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A narrative inquiry of experiences of validation of graduate students in economics

Eva Ximena Quintana

University of Texas at El Paso, evaquintana1000@gmail.com

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A NARRATIVE INQUIRY OF EXPERIENCES OF VALIDATION OF
GRADUATE STUDENTS IN ECONOMICS

EVA QUINTANA

Doctoral Program in Educational Leadership and Administration

APPROVED:

Rodolfo Rincones, Ph.D., Chair

Penelope Espinoza, Ph.D.

Teresa Cortez, Ed.D.

Zuobao (Eddie) Wei, Ph.D.

Charles Ambler, Ph.D.
Dean of the Graduate School

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Dedication

When I was born I was not only given two parents by God, I was blessed with two angels. This dissertation is dedicated to them.

A NARRATIVE INQUIRY OF EXPERIENCES OF VALIDATION OF
GRADUATE STUDENTS IN ECONOMICS

By

EVA QUINTANA, M.B.A., B.B.A.

DISSERTATION

Presented to the Faculty of the Graduate School of
The University of Texas at El Paso
in Partial Fulfillment
of the Requirements
for the Degree of

DOCTOR OF EDUCATION

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“But seek first his kingdom and his righteousness, and all these things will be given to you.”

-Matthew 6:33.

First of all, I want to thank God because he is the reason of everything good that happens in my life. Thanks to him, everything that seems impossible to achieve becomes reality. I will never take his help and his love for granted.

I want to thank my parents, the most diligent people that I know. You two have taught me that the secret to life is to work the most that you can for as long as you can, and everything that you have taught me is based on your example. My love for education and for finance is something that I owe to both of you.

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Dad - You are the reason that I always wanted to be a businesswoman. You are the best businessman, engineer, and dad in the world. You inculcated in me a love for numbers. There has never been a day where you have not woken up eager to go to work. I greatly admire your persistence and your tenacity. You are a great leader, who inspires people based on your innovative thinking. Thank you for your support and your excellent example.

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Abstract

The purpose of this study was to understand the experiences of students in a graduate Economics program located at a predominantly Hispanic-serving institution using narrative research design, a methodology that is not used in economics literature. The research question that guided the study was: How are graduate students validated throughout the process of their graduate education at a Master's in Economics program at a predominantly Hispanic-serving institution? The researcher interviewed 3 graduate women economics students, and 3 graduate men economics students to ensure triangulation of data. After conducting the study it became apparent that graduate women economics students and graduate men economics students were validated when their professors used creative learning, showed a caring demeanor, fostered cultural diversity and community engagement, as well as encouraged their professional development. Graduate women economics students and graduate men economics students suffered several invalidating experiences in their graduate program that made them question their ability to succeed. The main difference in the experiences of graduate women economics students and graduate men economics students resided in stereotypes of women students in their graduate program where men were the majority.

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Chapter 1: Introduction

Twenty six years ago, Gries and Marsh (1992) wrote that in scientific fields such as engineering, computer science, and physics, women were underrepresented. Today, women remain underrepresented in engineering, mathematics, physics (Beede, Julian , Langdon, McKittrick, Khan & Doms, 2011; Schnabel, 2017) computer science (Cheryan, Ziegler, Montoya & Jiang, 2017) and economics (Bayer & Rouse, 2016; Ginther & Kahn, 2006; Kahn, 1995; Levenstein, 2017; Romero, 2013). Even though women have pursued degrees in math-intensive fields throughout the past ten years, women continue to be a minority in jobs in math-intensive fields (Beede et al., 2011), and in researcher positions (Zacchia, 2017). Women encompass only 25% of the workforce in computing (Ashcraft, McLain & Eger, 2016) and 25% of the jobs in STEM (Science, Technology, Engineering, and Math) fields (Beede et al., 2011). Women only obtain 23% of the Ph.D.'s in computer science, 28% of the Ph.D.'s in mathematics and statistics, and 23% of the Ph.D.'s in engineering (Lundberg & Startz, 2017). Women make up 72% of the students in the doctorate programs in psychology, and 61% in the doctorate programs in sociology, but only 34% of the doctorates in economics (Romero, 2013). The number of women entering the Ph.D. in economics has not drastically changed in the past 20 years (Levenstein, 2017; Romero, 2013).

Women are more underrepresented in economics than in other social sciences, humanities, and life and environmental sciences (Schnabel, 2017). Ginther & Kahn (2004) showed that women are less likely to be promoted in economics than in statistics, life science, and engineering. In a study of more than 300 employees in an investment firm, Greig (2008) found it took women eight months more than men to be promoted.

Women have historically been underrepresented in the discipline of economics (Bayer & Rouse, 2016; Ginther & Kahn, 2006; Kahn, 1995). The underrepresentation of women in the economics profession has been labeled “a chronic phenomenon” (Zacchia, 2017, para. 4). This phenomenon has been attributed to the rational man ideology, which posits that women have made a rational choice not to study or work in the field of economics (Schnabel, 2017). Hubbard & O’Brien (2008) mention that one of the main assumptions in economics is that people are rational, which entails that “consumers and firms use all available information as they act to achieve their goals” (p. 5). However, the argument of the rational man ideology when used to explain the underrepresentation of women in economics has been questioned by a variety of scholars that note the historical gender discrimination in the field (Antecol, Bedard & Stearns, 2016; Ginther & Kahn, 2006; Schnabel, 2017; Zacchia, 2017).

There are 2.9 men per every woman that majors in economics (Schnabel, 2017). Women earn fewer doctorates in economics than in any other social science (Romero, 2013). In fact, in 2014, only 11 minority women earned doctorates in economics in the United States (Bayer & Rouse, 2016). Table 1.1 shows the difference in the number of doctorates earned by men and women in the discipline of economics.

Table 1.1: Number of Doctorates in Economics Earned by Men and Women 2011 - 2016

Year	2011	2012	2013	2014	2015	2016
Number of Doctorates in Economics earned by men	734	840	767	786	821	820
Number of Doctorates in Economics earned by women	387	402	416	404	434	418
Difference	347	438	351	382	387	402

Source: National Science Foundation (2016).

In the social sciences, there is a gender gap between men and women earning the full professorship from 12 to 25%, but in economics the gender gap is 50% (Ginther & Kahn, 2006). Perfect competition is not prevalent at economics departments, and this has been historically attributed to gender discrimination towards women (Becker, 1993). In the United States, women are only 15% of full professors (Schnabel, 2017). Only 29% of women are granted tenure after seven years at universities in the United States, as opposed to 56% of their men counterparts (Ginther & Kahn, 2006). Women in economics achieve tenure at a rate of 12 percentage points less than their male counterparts, a phenomenon that is not prevalent in other social sciences (Ginther & Kahn, 2006).

There is also an underrepresentation of women in leadership roles in economics. For example, it was until after the 19th century that women were mentioned amongst some of the most renowned researchers in economics (Zacchia, 2017). Women are only 4% of Chief Executive Officers of companies traded in the Standard and Poor's (S&P 500) Index (Ashcraft, McLain & Eger, 2016). Elinor Ostrom is the only economist that is a woman that has won the Nobel Prize in economics (Gittleson, 2017). Janet Yellen was the only woman in her class when she was a Ph.D. student in economics at Yale, and one of the two members in the faculty who were women at the economics department when she was at Harvard (Mace, 2014). Yellen served as president of the Board of Governors of the Federal Reserve Bank from February 3, 2014 to February 3, 2018. Today, only three women are members of the faculty in the economics department at Harvard, which has a total of 43 senior members, and only two of those women have tenure (Schnabel, 2017).

Underrepresentation of Women in Economics at UTEP

At the local level, particularly at The University of Texas at El Paso (UTEP), there are 18 professors in the Economics and Finance Department at UTEP of which only three are women (UTEP Economics and Finance College of Business Administration, 2018), even though 54% of the students at UTEP are women (Mathew, Lester, Barua, Kim & Wang, 2015). The three women professors are finance professors, two of them are Assistant Professors of Finance and one of them has the Wells Fargo Endowment for the Professor of Finance (UTEP Economics and Finance College of Business Administration, 2018). Even though students in the Master's in Economics program might enroll in classes that are taught by the three professors that are women, the three professors that are women are not professors in the Master's of Economics program. Therefore, there are no professors that are women in the Master's in Economics program. From the years 2010 through 2014, women professors were on average only 27% of the professors in the College of Business (Mathew et al., 2015).

In similar universities to UTEP, which are predominantly Hispanic, the underrepresentation of women in economics departments is also prevalent. In the department of economics at Texas State University there are 15 faculty members out of which only 2 associate professors, 1 lecturer, and the Department Chair are women (Texas State Department of Economics and Finance, 2018). In the decision sciences and economics department at Texas A&M university - Corpus Christi, there are 13 faculty members out of which 2 professors are women (one of the professors is the Chair of the department), and 1 professor of management information systems is a woman (it is also unlikely that this professor teaches economics) (Texas A&M University Corpus Christi Department of Decision Sciences and Economics). At the

University of Texas at San Antonio, there are 16 faculty members out of which only 2 professors and 1 lecturer are women (UTSA College of Business, 2018).

Students who enroll in the economics major at the College of Business in UTEP are few compared to other majors in the college, as is shown in Table 1.2.

Table 1.2: Undergraduate Students and Different College Majors UTEP in Fall 2014

Master’s Program	Men Students	Women Students	Total
Economics	25	21	46
Marketing	79	81	160
Finance	144	94	238
Management	143	139	282
Accounting	242	269	511

Source: Mathew, Lester, Barua, Kim & Wang (2014; 2015).

Of the students enrolled in the economics undergraduate major, 88% are Hispanic men, and 76.2% Hispanic women (Mathew et al., 2015). The average enrollment in the graduate lecture classes in Economics are 7 students (Mathew et al., 2015). As Table 1.3 reflects, the number of economics students enrolled in the Masters of Science at Economics at UTEP reflect a small difference to the number of accounting students in the Master’s of Accountancy, but a dramatic difference in enrollment to the Master’s of Business Administration at the College of Business at UTEP.

Table 1.3: Average Number of Students at UTEP Business Masters Programs from 2010 - 2014

Masters Program	Students (average from 2010 - 2014)
Masters of Economics	26
Masters of Accountancy	40
Masters of Business Administration	259

Source: Mathew, Lester, Kim, Wang, Datta, Alamillo & Vela (2010); Mathew, Lester, Kim, Wang & Datta (2011; 2012; 2013); Mathew, Lester, Barua, Kim & Wang. (2014; 2015).

Table 1.4 shows the total number of degrees awarded to students in the Master’s of Science (M.S.) in Economics at UTEP. These statistics are surprising when compared to the Masters of Business Administration, which awarded 68 degrees to men students, and 49 degrees to women students in the 2013- 2014 academic year (Mathew et al., 2015) as is shown in Table 1.5.

Table 1.4: Degrees Awarded in the M.S. in Economics Program at UTEP

Academic Year	Total Degrees Awarded	Degrees Awarded to Men Students	Degrees Awarded to Women Students
2009 - 2010	5	2	3
2010 - 2011	7	4	3
2011 - 2012	4	4	0
2012 - 2013	6	5	1
2013 - 2014	8	4	4

Sources: Mathew, Lester, Kim, Wang & Datta (2013); Mathew, Lester, Barua, Kim & Wang (2014; 2015).

Table 1.5: Degrees Awarded in College of Business Master’s Programs at UTEP 2013 - 2014

	Degrees Awarded to Men Students	Degrees Awarded to Women Students	Total Degrees Awarded
Economics	4	4	8
Accounting	15	8	23
Business Administration	49	68	117

Sources: Mathew, Lester, Kim, Wang & Datta (2013); Mathew, Lester, Barua, Kim & Wang (2014; 2015).

In comparison to other Master’s programs at UTEP where men are the majority, the Master’s of Science in Economics is only surpassed in the lack of degrees awarded to women students by the Master’s of Science in Physics and in Mathematics, as is shown in Table 1.6.

Table 1.6: Degrees Awarded in Fields where Men are the Majority 2013 - 2014

	Degrees Awarded to Men Students	Degrees Awarded to Women Students	Total Degrees Awarded
Physics	5	2	7
Economics	4	4	8
Mathematical Sciences	10	3	13
Computer Science	11	4	15
Mechanical Engineering	20	6	26
Civil Engineering	24	5	29
Industrial, Manufacturing, and Systems Engineering	30	11	41

Sources: Mathew, Lester, Kim, Wang & Datta (2013); Mathew, Lester, Barua, Kim & Wang (2014; 2015).

It is important to mention that I was unable to compare enrollment and graduation rates of graduate students in economics to similar predominantly Hispanic-serving institutions (such as Texas State, Texas A&M - Corpus Christie, and The University of Texas at San Antonio) because their fact books publish aggregate data on their College of Business, and they do not mention enrollment and graduation data on their Master’s of Science in Economics in particular.

Experiences of Women in Math-Intensive Fields

The underrepresentation of women in math-intensive fields is attributed to negative experiences such as discrimination, and stereotype threat (Ramsey & Sekaquaptewa, 2011; Steele, James & Barnett, 2002; Zacchia, 2017). Stereotype threat is described as an experience “when people who are stereotyped as lacking ability in a given domain perceive that giving a poor performance would be seen as stereotype confirming” (Ramsey & Sekaquaptewa, 2011, p. 378). Additionally, the underrepresentation of women in economics has been attributed to the

pedagogies used in economics (Lundberg & Startz, 2017), and to the lack of role models in their field (Gittleson, 2017; Levenshtein, 2017). In order to avoid negative experiences, women might decide to drop out of college, or to transfer to fields in which men are not the majority (Richman, Vandellen & Wood, 2011; Steele, James & Barnett, 2002).

In a study by Nosek, Banaji & Greenwald (2002) of gender-math attitudes, men were shown to have lesser negative attitudes towards math and science concepts than women because of the stereotypes that exist about women in these fields. In a study of undergraduate students in math, science and engineering by Steele, James & Barnett (2002) women mentioned negative experiences of stereotype threat. Meanwhile, men in this study did not mention negative experiences of stereotype threat. Steele et al. (2002) offered the explanation that the experiences of males differ because they have not been historically discriminated or stereotyped. In a study of undergraduate calculus students Ramsey and Sekaquaptewa (2011) showed that as women increased their math-gender stereotype (the belief that women are not skilled at math when compared to men), their performance in the class decreased.

In a study of graduate economics students, only 52% of women mention that they would attend their graduate economics institution again, as opposed to 70% of men (Colander & Holmes, 2007). Colander & Holmes (2007) offered the explanation that the difference between women and men graduate students who would attend their graduate institution again is based on a difference in their experience. In a study of more than 3,745 women who had finished college with an engineering degree, Fouad, Singh, Fitzpatrick & Liu (2011) mention that these women did not obtain a job in engineering because they believed that the workplace environment in engineering was not supportive to women, and that they chose jobs in Information Technology,

Education, or Government/Non Profit. Steele et al. (2002) showed that women students in fields where men are the majority experienced higher levels of discrimination that was directed towards them and to the women in the class, and these students anticipated that this type of discrimination would continue if they decided to continue in a career in that field.

Fair and equal treatment, lack of discrimination, having female role models, and social support are all positive experiences that contribute towards the sense of belonging of women in fields where men are the majority (Richman, Vandellen & Wood, 2011). Experiences that contribute towards the academic and personal growth of women students depend in great part on institutional agents that encourage women on their learning potential (Rendon, 1994; Rendon Linares and Munoz, 2011). Women role models create positive experiences for women in fields where men are the majority because they serve as support systems for other women, as well as examples of success (Richman et al., 2011). Bettinger & Long (2005) showed that having a woman faculty member in a class increases a woman's interest in the subject, as well as the likelihood of majoring in that subject, especially in subjects such as mathematics and statistics. However, women role models are not prevalent in math-intensive fields because women in these fields have been underrepresented for many years (Bayer & Rouse, 2016; Cheryan, Ziegler, Montoya & Jiang, 2017; Ginther & Kahn, 2006; Kahn, 1995).

Cheryan et al. (2017) mention the importance of positive experiences in reducing the underrepresentation of women in math-intensive fields:

“Experiences that provide girls and women with learning opportunities and necessary support as they progress, that diversify current stereotypes of the field, that do not

discriminate or devalue women, and that allow women to know that they can achieve success in the field are likely to make the biggest impact” (p. 21).

Ashcraft, McLain & Eger (2016) also describe the importance of positive experiences in the retention of women when they mention that these experiences make the difference between staying and leaving the workplace. The difference between women that choose to stay as opposed as to women that choose to leave fields where men are the majority are positive experiences in which they feel a sense of belonging to their field (Richman et al., 2011). In a study of women STEM students in community colleges, Starobin & Laanan (2008) found that women did not mention having a fear or dislike of math or science, but rather they wished that somebody had told them that they could study these subjects, as well as how much of a difference this would have made in their life. These students also mentioned the importance of when faculty members told them that they could study engineering in their decision to continue their academic careers.

Greater Representation of Women in Economics Through Validation

Validation is what can contribute towards a greater representation of women in math-intensive fields, including women in the discipline of economics. The basic tenets of the Theory of Validation are student learning and growth through the use of institutional mentors that foster academic and interpersonal validation (Rendon Linares and Munoz, 2011; Rendon, 1994).

Validation was defined as an in- and out- of class motivating process that helped students to become confident about their ability to learn, and to feel a sense-of-belonging to a community (Rendon Linares & Munoz, 2011). Validation can be academic or interpersonal (Rendon Linares & Munoz, 2011). Academic validation emphasizes the student’s ability to learn and potential to

succeed, and it can be enforced by creative learning experiences for students (Rendon Linares & Munoz, 2011). Interpersonal validation deals with the personal development and social adjustment of the students (Rendon, 1994). Institutional agents can create an environment that enforces interpersonal validation by encouraging the building of relationship networks, study groups amongst students, and foster cultural diversity (Rendon Linares & Munoz, 2011).

Women in graduate economics programs have been historically stereotyped as not having the same capabilities as men graduate students, and women graduate economics students have reported feelings of disconnection and lack of social interaction in their graduate program (Colander & Holmes, 2007) Therefore, women are in greater need of validation from their faculty members, because they have been shown to need greater positive reinforcement of their abilities than men (Roberts, 1991). The lack of women and/or minority faculty members may impede the validation of female and/or minority students due to the scarcity of institutional agents that are able to guide them on their academic journeys (Blackwell, 1988; Ülkü-Steiner, Kurtz-Costes & Kinlaw, 2000). Studying the experiences of students in a graduate program in economics is important in order to understand if their knowledge is validated, if their learning potential is emphasized, as well as if they believe that faculty members and/or family members have contributed in their involvement to the university, and in the development of their self-worth.

Lack of Narrative Inquiries in the Discipline of Economics

Studies that focus on the experiences of students in the field of economics can contribute towards ending the underrepresentation of women in this field, because researchers would be able to gain an understanding of their realities. Although many studies have focused on graduate

economics students using quantitative research designs (Colander & Klamer, 1987; Hale & Regev, 2014; Kahn, 1995; Kolpin & Singell, 1996; Mallinckrodt & Leong, 1992; McDowell & Smith, 1992; Neumark & Gardecki, 1996; Toews, Lockyer, Dobson, & Brownell, 1993; Ülkü-Steiner et al., 2000) and mixed-methods studies (Colander & Holmes, 2007), very few studies focus on the idiosyncrasies, realities, and context of graduate education (Bieber & Worley, 2006), and no studies that I could find focused on graduate economics students using narrative research. Scholars have noted that only research that focuses on fields that are of interest to men, and which embrace the rational man ideology have been emphasized in the discipline of economics (Colander & Holmes, 2007; Nelson, 1995; Zaccia, 2017). This type of research fosters what Clandinin and Connelly (2000) refer to as “people-free notions” in which “narrative histories of people were seen as slightly irrelevant” (p. 30). On the contrary, narrative inquiry is intended to develop “research understandings that could lead to a better world” by “enhancing personal and social growth” (Clandinin and Connelly, 2000, p. 61, 85). Schnabel (2017) discusses that it is important for women to engage in the research on the lack of gender parity in economics because “men have not proved particularly interested in understanding gender disparity; almost all of the research on gender discrimination within economics is done by women” (para. 25).

Purpose Statement

The purpose of this narrative study is to understand the experiences of students in a graduate economics program located at a predominantly Hispanic-serving institution. This study was conducted at UTEP because of the underrepresentation of women students and professors in the economics department. As opposed to undergraduate students, graduate students have experiences that are more ingrained with the norms of the economics field, and entrenched with

the ideologies of economics. Students in the Master's of Science in Economics program can choose between a 30 credit hour option in which the students are required to complete a Thesis, or the new Concentration in Finance option, in which the students are required to take 36 credit hours as opposed to a Thesis project (UTEP College of Business Administration, 2018b).

Students that apply to the Master's of Science in Economics program are required to have taken intermediate economic theory and quantitative methods (UTEP College of Business

Administration, 2018a). Before students in the Master's of Science in Economics program enroll in core and elective courses, they are required to take an Applied Mathematical Economics course, and the students are required to earn the grade of an A or a B in order to remain in the Master's of Economics program (UTEP College of Business Administration, 2018a). Narrative research was used because the understanding of the experiences of graduate economics students is lacking in the literature, and to gain an understanding of their experiences would greatly benefit the field of economics and other math-intensive fields.

Research Question

1. How are graduate students validated throughout the process of their graduate education at a Master's in Economics program at a predominantly Hispanic-serving institution?

Worldview

The worldview that will guide this qualitative study is that of constructivism. There are two main assumptions in the constructivist paradigm: 1). The constructivist paradigm is based on individual realities, and 2). Constructivists believe that reality is individually and socially constructed (Plano Clark & Creswell, 2011). Creswell and Creswell (2017) mention that the qualitative paradigm depends on two main tenets. The first tenet that guides qualitative research

is that reality is determined by experiences of the participants, and socially constructed. The second tenet is the ability of the researcher to be able to determine when saturation has been reached in order to provide a good narrative.

Theoretical Framework

A theoretical framework is defined as a “perspective or ideology that provides structure for advocating for groups or individuals” (Creswell, 2015, p. 507). Grant and Osanloo (2016) define the theoretical framework as a “selected theory (or theories) that undergirds your thinking with regards to how you understand and plan to research your topic, as well as the concepts and definitions from that theory that are relevant to your topic” (p. 13). The Theory of Validation as proposed by Rendon (1994) was used in this narrative study because it is used in validating low-income first-generation students at Minority-Serving Institutions (Rendon Linares & Muñoz, 2011), and nontraditional students are the majority of the graduate students attending UTEP (Mathew et al., 2015). A theoretical framework is preferred to a conceptual framework in qualitative studies in order to analyze and interpret data from the study in relationship with a theoretical framework, as well as to compare the findings of the study to the theoretical framework in order to show how the study has created new knowledge (Merriam, as cited in Casanave & Li, 2015).

Researcher’s Autobiography

It is important for the researcher to explain how the researcher’s background enables him or her to understand the text (Polkinghorne, 2007) because narrative inquiry begins with the researcher’s own autobiography, which plays a crucial part in the research (Clandinin and Connelly, 2000). I have a Bachelor’s in Business Administration with a degree in Finance, and a

Master's in Business Administration from a predominantly Hispanic-serving institution. My background may be helpful in understanding the experiences of economics students, because at this college I took several classes in Economics (including classes in the Master's in Economics program). In addition, I am a Hispanic woman who has attended a predominantly Hispanic-serving institution in a border region for my Undergraduate, Master's and Doctoral education.

All of the economics classes that I took in my undergraduate and graduate career were in the form of a lecture. Therefore, most of the economics classes consisted of the students walking into the class, sitting down, and listening to the professor explain the material for the remainder of the class period. There were some classes when I was the only student that asked questions, and I thought that it was unlikely that nobody in the classes had questions because they were very difficult classes. Even though it may seem difficult to enforce validation in such a situation, I could see how my economics professors would really try to validate their students. For example, one of the professors would be very knowledgeable of every one of the student's culture, and he would incorporate the student's culture into the class discussions. Another economics professor would add to the interest of the class by telling stories about his cultural background, and academic career. Another professor would explain the course's concepts and would apply them to practical and regional problems.

I obtained interpersonal validation in my university because I joined several Honors Societies, as well as the University Honors Program, which gave me a sense of belonging. In some cases, I saw traditional students struggle with the material as much as nontraditional students. In one of my accounting classes, the class began with more than 90 students. By the end of the semester, there were a total of 7 students, including me. I believe that the reason that I

did not struggle with the requirements of business school as much as other traditional students was because I joined Honors Organizations whose emphasis were on helping students become better students.

I am a traditional student, I am young, and I do not have children. I am not a first-generation student. My dad has three Master's degrees, and my mom graduated with Honors with two degrees from a university in the northern part of the United States. My grandfather (my mom's father) was a Medical Doctor with two specialities. Sometimes after spending hours and hours working in the class assignments and studying for the tests in my economics classes, I would wonder how nontraditional (including returning adult students) were able to complete all of the requirements of the economics courses with their family commitments. Maybe this was because they had worked all of their life in business-related fields, and they had gathered a lot of expertise in their employment.

I graduated with Honors and with an Honors certificate from my undergraduate career, and with Honors from my Master's career. Graduating with Honors is based on the grade point average. Graduating with an Honors certificate meant that I had to work on extra assignments for each class. Consequently, the professor had to provide feedback on the assignment, and I had to correct the assignment throughout the entire semester until the professor decided that it was finished. Since I had to work on extra assignments for each class in order to graduate with an Honors certificate, I believe that I was able to take advantage of the knowledge and expertise of my professors more than if I were just a student that had to turn in the class assignments only. Most of the professors that I asked if I could do extra assignments for their class in order to graduate with an Honors certificate were pleased to do so. In fact, one of the professors who

validated my knowledge and believed in my power to learn the most throughout my Undergraduate and Master's career was a Finance professor, who agreed to let me work on an Honors assignment for his class. The same professor gave me one letter of recommendation to apply to Master's programs during my Undergraduate career, and one letter of recommendation to apply to a Doctoral program when I was a Master's student. I remember that during his classes he would encourage his students to become Doctoral students in order to become professors, and he would mention the many ways that being a professor was a rewarding and motivating career.

The other three of the professors (two male and one female) that helped me witness my power to learn, and who validated my knowledge the most were Doctoral students. When I was an Undergraduate student, I asked all of these professors for a letter of recommendation to apply for a Master's program, and they said that they would be pleased to write the letter. One of the professors said that I was the best student he had ever had. The other professor who I asked to write another letter, I greatly admired because she was the only woman student in the Finance Doctoral program. Her class was one of the most difficult classes that I have ever taken. I remember that she would write in the class board all of the mathematical theories behind each of the financial theories that we were learning. When students would look confused, she would tell us that we were extremely capable of learning those theories, and that we should not be afraid of math. Another professor who was a Doctoral student was a Finance professor, and he wrote a two page letter of recommendation for me. Surprisingly, the four professors that I have described are from foreign countries that are considered masculine societies.

The assignment that enforced academic validation the most was when in one of my Undergraduate business classes the professor gave the assignment to write about our cultural

history, and how it related to a variety of topics in the book, which is a great example of an application of the Theory of Validation.

Unfortunately, only one professor who taught an Accounting class said that she would not be willing to help me in doing an extra assignment for her class. Also unfortunate was that when I was in my Master's program, I asked an economics professor for a letter of recommendation to apply for a doctoral program, and she said that even though I had a very high grade in her class, she would not write a letter of recommendation based only on my performance in her class. It may seem frivolous that I consider these experiences as not validating. Therefore, I would like to explain why I consider these experiences the opposite of validation. Validation entails supporting the students in their journey to obtain their degree in order to emphasize their potential to succeed (Rendon Linares & Munoz, 2011). In regard to the first situation, not every professor is as fortunate as to be asked by a student if she can work on an extra assignment for their class. Therefore, I believe that professors should encourage students to pursue their full academic potential, as opposed to limiting their initiatives to become the best students that they can become. In regard to the second situation, a Herculean amount of work is required in order to succeed in an economics class. Therefore, even though giving a letter of recommendation is not a part of the job description of a professor, I believe that giving a letter of recommendation to the best academically performing students in their class should not be a burden. In a way, professors that fail to give their best academically performing students letters of recommendation are limiting their future success, and this is contrary to the Theory of Validation.

The main difference that I noticed between finance and economics classes were that finance professors gave a class project in addition to the class tests. The project enabled students

to become more engaged with the subject, because it resembled what they would have to do when they entered the workforce. I believe that most of the professors in economics try to enforce validation, but it is a difficult task because cooperation is not inherent in the subject, unlike in Management and Marketing. Also, it is difficult to enforce validation when the class is designed as a lecture, as opposed to a seminar.

Obtaining a business degree is a difficult thing when you are a woman student, because it is difficult to find examples of women who are successful in their field, like the woman Doctoral student that I mentioned earlier. For example, out of all of the classes that I took in the College of Business in my Undergraduate and Master's program, I only had 9 classes with women professors. I hope that when students try to utilize all of the resources that the university has to offer, they encounter women and men professors that are willing to help, encourage, and validate them.

Chapter 2: Literature Review

In this section, how women are underrepresented in the field of economics is mentioned. Second, the benefit of institutional agents/mentors on the graduate education of women graduate students is stated. Third, graduate economics education in the United States is described, and the major problems within these programs in regard to the enforcement of competition, self-interest, and the male-centered model are presented. Finally, a review of the student development theories which were considered possible theoretical frameworks are provided, followed by a discussion of why the Theory of Validation was chosen.

Underrepresentation of Women in Economics Departments

Economics and economics departments are predominantly male, and women are underrepresented in leadership positions in economics departments (Kolpin & Singell, 1996; McDowell, Singell & Ziliak, 2001). Also, there are a lack of women in many sectors of the economics field such as the undergraduate majors, the graduate programs in economics (including Master's and Doctoral), in the receipt of Doctoral degrees in economics, and in the hiring and promotion of women into academic programs in economics (Bayer & Rouse, 2016; Kahn 1995; Romero, 2013).

In a survey of 250 economics departments, Levenstein (2017) found that from Ph.D. students to full professors, women remain a minority in the discipline of economics. Women are less likely than men to take an undergraduate economics course, or to major in economics (Emerson, McGoldrick & Mumford, 2012; Romero, 2013). Women earn 46% of all of the Doctorates in the United States, but only one third of the Doctorates in economics (Romero, 2013).

When women co-author a paper with a men colleague, women's chances of earning tenure increases only by 2% in comparison to their men counterparts of 8% (Sarsons, 2015). On average, women are less likely to receive tenure when compared to men by 18% in any field (Sarsons, 2015). Women earn less tenure than men in economics because they use their additional time for childcare as opposed to their men colleagues that use that time for research, which has decreased the rate of women who earn tenure in their first job by a total of twenty two percentage points (Antecol, Bedard & Stearns, 2016). In a study by Hengel (2016), articles submitted for peer review at a famous econometric journal by women were shown to take six months longer to get peer reviewed. The lack of gender parity in economics has been attributed to the pedagogies used in economics (Lundberg & Startz, 2017) as well as to the use of bibliometric rankings to assess the quality of the research based on the industry standard of the rational man (Zacchia, 2017). Ranks derived from bibliometrics in mainstream journals are used for personnel hiring and career advancement have been shown to be gender-biased, which cause women to change their research fields to fit the fields that are valued by men (Zacchia, 2017). The use of bibliometrics has indirectly affected gender discrimination of full and associate professors (Zacchia, 2017).

As members of the faculty in economics departments move upward in their employment ranks, women remain underrepresented in the full professorship position (McDowell et. al., 2001). In the year 2012, women were only 28% of assistant professors in economics, 22% of associate professors with tenure, and 12% of full professors in economics (McElroy, as cited in Romero, 2013). Gittleston (2017) states that only 13% of academic economists with permanent positions are women. The number of women full professors in economics programs that award

Ph.D.'s has increased at a slow rate of 5 percentage points in 20 years (Lundberg & Startz, 2017). Based on historical data, the number of women full professors in economics in 2080 will be that of only 30% (Lundberg & Startz, 2017).

When compared to men professors, as women increase in their rank from entering Ph.D. to tenured-track professors, the number of women in upper rank positions decreases, which is unique to the economics profession (Levenstein, 2017). This phenomenon has been partly attributed to the discrimination that they have encountered (Zacchia, 2017). Even though employment discrimination of women has been attributed to the differences in productivity rates between men and women economics professors, it has been shown that even when women economics professors publish the same amount of scholarly papers as their men counterparts, the repercussions of past employment discriminatory practices persist (Kolpin & Singell, 1996). In decisions of academic promotion, gender bias is prevalent (Sarsons, 2015). The slow journey towards tenure for women in economics programs is usually attributed to their choice to have a family; however, women's publication and productivity rates, choice to have a family, and family obligations do not explain the gender differences in promotion (Ginther & Kahn, 2004; Kahn, 1995). These differences have been allocated to "the result of discrimination, either direct or subtle, against female colleagues" as well as on the lack of relationship networks with male colleagues (Kahn, 1995, p. 202). Bayer and Rouse (2016) label this form of subtle discrimination as implicit bias and institutional discrimination which "occurs when facially neutral policies and routines of an academic department or instructor have, in practice, a disparate impact by gender or race" (p. 230).

The Role of Institutional Agents in Graduate Economics Education

There are some stress factors that are unique to women students, such as marriage-work balance, stereotyping, and discrimination; moreover women students are more likely to be stressed than their men counterparts, especially when there is a lack of women institutional agents in their graduate departments (Mallinckrodt & Leong, 1992; Toews, Lockyer, Dobson, & Brownell, 1993). The lack of women faculty in economics programs leaves women students without institutional agents that can guide them on their academic journeys (Kahn, 1995; Lundberg & Startz, 2017). In comparison to their men counterparts in graduate economics programs, women are more likely to engage in volunteer work, but they are less likely to pursue research or teaching assistantship positions as well as less likely to try to obtain publication for their work (Colander & Holmes, 2007). Increases in women faculty are helpful for graduate economics students because this increases the admission and graduation of more women from graduate economics programs (Hale & Regev, 2014; Neumark & Gardecki, 1996), decreases prejudices (Goldin, 1994), and decreases discrimination against women (Hoffmann & Oreopoulos, 2009).

During the graduate school years, women students might be concerned with family obligations, and the graduate department's support of a woman student's needs is crucial for her adjustment into graduate school (Ülkü-Steiner et al., 2000). Mentors, peers, and family have been proven to be crucial in women graduate student adjustment (Ülkü-Steiner et al., 2000). Schroeder and Mynatt (1993) mention the need for mentoring of women in graduate programs by women faculty, because of a woman student's feelings of insecurity. Relationship networks have been shown to be stronger when women graduate students have mentors or role models that are

women as well (Berg & Ferber, 1983). In a study by Ülkü-Steiner et al. (2000), the authors found that women graduate students in departments where the faculty were mostly men experienced lower levels of understanding for their family obligations, as well as lower levels of academic self-concept and career commitment. Patton (2009) also mentions the lack of relationship networks between women students and men faculty. Women graduate economics students lack the same professional networks as men graduate economics students because they are less likely to engage in collaborations with men economists (McDowell & Smith, 1992) and starting economists fail to form academic relationships with economists of renown (Blau, Francine, Ferber & Winkler, 2010).

Even though women graduate economics students that have advisors that are men have been shown to accept jobs that are research-oriented, as opposed to women graduate students that have advisors that are women (Hilmer & Hilmer, 2007), Barbezat (1992) found that women professors were not as interested as men professors in research focused jobs. Increasing women faculty in economics departments favorably impacts women graduate students, because women graduate students tend to choose advisors that are women (Neumark & Gardecki, 1996), and the number of women graduate economic students that are working with women advisors have more than doubled (Hilmer & Hilmer, 2007).

Role models and their personal attributes influence a student's academic self-concept, and graduate school is an important time for a woman student because it is when she develops most of her academic self-concept that will continue to influence the commitment to her career (Ülkü-Steiner et al., 2000). Bieber & Worley (2006) have shown that when students learn the most and become more involved in the university's life is when professors try to engage their students, as

well as when they show a caring demeanor. Patton (2009) mentioned that women minority students rely on women family, church, and sorority members for the support of their well-being.

Problems Women Students Encounter in Their Graduate Education in Economics

Nelson (1995) mentions that subjectivity, emotion, and cooperation have usually been ignored in the science of economics, which fosters individualism, and competition, and the reason for this is that the basis of economics is a rational, self-interested individual that makes optimal choices and who “interacts with society without being influenced by society: his mode of interaction is through an ideal market in which prices form the only, and only necessary, form of communication” (p. 459). In an analysis of 20 years of research in economics, Zacchia (2017) found that the topics that were emphasized and published embraced the paradigm of humans as rational actors who pursue their own self-interest. Colander & Klamer (1987) found that the thing that students most dislike about their graduate economics education are the mathematical workload, and the lack of practicality of the material, and the authors attribute these dislikes on the initial disinterest of students when they enter graduate school. Women are less integrated in graduate economics education because they prefer topics that deal with applied economics and policy, which are not as prevalent in the core courses that are taught (Colander & Holmes, 2007).

When describing that the main goal in economics is to gain a competitive advantage, Labaree (1997) mentions that in order to maximize returns with the least amount of effort, students are only concerned in learning what they have to learn to earn a good grade on the test. Becker, Greene & Rosen (1990) state that student learning in the education of economics is not valued as much as student accomplishment. The process of graduate education serves to

professionalize students, and to teach them which topics of study to value and which to deemphasize (Colander & Klamer, 1987). However, competition only increases the performance of men students, as opposed to women students, and this is due to different attitudes towards the sense of less risk-aversion and more self-confidence in men (Niederle & Vesterlund; 2007, 2011).

In their survey and interviews with graduate economics students, Colander & Klamer (1987) grew concerned about the socialization process in graduate economics education, and they mention that there was “definite tension, frustration and cynicism that, in our view, went beyond the normal graduate school blues” (p. 100). Women find the relationship with faculty members and the mathematical requirements of graduate economics programs three times more stressful than their men counterparts, and women find the coursework in their graduate economics programs to be two times more stressful than their men counterparts (Colander & Holmes, 2007). While the male-centered model might prove beneficial to traditional students, it only reinforces doubt, and prevents learning and growth for nontraditional students, who desire for their personal histories to be validated by their professors (Rendon Linares and Munoz, 2011; Rendon, 1994).

Student Development Theories

In narrative inquiry, the place where an individual exists is considered to be crucial in understanding the individual’s reality and experience (Clandinin and Connelly, 2000). Therefore, the following theories were considered because they place the student in interaction with her or his environment. Additionally, since 61.7% of the students at UTEP are Hispanic (Mathew et al., 2015), two main ethnic identity theories were discussed. After providing a summary of each

theory, a description of why the Theory of Validation was the theory that was most applicable to the study follows.

Student Involvement Theory

Astin (1984) is responsible for creating the Student Involvement Theory. The definition of involvement is “the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1984. p. 518). Outside activities such as the student’s employment or family reduce the amount of time that a student is able to invest in his or her studies (Astin, 1984). Therefore, Astin (1984) believed in order to achieve the outcomes of student learning and student development, faculty members should not focus so much on the curriculum and on their teaching methods but rather on how to motivate students to invest their time and effort into their learning and development. Student development is a function of the student’s investment in time and effort (Astin, 1984). Faculty members should focus on two main student outcomes: student involvement, and student learning (Astin, 1984).

Transition Theory

Schlossberg (1989) believes that in order for students to be involved in their learning they have to form relationships with students, faculty, and staff that allow them to witness their personal worth. A student’s community is “not desirable but essential to human survival” (Schlossberg, 1989, p. 5). It is in transition points where individuals exhibit feelings of marginality or insecurity about their sense of belonging (Schlossberg, 1989). As an individual experiences transitions, he or she is more prone to feelings of marginality (Schlossberg, 1989). However, marginality is a feeling, a condition, or a way of life, especially to bicultural

individuals, such as when a “Hispanic student from this country feels American but also takes pride in being of Spanish descent” (Schlossberg, 1989, p.6).

Situation, self, support, and strategies help adults deal with their transitions (Goodman, Schlossberg & Anderson, 2006). Situation refers to understanding the trigger, timing, control, role change, and the duration of the transition, while evaluating the individual’s experience with the transition, as well as the stress factors that are present, while providing an assessment of the individual’s behavior (Goodman et al., 2006). Self relates to personal and demographic characteristics and psychological resources that are crucial to the individual (Goodman et al., 2006). Family, friends, and community encompass the support system of the individual (Goodman et al., 2006). Finally, strategies consist of a variety of goals and coping modes that individuals use during and after the transition (Goodman et al., 2006).

Theory of Self-Authorship

Baxter Magolda’s Theory of Self-Authorship (defining one’s belief system) promotes learning in which students are encouraged to construct their own values, beliefs, and feelings in order to transform their values, identities, and relationships with others (Baxter Magolda, 2007). Colleges are encouraged to develop systems that connect student self-authorship with teaching and learning outcomes, in order for the student to not rely solely on external formulas (Baxter Magolda, 2007). Following external formulas is defined as the first phase in self-authorship stage, and they consist of patterns that students follow for their success that have been pre-determined by authority figures (Magolda, 2001). Individuals make meaning of their experiences through the use of conflicting assumptions that they encounter (Baxter Magolda, 2004). When

students find out that their plans are not working in the way that they require, based on their needs and interests, they enter the second phase of the path to self-authorship, known as the crossroads (Magolda, 2001). In this phase, students are relieved of some tensions, as they develop their own beliefs, and decide which career path they want as opposed to the path that others have chosen for them (Magolda, 2001). In order to become the author of one's life, which is the third phase towards self-authorship, students arrive at a strong self-concept after they self-reflect, and they become cautious in forming relationships that do not fit with their self-concept they have developed (Magolda, 2001). In the final phase of their path towards self-authorship, even if students trust external influences, a student's belief system is self-determined, and they make career and life decisions based on their internal foundation (Magolda, 2001).

Ethnic Identity Theories

Hispanic identity development. Torres is responsible for the Ethnic Identity Theory of Hispanic Identity Development in which acculturation and ethnic identity are used to categorize Hispanic students as having an Anglo orientation, Hispanic orientation, bicultural orientation, or marginal orientation defined as a preference for their Anglo culture, Hispanic culture, both Anglo and Hispanic cultures, and lack of attachment to either culture respectively (Torres, 1999). In the conceptual model developed by Torres, the student's environment, family, status, cultural dissonance, and relationships impacted the student's ethnic identity development (Torres, 2003). In a qualitative study of Latino and Latina students, Torres & Hernandez (2007) found that the Latino/a student's families and peers were perceived as the standard by which to judge knowledge and information when the students used external formulas to evaluate their ethnic

identity, but as students moved towards the internal foundations side of the spectrum, their ethnic identities encompassed their individual and environmentally shaped cultural values.

Ethnic identity development. Phinney (1990) reviewed a total of 62 studies which were published in a time period of 15 years in order to examine ethnic identity development.

Throughout the review, Phinney (1990) produced the following ethnic identity themes: self-identification, sense of belonging, attitudes, and participation in cultural activities. Self-identification referred to the ethnicity that the participant identified with (Phinney, 1990).

Attitudes could be positive or negative, and they regarded how a participant felt about his or her ethnic group (Phinney, 1990). Sense of belonging was based on the participants' belonging to his or her ethnic group or how the participant felt when he or she compared his or her culture to another ethnic group (Phinney, 1990). Participation in cultural activities were defined as the practices and behaviors of an ethnic group (Phinney, 1990).

The model of identity formation consists of three stages, which are: unexamined ethnic identity, ethnic identity search, and ethnic identity achievement (Phinney, 1995). The development from the first to the second stage of the model consists of a change between a lack of interest in the adolescent's ethnicity, to a sense of awareness of their ethnicity (Phinney, 1995). In the final stage of the model, adolescents become cognizant about their ethnicities as members of minority cultures, and become culturally relative towards other cultures as well (Phinney, 1995).

The Theory of Validation

The Theory of Validation was developed at the National Center for Postsecondary Teaching, Learning, and Assessment headquartered in Pennsylvania State University to analyze

college student involvement (Rendon Linares & Munoz, 2011). Rendon (1994) mentions that the Theory of Validation is based on the work of Astin, Terenzini and Pascarella who also studied college student involvement. When Rendon (1994) speaks about her personal experience in her doctoral program, she mentions that she remembers how she could not relate to the experiences of her male peers who were white, and had attended very prestigious universities because their cultural realities differed to a great extent from her own. Rendon (1994) mentions that nontraditional students feel that in order to succeed in American education, they must assume new identities and unlearn the cultural values and practices of their past. Also, nontraditional students are vulnerable to in-class and out-of-class experiences in transition points, such as the first year of graduate school, in which they question their ability to succeed (Rendon, 1994).

Open-ended interviews were used with a sample of students across several universities (a minority community college, a liberal arts college, an urban state university, and a residential research university), and the questions for the interviews consisted of the people and the events that were significant in the transition to the university life, and the effects of the university on students (Rendon Linares & Munoz, 2011). The students that were interviewed were asked to mention instances where they felt that they could succeed in college, and their answers consisted of instances where either faculty, and/or family members had validated the student's knowledge and life experiences (Rendon Linares & Munoz, 2011). In order to succeed in American education, students should be encouraged to retain their language and culture because their past experiences are a powerful resource that they bring into university life (Rendon, 1994).

Academic and interpersonal validation. Academic validation is defined as when institutional agents trust a student's ability to learn and "to acquire confidence in being a college

student” (Rendon, 1994, p. 40). Faculty can enforce academic validation in classroom practices by inviting guest speakers of cultural backgrounds similar to their nontraditional students, by acknowledging the validity of the different perspectives of nontraditional students, and by encouraging personal histories and topics related to the student’s cultural background (Rendon Linares & Munoz, 2011). Rendon (1994) mentions an example where a minority, returning adult student mentioned in the field group interview that she (the student) believed that she was capable of learning when the student heard an audio recording of a speech that the student gave in her communications class. Therefore, a very important classroom practice that faculty can create for nontraditional students is the design of activities where these students are able to witness their power to learn (Rendon Linares & Munoz, 2011).

Classroom practices can also foster interpersonal validation (Rendon Linares & Munoz, 2011). Interpersonal validation is defined as when institutional agents “take action to foster students’ personal development and social adjustment” (Rendon, as cited in Rendon Linares & Munoz, 2011, p. 19). Faculty members create validating experiences for their students when they offer positive reinforcement, tailor of the curriculum to reflect the student’s diverse backgrounds, give encouraging phrases, mentor the students outside of the classroom (such as in the university’s library or cafeteria), and when they support the students in their journey to obtain their degree (Rendon Linares & Munoz, 2011).

Advantages of using the theory of validation. The Theory of Validation was based on Astin’s Student Involvement Theory (Rendon, 1994). The Theory of Validation seemed the most applicable theoretical framework to use in the study because unlike the Torre’s and Phinney’s Ethnic Identity Theories, it has been successfully applied numerous times with Latino/a students

(Rendon, 2002), first-generation students (Rendon, 1995), African American students (Holmes, Ebbers, Robinson & Mugenda, 2000), and nontraditional students (Barnett, 2011). Also, the Theory of Validation acknowledged students of different cultural backgrounds because Rendon (1994) mentioned that college students do not fit the profile of traditional white men anymore, but rather nontraditional first-generation and minority students. Since the purpose of the study is to understand the experiences of graduate economics students, as opposed to transitions, or belief systems, the Theory of Validation was a better theoretical framework for the study than the Transition Theory or the Theory of Self-Authorship.

Chapter 3 - Methodology

As mentioned in Chapter 1, the purpose of this study using narrative research design was to understand the experiences of students in a graduate economics program located at a predominantly Hispanic-serving institution through the lens of the Theory of Validation. In this section, a background of narrative research is provided. First, the types and techniques of narrative research are described. Second, the data collection process in narrative research is mentioned. Third, the stages and the types of questions used in in-depth interviews are defined. Fourth, the importance of interpretation and ensuring accuracy in narrative research are presented. Finally, how all of the necessary requirements of narrative research in this narrative study, and how biases were controlled are described.

Narrative Research

In a movement against the grand narrative and into narrative inquiry, the individuals who experience the stories and the place in which those stories take place became the central focus of narrative inquiry, and those experiences are narrative expressions “of an individual’s stories within a particular context at a particular time” (Clandinin and Connelly, 2000, p. 25). Narrative inquiry was based on the teachings of John Dewey (Clandinin and Connelly, 2000). John Dewey’s interpretation of true knowledge does not evolve in isolation and from self-interest, but in conjunction with other perspectives and communal goals (Dewey, 1944; Rogers & Oakes, 2005; Siegfried, 1999). Experience is what guides an inquiry, because individuals exist in a personal and in a social realm and they cannot be understood by a focus on the individual in isolation (Clandinin and Connelly, 2000).

Narrative research is used when the researcher wants to examine individual stories from one or more individuals in order to gather their experiences (Cresswell, 2015). Narrative is considered both a method as well as the phenomenon that is studied (Clandinin & Connelly, 2000; Pinnegar & Daynes, 2007). Through the use of narrative research, researchers are able to understand how individuals understand and present their lives through storytelling (Sandelowski, 1991). In narrative inquiry the research topic is supposed to create new meanings and new knowledge claims that contribute towards the current knowledge of the topic (Clandinin and Connelly, 2000).

Narrative research has been defined by many researchers as follows. Polkinghorne (2007) defines narrative research as “the study of stories” (p. 471). Gay, Mills & Airasian (2009) define narrative research as a description of people’s lives, a collection of their stories, and a discussion of their meaning. Clandinin and Connelly (2000) define narrative inquiry as “a way of understanding experience” as well as “stories lived and told” (p. 20).

Narrative research is a “collaboration between researcher and participants” (Clandinin & Connelly, 2000, p. 20). Creswell (2015) mentions that “for educators looking for personal experiences in actual school settings, narrative research offers practical, specific insights” (p. 504). In narrative inquiry, even though the research topic may be institutional, the focus is on people (Clandinin and Connelly, 2000).

Types and Techniques of Narrative Research

The two types of narrative research are descriptive and explanatory (Sandelowski, 1991). In descriptive narrative research the researcher describes the following: stories or events of

individual or group narratives, overarching or conflicting story lines, individual stories in relationship with the entirety of cultural stories, and/or how certain life events shape an individual's life (Polkinghorne, 1988; Sandelowski, 1991). Explanatory narrative research involves questioning the why of something that occurred through a detailed narrative account (Polkinghorne, 1988; Sandelowski, 1991).

The two types of narrative research techniques are the following. The first type of narrative research technique is narrative analysis, which consists of the narrative that is developed by the researcher and where the story is the outcome (Gay, Mills & Airasian, 2009). The second type of narrative research technique is analysis of narratives, which consists of a process where the researcher analyzes the stories with the outcome of arriving at concurrent themes (Gay, Mills & Airasian, 2009).

Data Collection in Narrative Research

The data collection techniques in narrative research are: restorying (gathering of stories, analyzing them, and placing them in chronological order), oral histories (collecting data about participants' experiences), memorabilia (gathering artifacts that evoke stories from participants), story telling (data collection through stories), letter writing (dialogue that can be in the form of e-mailing), and autographical and biographical writing (participant perceptions of their experiences) (Gay, Mills & Airasian, 2009). Other techniques mentioned are journal writing, field notes, conversation, research interview, and family stories and stories of families (Clandinin and Connelly, 2000).

In-depth Interviews

Through the process of in-depth interviews, knowledge is constructed between the researcher and the interviewee (Legard, Keegan & Ward, 2003). In-depth interviews are applicable when the researcher wants to obtain detailed information that is not possible with other data collection methods, such as surveys (Boyce & Neale, 2006). However, the purpose of in-depth interviews is to achieve overarching themes across the issues that are discussed, as well as to achieve depth within each each theme (Legard, Keegan & Ward, 2003).

The in-depth interview incorporates a sense of flexibility, but the researcher should have an interview protocol with common themes that she wants to address, which entails that the interview is semi-structured (Legard, Keegan & Ward, 2003). The interviewer should use feelings, opinions, beliefs, and reasons to evoke meaningful responses from the participants in order to avoid surface-level answers (Legard, Keegan & Ward, 2003). It is important for the researcher to engage in active listening in order to seek understanding and clarity of the responses from the participant (Guion, Diehl & McDonald, 2001). The in-depth interview needs to be conducted face-to-face (Legard, Keegan & Ward, 2003). The researcher should record the interview through audio-recordings, as well as written notes (Guion, Diehl & McDonald, 2001). In-depth interviews do not use focus groups, and the place, the time, and how formal the interview is shapes an interview, which usually transforms into a form of conversation (Clandinin & Connelly, 2000).

The researcher needs to build a climate of trust with the participant in order to build rapport and a good relationship with the participant (Legard, Keegan & Ward, 2003). The researcher should also be open-minded, flexible and responsive, patient, and observant (Guion,

Diehl & McDonald, 2001). Listening carefully to the stories from the participant is important in order to paraphrase and reflect on the stories, and to understand the meaning of the stories by paying attention to the emotions and the tone from the participant (Guion, Diehl & McDonald, 2001). Building credibility with the participant is important by asking meaningful and knowledgeable questions, in order to show that the researcher is efficient and prepared (Legard, Keegan & Ward, 2003).

Stages of in-depth interviews. Before conducting the in-depth interview, the researcher needs to design an interview guide (Boyce & Neale, 2006). In-depth interviews consist of six stages. In the first stage, arrival, the researcher needs to avoid the topic of the research until the interview starts, in order to build rapport with the participant (Legard, Keegan & Ward, 2003). The first stage of the interview has also been referred to as thematizing (Guion, Diehl & McDonald, 2001). In the second stage, introducing the research, the researcher directs the interview by reiterating the purpose of the study, by asking permission to record the interview, and by letting the participant know how long the interview will approximately take (Boyce & Neale, 2006; Legard, Keegan & Ward, 2003). The second stage of the interview is also known as designing, and it includes three parts of the interview guide, which consist of the fact sheet (to record the time, place, and date of the interview, as well as the demographic information of the participant), the interview questions (which include space for the researcher to write observations), and the post-interview comment sheet (where the researcher records interpretations and/or comments). On the third stage, beginning the interview, the researcher gathers factual information about the participant, as well other brief details about the participants (Legard, Keegan & Ward, 2003). On the fourth stage of the interview, during the interview, the

researcher guides the participant through the main themes that the researcher had earlier developed, and uses follow-up questions to ensure in-depth answers (Legard, Keegan & Ward, 2003). The main tasks of the researcher are to listen, to observe, and to guide the participant through the topics the researcher wants to research (Guion, Diehl & McDonald, 2001). In the fifth stage of the interview, ending the interview, the researcher lets the participant know that the end of the interview is approaching in order for the participant to return to comments about their everyday lives (Legard, Keegan & Ward, 2003). In the final stage of the interview, after the interview, the researcher may answer any additional questions that the participant may have, and the researcher may make final notes and succinct summaries about what was talked about during the interview (Boyce & Neale, 2006; Legard, Keegan & Ward, 2003). After the interview has been completed, the researcher needs to develop themes from the responses from the participants, in order to synthesize the responses to the questions presented during the interview (Guion, Diehl & McDonald, 2001).

Interpretation in Narrative Research

Narrative inquirers are tasked with the challenges of becoming aware of the variety of narratives, as well as finding where these narrative intersect, and imagining which new narratives may arise (Clandinin & Connelly, 2000). The two main interpretation approaches in narrative research are Verstehen, and philosophical hermeneutics (Polkinghorne, 2007; Schwandt, 2000). In the Verstehen approach, the researcher interprets the meaning of the stories of the participants through the use of understanding and empathy (Polkinghorne, 2007; Schwandt, 2000). In the philosophical hermeneutics approach, the researcher interprets the meaning of the stories by interaction with the participants (Polkinghorne, 2007; Schwandt, 2000). Narrative inquiry serves

not only to understand experiences, but also to make meaning of those experiences (Clandinin and Connelly, 2000). In narrative research it is important for the stories to actually present what they are supposed to present, in order to ensure that the meaning of the experiences of the participants are fully understood (Polkinghorne, 2007).

Description of the Methodology

Before the data collection phase of the study began, all of the required forms were submitted to the Institutional Review Board at UTEP in order to obtain permission to conduct the study. After the study was approved by the Institutional Review Board, the data collection phase of the study began. The purpose of the study was to understand the experiences of graduate students in a Master's in Economics program at a predominantly Hispanic-serving institution. Therefore, descriptive narrative research was used because it focused on how experiences shape an individual's life (Polkinghorne, 1988; Sandelowski, 1991). In-depth interviews were conducted in order to gather the data from the participants. The final version of the interview protocol (located in the Appendix), which was used during the in-depth interviews was developed after several drafts, and it included 14 questions and 3 probes. The interview protocol was used to evoke insightful responses and to clarify ambiguous and contradictory statements (Legard, Keegan & Ward, 2003). The interview protocol was designed based on the basic tenets of the Theory of Validation because it was the theoretical framework of the study. As mentioned in Chapter 1, I believed that validation was what could contribute towards a greater representation of women in economics, as well as in other math-intensive fields. Therefore, the interview protocol was designed to explore the academic and interpersonal validation of graduate economics students.

Two in-depth interviews were conducted with each of the participants. During the first interview, the interview protocol was administered. After conducting the first interviews it became apparent that the final version of the interview protocol did not need any further revisions since it took 60 minutes to administer, which was the designated amount of time. The second interview was used for member checking with the participants (discussed later). The first and the second interview lasted 60 minutes each. Before the in-depth interview began with each participant, the participants were asked to read the informed consent form and to sign the informed consent form if they agreed. After each participant signed the informed consent form, the participants were asked what they wished for their pseudonym to be. Only their pseudonym was included in the interview protocol, as opposed to their real name, in order to protect their confidentiality. The 2 in-depth interviews were audio recorded. Only the participant's pseudonym was included in the recordings in order to protect their confidentiality. All of the interview protocols, all of the recordings, and all of the transcripts with the student's pseudonym were protected with a lock in a secure place. The in-depth interview consisted of the six stages that were mentioned in Legard, Keegan & Ward (2003), in which rapport was built with the participants, the purpose of the interview was reiterated, factual information about the participants was gathered, the participants were guided through the main topics to discuss, the interview was concluded, and a segment of the interview was dedicated towards answering and asking any additional questions.

Purposeful sampling was used to select the participants, which meant that participants were selected based on the purpose of the study (Luft, Firestone, Wong, Ortega, Adams & Bang, 2011). Purposeful sampling was chosen because it is used in qualitative research in order for

researchers to “intentionally select (or recruit) participants who have experienced the central phenomenon or the key concept being explored in the study” (Plano Clark & Creswell, 2011, p. 415). Therefore, the participants were selected because they were graduate economics students. Henninck, Kaiser & Marconi (2017) state that it is more important to “focus more on the quality and richness of data rather than the number of participants” (p.1). A total of six graduate economics students were interviewed, which consisted of three graduate women economics students, and three men graduate economics students. Once I reached the point of saturation, the interview process ended. Saturation is defined as “when no additional issues or insights emerge from data and all relevant conceptual categories have been identified, explored, and exhausted” (Henninck, Kaiser & Marconi, 2017, p. 2). The participants of the study were recruited by asking permission from professors in the College of Business that teach students in the M.S. in Economics Program to allow me to talk to the graduate students in economics in their class (or to give me their e-mails), in order to inform them about the study, and ask them if they would like to be participants in the study. If the professors chose for me to go talk to their students, all of the graduate economics students were asked to write their name and e-mail in a piece of paper, and they were contacted after the class in order to ensure their privacy.

Since the worldview of constructivism was used, and the constructivist paradigm is based on individual realities, and constructivists believe that reality is individually and socially constructed (Plano Clark & Creswell, 2011), the Verstehen interpretation approach was used, which goes alongside with the constructivist worldview, and against the positivistic worldview and assumptions. After I transcribed the interviews and read the transcriptions multiple times I coded the interview transcripts in order to begin the construction of thematic networks. Coding is

defined as “the process of grouping evidence and labeling ideas so that they reflect increasingly broader perspectives” (Plano Clark & Creswell, 2011). Thematic networks consist of three themes: Basic Themes, Organizing Themes, and an overall Global Theme (Attride-Stirling, 2001). Basic Themes are defined as “the most basic or lowest-order theme that is derived from the textual data” (Attride-Stirling, 2001, p. 389). Organizing Themes are defined as “a middle-order theme that organizes the Basic Themes into clusters of similar issues” (Attride-Stirling, 2001, p. 389). Global themes are defined as “super ordinate themes that encompass the principal metaphors in the data as a whole” (Attride-Stirling, 2001, p. 389). I arrived at the Global Theme of Validation through the use of the Organizing Themes of: Academic Validation, Interpersonal Validation, and Invalidating Experiences. I arrived at the Organizing Themes through the use of a variety of Basic Themes. For example some of the Basic Themes that produced the Organizing Theme of Invalidating Experiences were: Pedagogies used in economics, and Lack of mentoring and encouragement. I interpreted the results by comparing them to the initial research question as well as to existing literature in order to arrive at a larger meaning of the results (Plano Clark & Creswell, 2011).

Controlling for Biases

Due to the underrepresentation of women in the field of economics the target participants were current women students in the Master’s of Economics at UTEP. However, I also decided to interview current men students in the Master’s of Science in Economics at UTEP in order to compare their responses to the responses of current women graduate students in economics at UTEP. In qualitative research reality is determined by experiences of the participants, and socially constructed (Creswell and Creswell, 2017). Therefore, it is imperative for the researcher

to accurately interpret their experiences. Triangulation and member checking were used as ways of controlling for biases. Triangulation is defined as when methodologies are combined to study one phenomenon (Denzin, 1978). The interviews with the graduate men economics students served for the purpose of triangulation of data in which “the inquirer builds evidence for a code or theme from several sources or from several individuals” (Plano Clark & Creswell, 2011, p. 210). Credibility was established by member checking (Guba & Lincoln, 1994). Member checking is when the researcher summarizes the major themes of the findings and then the researcher takes these findings to a few participants in order for them to give their opinions about the accuracy of the interpretation of their experiences (Plano Clark & Creswell, 2011). Therefore, the second interview was used to member check the experiences of the participants of the study. During the second interview which consisted of member checking, the participants clarified their contradictory statements and offered additional examples for further development of their experiences. The data analysis of the study was based on the experiences of participants after member checking was conducted.

Chapter 4 - Data Analysis

In this section, an introduction of the participants in this study is mentioned. Second, the experiences of academic and interpersonal validation of graduate economics students are presented in order to describe how graduate students are validated throughout the process of their graduate education at a Master's in Economics program at a predominantly Hispanic-serving institution. Third, the five main experiences of invalidation within and across graduate economics students are mentioned. Due to the underrepresentation of women in the field of economics, throughout the whole section the experiences of graduate women economics students were presented first, and then the experiences of graduate men economics students are mentioned in order to triangulate the experiences of graduate women economics students.

Introduction of Participants

Rosalyn

Rosalyn is a half White, half Hispanic woman graduate economics student who is pursuing the Concentration in Finance. She is the oldest of her siblings, which are two twin girls and one younger brother. She identifies more with her Hispanic portion because her Hispanic family lives in El Paso, and her Hispanic grandma helped raise her because both of her parents worked while she was growing up. Also, she does not speak fluent Spanish, although she is the best Spanish speaker amongst her siblings. She is a first-generation student because her parents did not go to college. Rosalyn has a Bachelor's in Economics and Finance from UTEP. When she was an undergraduate student, her extracurricular activities consisted of being a member in a fraternity at UTEP, as well as being a Teacher Assistant. Her current extracurricular activities as a graduate student consist of being a member in an Honor Society, as well as the Treasurer for an

economics group in the El Paso community. Rosalyn works for a nonprofit organization doing research. Her main research interest is economic development. She took macroeconomics in high school, as she was pursuing the early college requirements in her early college program at El Paso Community College (EPCC). Her short-term goals are to graduate with Honors and Honor cords in December in order to acknowledge her family and their influence on her education, and to move to Austin to experience new art, restaurants, and attractions. Her long-term goals are to work in economic development, to teach at a university, to get a Ph.D., or to become a corporate leader. She wanted to pursue a graduate career in economics because of the passionate way her economics professor taught his class.

Ana

Ana is a Latina Mexican International woman graduate economics student pursuing the Concentration in Finance. Her parents own a tortilleria in Chihuahua. Both of her parents used to work in a bank in Chihuahua until they lost their job due to budget shortfalls. She and her brothers moved from Chihuahua to pursue a college education in El Paso. She is a first-generation student. Ana has a Bachelor's in Finance from UTEP. When she was an undergraduate student, her extracurricular activities consisted of being a member of three organizations, including one marketing organization. As a graduate student she is not involved in extracurricular activities within the university, and she described her extracurricular activities as being with her friends, and doing homework. Ana works as an accountant in a public research organization. Her research interests consist of housing development, as well as how a city can grow more, and how the economy of a city can be better. Ana did not take economics in high school because no economics classes were offered in high school in Mexico. Her short-term

goals are to graduate, and to get a volunteer internship in economics. Her long-term goals are to buy a house, to own a business, and to have more real estate in Mexico. She decided to pursue a graduate career in economics because she wanted to pursue a graduate career in business, and there were not many graduate programs in business. She preferred the M.S. in Economics as opposed to the M.B.A., because she thought it would be less competitive because not many people enroll in the M.S. in Economics program. Also, she wanted to be more informed about the economy, and to be better able to understand the news.

Thalia

Thalia is a Hispanic woman graduate economics student who is pursuing the Thesis option. Her mother is the business owner of a very successful Hispanic business in the U.S. - Mexico border. Her father is the Director of Operations for this company, and he used to work in the maquiladora industry. She has two brothers - one is older and he works in communications and marketing, and the younger one is in high school and is interested in computers, technology, and engineering. Her family from her mother's side lives in Mexico, and her family on her father's side are first-generation U.S. Citizens. She is a first-generation student. Thalia has a Bachelor's in Economics and International Relations from another university in Texas. Her extracurricular activities when she was an undergraduate student consisted of Student Government Association, and she started her own student organization for anybody that studied abroad after she spent a year in Chile. She mentioned that it was difficult for her to become engaged in the university as a graduate student because she works 60 to 80 hours a week. Thalia works for a government agency. Her research interests include how the global economy and local economies are affected because of immigration, economic policy, and Mexican consumers on the

U.S. side of the border. She took one economics class in High School. Her short-term goals are to move back to Latin America or to South America in order to engage in economic analysis, and to pursue a career in economic development. Her long-term goals consist of pursuing a career in economic policy, and to start a think tank for economic policy in El Paso. Two of her professors incentivized her to pursue a graduate career in economics when she was an undergraduate at another university in Texas. One of her professors was a woman from Turkey, and the other professor was a man from Iran.

Miguel

Miguel is a Hispanic man graduate economics student who is pursuing the Thesis option. He is the youngest of five siblings. All of his siblings have a Bachelor's degree, a couple have Master's degrees, and one has a Doctorate degree. He is a first-generation student. His parents have a high school education from Mexico. Miguel has a Bachelor's in Engineering from UTEP, and another Master's degree from another university. His extracurricular activities while he was an undergraduate student consisted of roller hockey, playing basketball with friends, and running. He did not like joining student organizations because he felt that the leaders of the student organizations lacked leadership skills. As a graduate student he still does not like to join student organizations because he continues to feel that these organization lack a true mission. Therefore, his extracurricular activities as a graduate student consist of going to the gym and to exercise classes outside of school. Miguel works in a public organization doing research. His research interests include how people allocate their resources so that the mind is productive at work, and so they have the physical resources that they need to do a better job. He took one economics class in high school. His goals are to graduate, to continue to find a right job for him, and to be

financially successful. What influenced him to pursue a graduate degree in economics were YouTube videos that explained economics in a fun way, and a book author that was an economist from a book he really enjoyed. He has had a variety of invalidating experiences with professors at the Master's in Economics program and he is reluctant towards finishing his degree. Miguel started the M.S. in Economics because he wanted to see if he wanted to pursue a Ph.D. in economics, and now he is sure he does not want to. Also, he is sure he does not want to donate money as an alumni based on the experience that he has had.

Paul

Paul is a Hispanic man graduate economics student who is pursuing the Concentration in Finance. He is not a first-generation student. His father has a Bachelor's and a Master's degree in Business, but on his mother's side he is one of the few who have gone to school. He mentioned that his parents did not teach him Spanish. Paul has a Bachelor's in Business Administration with a Concentration in Economics from UTEP. His extracurricular activities when he was an undergraduate student consisted of being a member of Student Government, as well as of a fraternity with the College of Business at UTEP. He attended fundraisers, and other community service events. He did not mention any extracurricular activities in graduate school. Paul works in municipal finance evaluating budgets. His research interests include trying to figure out what affects bridge crossings, and tracking citations, which are a revenue source for El Paso. He took one economics class in high school. His short-term goals are to graduate, and to apply for jobs that will help him climb the ladder in his career. His long-term goals are to move out of El Paso, to get a Ph.D. in order to teach in a university, or if he does not get a Ph.D. to become a lecturer at a university and teach simple economics to students. What influenced him to pursue a graduate

degree in economics was a career test that he took in eighth grade which said that he should be an economist. Since then he became interested in the economy. Also, since his father has an undergraduate and a graduate degree in business, he has always been his inspiration to pursue an education.

Tom

Tom is a Hispanic man graduate economics student who is pursuing the concentration in Finance. His family is native to Mexico. He is not a first-generation student. His father is an archeologist, and his mother has five Master's degrees in the education and psychology fields. He has an undergraduate degree in psychology from a university in Arizona, and another Master's degree from UTEP. His extracurricular activities when he was an undergraduate student consisted of going to many small Native American towns to look at art exhibits, as well as hiking, camping, and outdoor activities. He mentioned that since he was a full-time student he did not engage in extracurricular activities at his university in Arizona. For his other Master's degree while at UTEP he re-started a student organization where he was the treasurer, and he joined the French club. He did not mention any extracurricular activities at the university while in the M.S. in Economics program. Tom works at a government agency where he oversees contracts with private entities. His research interests include economic development, as well as how to expand the region without the use of tax incentives only. He took two economics classes in high school (micro and macro economics). His short-term goal is to graduate, and his long-term goals are to obtain more of a managerial position at work where he will be able to help people start businesses. What influenced him to pursue a graduate degree in economics was the fact that he wanted to work in a field dedicated to business retention and expansion, and when he

viewed the requirements for jobs within these fields, all of them suggested that an education in economics was preferred.

Please refer to Table 4.1 for a summary of the participant’s characteristics.

Table 4.1: Summary of Participant’s Characteristics

Pseudonym	Ethnicity	First-generation student	Current employment	Number of economics classes in High School	Field of Undergraduate Degree
Rosalyn	Hispanic and White	Yes	Works for nonprofit organization.	1	Economics and Finance.
Ana	Latina, Mexican International	Yes	Works for a public research organization.	0	Finance.
Thalia	Hispanic	Yes	Works in a government agency.	1	Economics and International Relations.
Miguel	Hispanic	Yes	Works for a public research organization.	1	Engineering.
Paul	Hispanic	No	Works in municipal finance.	1	Economics.
Tom	Hispanic	No	Works in a government agency.	2	Psychology.

Validation

In this section the global theme of Validation is presented through the use of three organizing themes: Academic Validation, Interpersonal Validation, and Invalidating Experiences. Also, several basic themes are used to present how I arrived at each organizing theme. For example, creative learning that emphasizes power to learn and potential to succeed is one basic theme that allowed me to arrive at the organizing theme of Academic Validation.

Academic Validation

Creative Learning that Emphasizes Power to Learn and Potential to Succeed

Academic validation emphasizes the student's ability to learn and potential to succeed, and it can be enforced by creative learning experiences for students (Rendon Linares & Munoz, 2011). Throughout the interviews it became apparent that economics professors who implement academic validation in their classes make a positive change in the lives of the graduate women economics students. Similar to Ülkü-Steiner et al. (2000) the professor's personal attributes influenced the women graduate student's academic self-concept, and the commitment to their careers. Rosalyn mentioned how she decided to pursue a graduate career in economics because of the passionate way that her professor taught his class as well as how his interest in the subject was apparent to his students in one of the first introductory classes in economics:

I really wish you could like sit in on his class, you could see how he teaches it. He like bangs on the table, and like smacks the chalkboard, and he's just telling me like- this stuff is important! and then he, like in a very, I don't know, in a better way to say than what I just said. For instance, he tells us about how everything connects to Economics, like even the guys in the military, even the people in the shore, in a submarine, are all like connected into Economics, and it was like I want that much passion. He even tells us, he's like writing these papers at like 2:00 in the morning, and thinking of all these theories, and I'm like- what? I want to be that passionate about something, you know? So yeah, him for sure. In terms of like, what caused me to continue my education.

Rosalyn continued by saying that this professor incentivized her to continue to pursue a Doctorate in economics in the future.

While she was an undergraduate student in another university in Texas, one economics professor impacted Thalia's decision to major in economics. In resemblance to Bettinger & Long (2005), having a woman faculty member in a class increased a woman's interest in the subject, as well as the likelihood of her majoring in that subject, especially in subjects in math-related fields. This professor was a woman from Turkey and Thalia mentioned:

She kind of connected immigration and economics, which were, immigration was the subject that I was trying to hone in on. And, she kind of made the connection for me that made more sense for me to continue my education in economics instead of international relations. But, she really had that one-on-one passion, and would spend that time, that allowed me to really understand economics.

In similarity to Starobin & Laanan (2008) Thalia noted the difference that professors that told her that she could study subjects that dealt with math and science made in their life. Thalia mentioned how one of her economics professors while she was an undergraduate student at another university in Texas helped her to choose to pursue a graduate career in economics because he introduced her to another economics professor at UTEP, and how both of these professors made a change in her life because they believed in her power to learn and potential to succeed:

My senior year I also had another professor who was from Iran. He taught labor economics and he was also incredible. And he also had a very close relationship with a professor here at UTEP. So it kind of just happened on a whim, it wasn't something that I

decided. I think he decided for me. So, graduated in December, started my job in February, went back to walk in my graduation in May. And I ran into him, and he asked me what I was doing and he told me I had to pursue a graduate level economics degree. When he found out I was in El Paso, he immediately connected me with the Director of the Master's in Economics Program, who introduced me to the M.S. Program here at UTEP and two weeks after that I was starting my first summer class. So, I didn't really have to think about it, I just, they just kind of made it happen for me. So that was really great.

In resemblance to Rendon Linares & Muñoz (2011), faculty members implemented academic validation in their classrooms by creating activities where the students were able to witness their power to learn. Rosalyn mentioned how one of her Finance professors helped her witness her power to learn when he congratulated her on how she had done a great job in a class presentation:

We have this, what's it called? this presentation and he's like - yeah you do really good! Like as a professor, you have that kind of personality, and I'm like yes! This is great, like I, you should have seen me when I walked out of class, I was being way too much, I was like oh how cool.

After Tom asked for help from one of his economics professors and one of his finance professors in regard to questions that he had about applying methodologies in one of his work assignments, Tom mentioned how his professors answered his question and incorporated Tom's problem into the class discussion:

The encouragement came from later in the class when they would actually kind of tailor

it to my issues. They're like - okay let's pretend that El Paso this, but very specific to the issues that I had brought up. So it was encouraging that they're taking real life scenarios out of real life situations, again coming from a sit-down meeting with them for about 5, 10 minutes, to be placed into the class. I gotta say there's gotta be about ten times I can think of when the professor's based out of conversations that I would have with them, either if I just approached them after class or whatever real quick, they would say - what if this happened in El Paso? but they were really specific to the situations that I was dealing with. It was encouraging to see that it was implemented in the class. Not only that, but it was on a personal level. The problems that we're trying to solve at work were being placed in the class.

When referring to his statistics professor Miguel said:

One example would have to be a course that wasn't within the economics curriculum, it was outside of it. Because it's statistics, and I think she just understood. I don't know if she took courses in how to improve, how to be a teacher, but just the idea of providing a bunch of practice problems, and then also practice problems where you're not penalized if you get it wrong. You just do it over and over until you get it right. That's encouraging people to learn, which it encourages you to fail, and it's okay. It encourages you to want to get it right.

Paul mentioned that his Accounting professor who was a woman taught her classes in such an interesting way that him and his classmates would stay 30 minutes after the class was over in order to keep asking questions due to the interest of her students in her knowledge and in the way she explained the class material:

She really broke it down and went into a lot more detail in explaining things and talked a lot more about accounting and how to do things, what could work, and really specific examples of what and what doesn't work in accounting when you're trying to classify whatever it is you're looking at. Liabilities or expenditures. So I feel like with her that's probably one of my more favorite M.B.A. courses, because she took something that can be complicated and broke it down very nicely that everybody, regardless of their education background could understand. And part of that was her personality as well, she was very outgoing, very talkative. So the class was never dull, it was never boring, it was always interesting, and she kept it interactive.

Faculty members implemented academic validation in their classrooms by ensuring students that they would be successful (Rendon Linares & Muñoz, 2011). Thalia and Tom both mentioned how their professors helped them witness their power to learn when they are able to apply what they learned in class in their employment. Thalia stated:

The big thing is one day I'm learning something and the next day I'm applying it at work. So I think my professors see that out in the work field, when I'm calling them for references, or something that I'm gonna apply in work.

Tom mentioned a similar example, but with a Finance professor:

He was able to give us the knowledge to go into a specific company and track their stocks, track their method of thinking and track all of the financials in a way that we can implement it right off the bat. It's not just for class, like we can actually, if we wanted to create a portfolio, and in fact, a couple classmates and I, we found this free app where you can trade stocks, and throughout our semesters we actually ended up trading stocks.

A lot of the methods that was taught in the class were actually implemented into how we traded stocks, how we go on about creating our own portfolio.

Paul described the impact that the Department Chair of the Economics and Finance Department had in his research interests and in him wanting to pursue a Ph.D. in the future during his undergraduate career:

The courses that I took with him, they are a lot more micro oriented. So he dealt more with the individual and learning that side of it, I had taken previous micro courses, and you know they were okay, it was interesting but, I was more interested in macro. So his teaching style along with what he had to offer, as far as experience, his personal experience and integrate that into the course. That had a huge impact on me as far as wanting to go more of a micro route. So with him, he's a lot more inspirational. It was always interesting to hear what he had to say and he's very passionate about what he does and he's an older man, I mean he could be retired if he wanted to. But he's still out there teaching economics to students.

Caring Demeanor and Valuable Feedback

In resemblance to Bieber & Worley (2006) students learned the most when professors tried to engage their students, as well as when they showed a caring demeanor. In similarity to Rendon (1994), faculty members implemented academic validation in their classrooms by being personable and by providing feedback to students. Ana described how the teaching methods of her woman finance professors differed from the teaching methods of her men economics professors:

I think they are really patient. First of all, really patient. And they explain things, like

even if it's something really obvious, like they have patience to explain even like the littlest, the little things if someone doesn't understand.

Ana also mentioned how her Finance professor who was a woman spent a lot of time on details that might be important for her student's understanding: "She explains things like apples, oranges. Like very very clear. She has a very good way of communicating her words." Miguel also noted how his favorite class was with a statistics professor who was a woman because of her attention to detail and patience:

The best class I've had within my degree so far has been a statistics class, and it was taught by like a teacher of the year, and you can tell! Like the way she set up the courses, the way she's incorporated Blackboard. The way she's incorporated more than just - here's theory. So I'm a big believer in training, right? Not just education in training, but it's training where, now that I've taught you something we're going to do it, over and over and over and over, just repetition repetition repetition. And, here, it's more - here's education, I'm going to give you some problems which I'm going to then grade you on. As opposed to - I'm going to teach you a few things, I'm going to give you problems that you're allowed to fail on. And like she would use the Blackboard where she would give you a question, and you could answer as many times as you want in order to get it right, and then she'll test you afterwards.

Interpersonal Validation

Influence of Their Families in their Education

Interpersonal validation deals with the personal development and social adjustment of the students (Rendon, 1994). Family members, friends, and members of the faculty contribute

towards the student's interpersonal validation (Rendon, 1994). In similarity to Richman et al. (2011) graduate women economics students mentioned the importance of women role models in creating positive experiences, and serving as support systems and examples of success in a field where men are the majority. Also, in resemblance to Patton (2009), graduate women economics students mentioned how they rely on women family members for the support of their well-being.

Thalia mentioned the influence of her mother in her education and career:

One of my biggest role models of course is my mother. Was born in Mexico. Worked her way out of a house with very divisive family and then went on to become a business owner, both in Mexico and in the United States. One of the top Hispanic businesses in the U.S. - Mexico border, and it's always been very empowering because anything that people tell me I can't do, I just look to her and she's already done it. And so she's always been my biggest role model, my biggest champion.

Rosalyn also mentioned the influence that her mother had in her education:

All the time we would drive by UTEP, every single time when I was little she was like - look, there's your school. And I'm like - oh, okay mom. You know? Every single time, and so I just thought that was something you were supposed to do.

Nontraditional students do not know how to proceed with the everyday activities that are necessary in their universities, such as filling out financial aid forms because they do not have role models who went to college or are familiar with these processes (Rendon Linares & Muñoz, 2011). Even though Rosalyn was a first-generation student, she described how her mom would help her in her struggles in the university, a great example of interpersonal validation:

I would always ask my mom for help, and I would always be like - Hey mom can you double check what classes I'm going to take? Can you double check my schedule and help me see if there's something that's like better? and then I'd tell her - Mom, I need to pay for school, what can I do? Hey mom, can you come with me to the financial aid, cause I don't know. I don't know! And so she was always there, and she would drive me to school for like my first two years. Like I'd always ask her - Hey what do think about this? Do you think I should join this? It's not like I can't make up my own thoughts right, but I feel like I need somebody there to like validate what I'm doing because in my own mind, I'm sure I think I'm right but if you get another perspective it really helps.

The decision to attend college is not guaranteed for nontraditional students because they have to consider giving up working full time and the income associated with that employment which is greatly needed by their families (Rendon Linares & Muñoz, 2011). All of the graduate women economics students were first generation students, and all of them mentioned how they received interpersonal validation from their families as they pursued their education. Ana described how much it meant to her to be in a graduate economics program considering that her parents did not go to college:

I see the joy in their eyes because as I say they never went to college so when you see like their eyes, when we graduate, like my brother, and my other brother, and then me, they're like super happy to see what they cannot accomplish, that we're accomplished for them. And, my brothers they don't have a Master's, I'll be the first one having a Master's, and they are supporting me in every single step of the way. I feel really happy that I'm doing the Master program, especially because it's a big opportunity here at UTEP.

Thalia mentioned a similar experience:

I think it's a success story, to know that your family sacrificed what they did to move here and to give you a better life, and to know that you are doing something with it. And you're pursuing your dreams and your goals, and you're getting somewhere. I think that's the most satisfying thing, is that you're slowly paying back what they've sacrificed for you.

Rosalyn explained what it meant to her to be a first-generation student and to be in a graduate economics program:

I'm sad that my parents didn't go to college, right? But I'm very happy that I was given the opportunity to because I was even thinking the other day when I was driving, my grandparents, they came from Mexico, and they got a job here, and they established themselves here in the United States. I think it's hard, you know like my grandpa he wanted his family to be stable here in America. And, with my parents, like they were working very hard, and they stressed the importance. Like my mom, she even told me, when she sees me and my sisters, when we're walking down the stage in graduation, she told me, she was crying. Because she told me - that's a dream that I had, that I didn't get and I'm happy that you can have. That's one of her biggest regrets, not going to college, right? And I can see the, the importance of it. And so now, I think in my life, I'm doing something I love and I'm enjoying it. You hear like there's a lot of people that don't enjoy what they do. But I found something, and I'm like - I wouldn't have this, unless they set a path for me.

Graduate men economics students also mentioned the influence that their families had on their education. Paul said:

One of my biggest role models, it would be my dad. Growing up he always told me - you need to go to school. And like I mentioned before, I always had like a business aptitude, had an interest in that. I always knew my dad had a business background, he got his undergrad in that I believe. So at least in I guess my academic goals, I mean, a big part of that would be because of my dad, you know? He went to school, he told me the struggles of not going to school. And you know, people say that back in the 1950's and 60's, you didn't necessarily have to go to school to obtain a good job but he grew up in the 70's so, even back then, he realized, you know - I need to go to school. I mean back then you needed a degree to, not needed but if you wanted to make more money to support a family, to support yourself, I mean that made sense to do it. So I guess in my educational attainment, a lot of it's been attributed to my dad pushing me to go to school.

Miguel also mentioned the influence of his family in his education: "Growing up education was driven like a very important thing to accomplish."

Fostering Community Engagement and Cultural Diversity

Institutional agents can create an environment that enforces interpersonal validation by fostering the cultural diversity of their students (Rendon Linares & Munoz, 2011). Thalia described how her economics professors introduce her to successful people in the community who might serve as her mentors, which is a great example of interpersonal validation: "I think they notice that drive, and because of that they invite me to events and they introduce me to different people in the community who might be mentors." Paul mentioned that one of his

economics professors encourages his students to attend talks about the economy, which is another great example of interpersonal validation:

He would tell us maybe two or three times during the class, he would tell us - you know, I'm going to do this lecture over here on this particular topic and this is how this relates to class right now. So he would encourage us to go to these talks and there's gonna be a lot of people there from different backgrounds of the economics field.

As mentioned in Chapter 2, nontraditional students feel that in order to succeed in American education, they must assume new identities and unlearn the cultural values and practices of their past (Rendon, 1994). The curriculum needs to reflect the student's personal histories because they need to see themselves and their background in what they learn (Rendon Linares & Muñoz, 2011). Fortunately, Ana and Paul mentioned how their economics professors acknowledged and encouraged their culture in the class discussions. Ana, who considers herself Mexican/Latino described the following:

Most of the things we talk about are related to the border, and the relationship between Mexico and the U.S. So we talk a lot about the Mexican culture.

Paul explained how his economics professor incorporated his culture into the class discussions and assignments:

One of the most interesting things that he brought up was he asked us: each year how many billions of dollars are spent in consumerism here in El Paso from retail, restaurants? He asked us - what percentage is associated with the Mexican shopper that comes across the border? And it was about ten percent so. Him able to throw those types of figures in there, facts based on data that he has, integrate the whole ethnicity thing,

because we are a border city and our economy affects theirs and vice versa. He was able to make some of those examples in class and that was always interesting to hear, how different nationality affects the El Paso region.

Encouraging Professional Development

Contrary to Becker et al. (1990) who mentioned that student learning in the education of economics is not valued as much as student accomplishment, three of the participants gave examples of how their economics professors wanted for them to succeed as professionals as well as students. Ana gave an example of how her economics professors want to see their students succeed in their professional careers:

They see an opportunity in economics, there's not many opportunities in economics here in El Paso, but if they see one they send it to us. I would say that's caring about not only being a student, but caring about how to apply your Master's into the real world. That's the way they show they care about our future. It just depends on the person, if you take the opportunity or not. I mean the opportunities are there, and they show us the way.

Rosalyn mentioned how the Director of the program helps students get employment opportunities:

We have this professor who is in charge of the economics graduate program, and he sets students up with jobs. He has faith in them, my friend he actually just got a job. The professor helped him, that's been like a recurring theme with like a lot of people that I've heard. I'm grateful that these professors do see the opportunity, the potential in us, that they'd be willing to put our name alongside their name in anything that they put their students in.

Tom described how his economics professors not only wanted him to succeed academically, but also professionally:

I like the fact that they want to see me succeed professionally. I don't think that they've ever emphasized academically. Not ever, but I think they put a lot more emphasis on professionally. Because throughout all of the classes they mention a lot of the people that have graduated from the program, and what they're doing now and how it related to what we are doing. Better than succeed, get A's and all of that stuff, it's more of an emphasis on - what can you apply this to in the real world out there. I think that they place a lot more emphasis on the professional development, rather than the academic one.

Study Groups and Social Networks

In resemblance to Rendon Linares and Muñoz (2011), students were interpersonally validated by forming study groups amongst students and social networks with their peers. Most of the participants mentioned how they had formed study groups and close relationships with their classmates, and how these classmates were the first that they contacted when they were struggling in school. Rosalyn explained that even though economics is extremely competitive, all of her classmates and herself wanted everyone else to be successful:

Even when I'm having a hard time, like my friend, and I'm like - hey how do you do this? Show us how you do this? You're such a small cohort, you want to pull everybody to the finish line with you.

Thalia mentioned how all of her classmates attend each other's birthday parties, and how they help each other:

It's been a really great experience because if we ever need anything we can always just ask each other any doubts, registering for classes, whatever it is, we're just all kind of there for each other. So it's been really great.

Tom described how he admires the knowledge of his classmates, and how he contacts them for advice related to his work:

I actually approach them on a regular basis asking them for feedback. So for example, just last week. Whenever I think the topic is too narrow for me reach out to my professors, because I know they're there as a source, but whenever I have a topic of discussion that is just too narrow for them, I'll go ahead and reach out to them. And usually there's about two, three people that I reach out to out of my cohort. Two of them girls, one of them a guy. And it's usually the girls that I reach out to first. Simply because they've shown mastery in that field. Just by being in class with them, I know what they're capable of. I've actually been placed in teams with some of those girls, and I gotta say they're really smart. They really know what they are doing. So in a professional setting, outside of academia, I do reach out to them. Not because they are women, but simply because them as individuals have shown to have been very knowledgeable in what they're doing. I feel that they're approachable and that they're knowledgeable enough to get their feedback.

Paul mentioned how he also asks his classmates for help:

Sometimes I'll ask some of my classmates. Some of them will grasp it a lot more than I did. And we'll just help each other out during the breaks that we get during class and after that it's like - oh, it makes sense now. It's happened to me a couple of times in my

finance courses, I'll do the same, I mean, when you're going over something and you get a break, it's time for me to understand something. And then I kind of understood how they do whatever it is they're doing, calculation, so I think the really easy stuff like that, we have to help each other out.

Invalidating Experiences

Lack of Interest in Economics due to Poor Advising and Teaching in High School

The invalidating experiences of most of the participants started since high school. Nontraditional students question their belonging in the university because they have usually suffered invalidating experiences in the past (Rendon Linares & Muñoz, 2011). Rosalyn gave an example of an invalidating experience she suffered when her advisor in high school did not send her application requirements to an Ivy League School she had applied to:

When I was in high school I wanted to go to an Ivy League School. That was the only type of school my parents would allow me to go to if I wanted to leave. And so I did apply to one and when time came around for us to at least to receive our letters, and I never received, even a rejection letter. And I was like - Hey, if you don't want me, I'm totally cool with that, like you're an Ivy League, I'm fine, but at least tell me that you don't want me to be a part of it, right? So I called, and I'm like - Hi, I was hoping to receive a response to my application, and they told me that my counselor had never sent in my transcripts or anything of my academic - anything that I did. And I was - it hurt, because I was very involved in school. I was doing well in my classes and I felt like I had a fair chance, you know? And ever since I didn't go, it felt like a chip in my shoulder, like something that I didn't, that I wasn't able to do.

Most of the participants mentioned that they had never considered studying economics because economics was not of interest to them due to invalidating experiences with economics teachers in high school. Thalia stated the following:

In high school I took one Economics class, and I absolutely hated it. It was a requirement, it was also another A.P. class that I could take in high school. But the professor, the teacher was just absolutely awful. I think he hated Economics himself.

Miguel mentioned how his economics teacher in high school was not an inspiring teacher:

I think it was required, in high school, and it was taught by, it was taught by my basketball coach. And, just to give you some context, this coach was considered like one of the best in the region. So, his focus was on basketball, and you could tell, he was almost just teaching a course because he had to teach a course.

Tom discussed how he had taken economics in high school, but he barely even remembered his teachers:

I vaguely remember them. Again, cause it wasn't one of my favorite subjects. At the time. I want to say they were helpful but again, because they didn't really have a big impact in my life back then. I don't remember them that well.

Paul mentioned the following:

At least once a semester I think back to that class in high school, and it was very rudimentary, it was very elementary, really. I mean, supply and demand, and what drives it. And that was it. And you took a semester of that. So, when I compare that to what I took in my undergrad it's night and day, and I feel that people need to be more aware of how it works and you don't need to understand the Calculus, or anything like that but just

simple factors that affect the economy, how things don't always go as planned where you do all of the steps, or whatever it is. So yeah, the class was a joke. I didn't learn much at all.

Colander and Klamer (1987) stated that graduate economics students view the material that is taught in economics courses as lacking practicality. Although the participants do not feel a disconnect with the material is taught in their current graduate program, some felt a disconnect with the material that was taught in high school. Miguel mentioned:

I think, in this class, it was simply focused on, you know, Adam Smith's invisible hand. And I even think, like the wealth of a country, is sort of like an abstract concept for a lot of people in high school, at least, so here in El Paso, it wasn't, it wasn't like the Lower Valley of El Paso where I grew up, where you come across like more low income families. I went to a high school in the Upper Valley, where there were more, you came across more, sort of successful families, financially successful families. More families that had owned their own business, and even they, I still feel like the topic of a wealth of a country is maybe of no interest to high school students. So I just remember going to class, and I learned a little bit about supply and demand, but it wasn't, it wasn't really about how I apply these concepts to my life. Which I think most high school kids are interested in, right? Like, how does this apply to me? Rather than how is a 16 year old, or a 17 year old going to affect the wealth of a country. So, I think that's why there is a disconnect there, between that class, and just being that age.

Paul described a similar experience:

I feel the curriculum, whether it's devised by the school or they have to follow the state guidelines or whatever it may be, it's informative but I guess it's the timing of it really, it wasn't long enough and learning economics in high school, it's a fairly complex topic. So there's only so much that you can teach to high school students without losing interest in wanting to learn all of these broad things really.

First-generation students felt that they were not informed about economics enough to want to pursue an education in economics. Ana stated that she thought that women do not pursue an education in economics because they do not know what being an economist entails:

I think it's a lack of not enough information of what economists do, or what type of job you can get in economics. It's so easy to know what type of job you can get studying accounting or studying management. Or I don't know, it's simpler to think that way, than to think - oh, well what economists do. I guess that's also part of why people don't choose economics, especially women.

Rosalyn also mentioned that students are not informed about economics:

When you're at that point in your education. You mostly think about being a doctor, or you think about being a lawyer, or a teacher, or something like that, right? But you don't realize so many things. Like I always thought I was gonna be an architect. I was like - oh, this is a totally different idea than what everybody else would think, they don't even know what an architect is. But there's so much more, and I'm frustrated, I'm completely frustrated that we don't know about this. And I don't know if like other communities know about all of these opportunities. Because, I was even telling my cousin, like she doesn't know what to do! And she's just like - oh, I'll just go the med

route. But like, no I know that's not her, I don't why she's going into that, but it's just like we don't know!

Miguel discussed how the parents of first-generation students are not informed about economics enough to encourage them to pursue an education in this subject:

First generation kids, their immigrant parents don't really have an understanding of all the different types of jobs that you can make a living in, at least within the United States. So, business, I think it's, maybe they don't really have an understanding of what you can do with a business degree. They're always thinking more of these technical degrees that you can, you know for sure there's a job market, there's a demand.

Miguel continued by discussing that high school teachers are not informed about economics themselves to motivate their students to pursue a degree in economics:

It never occurred to me that- hey, I'm good at math, I wonder what other types of degrees include math in the College of Business, and I think it's because even in High School, and earlier, once teachers know you're good at math, they always want to push you into engineering, because that's all they know too. And you realize a lot of these teacher, they don't even know how to apply, or what types of jobs are out there for kids. So that was unfortunate.

Pedagogies Used in Economics

Do-it-yourself method. As discussed in Chapter 2, nontraditional students are vulnerable to in-class and out-of-class experiences in transition points, such as the first year of graduate school, in which they question their ability to succeed (Rendon, 1994). Nontraditional and traditional students mentioned how their economics professors inculcate a do-it-yourself method

in all of their classes. The do-it-yourself method that economics professors inculcate in their classes resembles the male-centered model which reinforces doubt, and prevents learning and growth for nontraditional students (Rendon Linares & Munoz, 2011; Rendon, 1994). The male-centered do-it-yourself method proved to be an invalidating experience to the women graduate economics students. Rosalyn mentioned that the only way that she was familiar with the software that was used throughout her economics classes was because she had learned the software as an undergraduate economics student. Also, Rosalyn described how she wished she could rely more on her economics professors to teach her how to utilize the software:

I think for the whole class in itself, the students don't know what's going on. But I think that the teachers see that, and they're like - hey, well you need to teach yourself, like you need to learn. But like I don't learn that way, so I'm thankful that I have that pre-class (in undergraduate). Look, I see like with one of my friends, he, he's like reading manuscripts of how to do statistical programs. It's like - oh, you poor thing. But he's reading it, he's understanding it. But I guess he's getting more out of it. I wish they did, I would not ask them for help, though. I would not ask my professor for help. Because they're like - yeah, the material's online, you can find it. And like why? I think I'm like waiting for them to.

Ana described how instead of showing his students how to use the software, her economics professor told them to watch videos to teach themselves how to use the software:

In the very first class that we took, and we were working with a program. It was a program that was available at the UTEP labs, in the business college. And like the first

time that you see that program, it's like - how do I start? Like where do I click? It's kind of complicated if you don't have any guidance before. So, he encouraged us to watch videos, and more like he going into your computer and showing you - click here, click there, like he encouraged us to look at the videos.

Surprisingly, the male centered do-it-yourself method also proved to be an invalidating experience to the graduate men economics students. Tom mentioned how it was an invalidating experience for him when his professors did not explain the software:

There was something that I just could not understand using the software that we had never used before. Even to this day, the class does not require for us to open up our computers and use that software. So it was more of a kind of learn as you go. So that was definitely a negative experience in that class, I mean that was just frustrating. It's kind of like learning a language without ever hearing it or speaking it. Or hear anybody else speak it. Because you have to learn different commands that while they're taught in class at the theoretical level, they're not taught in the computer aspect of it. It's like telling somebody to use Adobe Acrobat for paint shop or whatever it's called and teach him all about art. Well, art does not relate to how you use a computer. How you use the commands and all that stuff. So while you're understanding the theory of it, and why you're doing all the things, when you're in front of the computer you're just drawing a blank. How do I do it? Like I know what I'm supposed to get to but how do I physically, like what keys do I punch in? What commands do I have to type in to get to that? I know in paper, but that's not the point. Not when you're dealing with data that's thousands of inputs. It would take years to do it.

Paul described a similar experience:

With this professors it was just like, - so this is eViews, this is where you can download it, this is what's due next week, go figure it out or do it. He wouldn't tell us that, but he'd tell us - Hey, It's due. You read the problem set, and you look at what you need to do. But it's up to yourself to figure out how to manipulate the software. Do what you need to do. So there's a lot of research online, on my own, a lot of YouTube videos on how to run different things on eViews. So it's been challenging.

Miguel mentioned how he was frustrated by the lack of explanation from his professors:

As far as the teaching goes, when I think about it, it's like maybe I could have figured that out on my own. Like if I had gotten the textbook, well no, it wasn't that bad, it did add some value, but I would have expected more value taking courses with these professors, rather than just me picking up and reading a textbook.

The following is an example that Paul gave in regards to the do-it-yourself method:

You take notes as much as you possibly can, as best as you can. And you're just thrown out there, and you have to figure it out sometimes. I mean they give you examples in class but, I mean they give you a book and tell you look at so many examples and problems, and - this is how you do it, go practice it. So I felt like we were just thrown out there and told to learn things on our own.

Lack of creativity in lecture. Labaree (1997) mentioned that since the main goal in economics is to gain a competitive advantage in order to maximize returns with the least amount of effort, students are only concerned in learning what they have to learn to earn a good grade on

the test. In contrast to Labaree (1997) the graduate economics students that I interviewed were eager to learn, and the lecture format of all of their economics classes proved to be an invalidating experience within and across participants. The main problem with using the teaching method of lecture is that the professor is “the sole authority, and assessment tends to focus on learning outcomes as opposed to learning processes” (Rendon, 1994, p. 2). Rosalyn mentioned the following about the lecture format in her economics class:

I think everybody in class is extremely eager to learn, and I’m extremely eager to like learn like new ways, and new practical ways of applying this stuff. And so when we, cause it’s a commuter school right? Like people are driving, like I live on the far, far side of town. It takes like 40 minutes, sometimes to get here. And so to like drive all the way to come to class and then it’s not, it doesn’t feel worth it so that’s when like you start to see that students don’t go to class. And like the class starts to loose it’s momentum.

Rosalyn continued by saying that the lecture format of her economics classes made it difficult for her to ask questions:

I don’t know I just feel like it’s, first of all I don’t think it’s good to ask questions unless you’re in like a seminar kind-of-thing, or like a, or what is it? Like that Socratic uh, class learning type-of-deal? I don’t feel like it’s appropriate for me to ask a question unless we’re in that kind of environment.

Thalia described how her economics professors do not change their teaching method to reflect her learning style: “I’m a really big visual and story kind-of-person to learn, so it’s been a challenge being here at UTEP because majority of the time they’re just talking.”

Paul also described how he is a visual learner, and how the lecture format of his economics classes has been a struggle:

Personally, I'm more of a visual person. So I think I've had to adapt to the whole lecture style. And that probably started when I was in undergrad. Because a lot of the upper level courses, that's all it was, just lecture. I think I would've like to have seen more, I wouldn't say power points, because I think in economics they're not as effective. I feel like you really need to draw a lot of things out.

Miguel also mentioned how the teaching method of lecture was an invalidating experience because he felt he could not rely on his professors:

Just lecturing, lecturing, lecturing, lecturing. And, we're beyond that, gotta be better than that. Trying to think about the other classes, so then it's lecturing and then they give you problems. And not even like a lot of problems, like it's, I almost felt like there was, it seemed like they were, this is what I gathered, a lot of the students that they're employers are paying for it. So, their teaching method was, - I'm going to lecture, and I'm not going to burden you with a lot of homework or problems so I'm not going to assign much. So, yeah I guess it's up to the student. And I guess this goes for every graduate degree, it's up to the student to make the most of it. But you want someone more than just a facilitator, you want a teacher, you want a professor. It's foolish to say that for the faculty to rely on that, so I practice martial arts, and you would never have a martial arts teacher just say - oh just show up and it's up to you to make the most of it. No, you pay to go to the academy so that instructor can work with you and I just didn't get that.

Miguel continued by saying that the lecturing of his professors prevented him from witnessing his power to learn:

I just don't think these people know how to teach. Right? I think a lot of them are just Ph.D.'s, and they're not Ph.D.'s in learning and education, and you can tell. I mean, all you have to do is I guess even read a couple books about how people would, I would imagine, I'm imagining, but it just, it surprises me how little focus they place on training. I guess when I think of power to learn, for me power to learn means putting me, putting the students in a position to push themselves a little bit at a time, right? To give them challenges that are overcomeable. And, yeah I don't see that. It was all just lecture.

Lack of Mentoring and Encouragement from Men Faculty Members

Rendon (1994) spoke about her personal experiences in her doctoral program, and how she could not relate to the experiences of her male peers who were white, and had attended very prestigious universities because their cultural realities differed to a great extent from her own. In similarity to Patton (2009) who mentioned the lack of relationship networks between women students and men faculty, women graduate economics students felt that they had trouble building relationships with their economics professors. The lack of relationships between the women graduate economics students and the men faculty proved to be invalidating experiences because of the scarcity of institutional agents that were able to guide them on their academic journeys (Blackwell, 1988; Ülkü-Steiner et al. 2000). In resemblance to Colander and Holmes (2007), women graduate economics students reported feelings of disconnection and lack of social interaction in their graduate program. Ana mentioned that she did not share many experiences

with her professors: “I really don’t have many experiences with them, just the interaction we have in class.” Rosalyn said that she did not know how to relate to her professors:

For me, it’s been difficult. I just, I don’t know how to relate to them. But I mean like yeah we have similar interests, but I’m not gonna come up and like talk to you about I don’t know, sports? I guess? Do you want to talk about soccer? Then let me start watching soccer, just so I can talk to my professor. The closest thing that I’ve ever had to a mentor is just talking to my professor about the Ph.D. program. So yeah, not too too much mentoring unfortunately.

In similarity to Rosalyn’s experience about how she felt that she could not connect with her professors because most of their conversations and examples dealt with sports, Miguel also noticed how most of the examples that his professors gave were tailored towards men rather than towards women:

There’s a woman, I think one woman in my classes, and I think I often, I have a twin sister, so I think I catch moments more so than other men, when - oh, that’s something that maybe I would get faster than my sister would. So, my experience is you come across some of these examples that, and comments by some of my professors, that are almost geared towards men, rather than to women.

In contrast to Rosalyn, Thalia did not feel a disconnection with the fact that professors discussed sports in their classes, but she did feel a disconnection when her professors did not include her in the conversations about sports since she is an avid sports fan: “I think that’s just, that’s the way society is unfortunately, we assume that girls like pink and boys like blue and we don’t mention blue to girls because why would they care about blue?”

Thalia mentioned how the lack of approachability of her economics professors prevented her from having mentorship opportunities:

It's very disconnected I think. They don't seem as approachable as I remember my undergrad professors. I don't know if sometimes they're not fully happy, but it seems a little harder to have conversations and ask them questions, and connect with them to get them to be your mentor really.

Faculty can implement interpersonal validation by wanting their students to succeed as persons, not just as students (Rendon Linares & Muñoz, 2011). Unfortunately, Thalia continued by stating that she does not feel her economics professors want her to succeed as a person as opposed to just as a student: "I think some professors are just here to just teach and get through another day of their job." The lack of relationships and mentoring with the economics professors also proved to be invalidating to graduate men economics students. Paul mentioned a similar experience to Thalia:

I feel like they don't really provide a lot of feedback or encouragement, not that we're expecting that but you would think with the smaller class you would get more of that from professors but I kind of feel like they're just doing their job.

Miguel was considering not finishing his degree because of his experience in the graduate economics program: "The only reason I would not want to finish is a part of me likes the idea of being able to send a message to the graduate degree program that you have to get better." Miguel stated that the topic of his thesis did not deal with what motivated him to pursue economics because the lack of help, encouragement, and mentoring from his economics professors:

I don't think professors do a good job in helping students how to write a thesis. It's just -

hey, what's the data? and what can you do that's quick? And that's not the point.

That's not the reason that I wanted to pursue economics. It was to find an answer to a question that I had. I feel like they really don't guide or help you.

Asking For Help When Struggling In School And Cooperation Are Not Encouraged

Nontraditional students do not ask questions because they are afraid that they might be seen as lazy or not intelligent (Rendon Linares & Muñoz, 2011). Surprisingly, all of the participants mentioned that they did not ask for help from their professors because they were embarrassed, and that they thought they might be seen as a disappointment to their professors, or cause frustration with their professors. Most of the participants mentioned that their professors inculcated cooperation into their classes because they encouraged study groups between students. However, it is uncertain whether economics professors actually encourage cooperation within their classes, or if they prefer students to ask other students questions because they create an environment where questions are not welcomed. When competition is inculcated in teaching and learning the curriculum is focused on European values that ignore the contributions of women as well as of other cultures (Rendon, 1994). In resemblance to Nelson (1995), Ana stated that economics professors inculcate competition in their classes: "Professors in economics, it's more about do-it-yourself, they promote the self-interest in the class." When referring to her economics professors Ana mentioned the following: "Before asking them questions, to see if we can find a solution by ourselves, but not just by yourself, like as your teammates, like - come to me with a question that you really couldn't answer." The response that Ana gave went against the Theory of Validation. If economics professors really encouraged their students to ask questions they wouldn't mind providing feedback whenever the student needed it, as opposed to asking

their students to wait until everyone else in the class couldn't answer the question and then contacting the professor.

Thalia described a similar experience:

Usually what we do is one of us in the group will ask for help so that it's not coming from all 10 of us. Sometimes it's my turn or sometimes I just don't have time to wait for my classmates' answer.

Rosalyn mentioned that she believed that only "students that do bad go talk to the teachers."

Also, Rosalyn mentioned that she feels like if she asks a wrong question she might disappoint her economics professors:

I just, I don't know why I think this, but, I feel like, there's this one guy in my class, right? Asks all these questions, and even questions I'm like - I don't know if you should be asking that kind of questions, like boy we are in Master's! right? Him and this other guy, I'm like - guys, what, what's going on! And like you can see the face of the professor, like, what? like this is like basic stuff. I don't want to get that look. You know? Because I even know like myself, like I'm thinking like - what kind of question is that? I don't know, I personally think it's disappointing when I were to ask a question and it's like a ridiculous question. Even if I don't understand it in particular, I think it's a disappointment to the professor, because I feel like - hey, I let him down because I'm not learning the material.

Paul described a similar invalidating experience:

There's been like one professor who is relatively kind of new to the M.S. Program, he's a little bit younger so, there's been times when he would ask us questions in class, and even

the smart people in the class, we had no idea. He wouldn't make remarks, but he would just make like faces like - I can't believe you guys don't know this.

Tom mentioned that he did not ask his professors for help because he was embarrassed: "I guess probably I am a little embarrassed to go ask for help. You're suppose to be at a higher level, you're supposed to be understanding these topics, so I guess that's probably it." Miguel stated that after he decided that he did not want to pursue a Ph.D. in economics he started to doubt what his goals in his graduate program were, and that he felt that he could not talk to his professors about these doubts:

I think if you're smart as a student, you cannot be honest with your professors because you have to lie to your professors that you're going for a Ph.D. Because if you tell them the truth, they'll lose interest in you. And it makes sense because they have their resources, whether it is their time, or their access to R.A. positions, or graduate positions. So, they want to invest in someone who is going to pursue a Ph.D., so I began thinking about the Ph.D. and once I changed my mind I felt it was in my best interest to keep it to myself. And so with that, I'm unable to fully express my concerns with these professors.

Stereotypes

In similarity to Colander and Holmes (2007), experiences between graduate women economics students and graduate men economics students differed. In resemblance to Ramsey & Sekaquaptewa (2011) and Steele et al. (2002), the main differences between the experiences of graduate women economics students and graduate men economics students resided in experiences of stereotypes of women graduate economics students. Just as it is mentioned in Rendon (1994) when she wrote "we hear loud and clear that only white men can do science and

math” (p. 4), Rosalyn discussed this powerful message that is prevalent in academia that women are not intelligent enough to do math:

Economics it’s more of like a man’s field, right? So, in that sense, women have to prove they’re as smart as men, or they can actually make it in this field. So, I think there’s some stereotypes that maybe women might not be as smart or they might not be able to do certain things like math or things of that nature. So, we kind of have to break down that stereotype. But yeah that’s mostly what I meant by that, just that you have to show that you’re just as smart or smarter than the guys that you’re with.

In resemblance to Nelson (1995), Rosalyn mentioned how emotion was ignored in economics. Rosalyn gave the following example about how she expected for one of her professors to be more supportive:

I remember this one time, I hadn’t done very well on like an exam, and I wanted to speak to my professor about it because like I told him - this is not me, I’m not used to this. Like, I don’t know how to deal with like if I didn’t do so well in a test. Like can I do extra work? Can I do like even more articles to read? Like give me something, and he was like - Oh no, you’ll do fine. And he kind of brushed it off, like - oh yeah, you’ll do fine, don’t worry about it. And he like walked away. And I’m like will I be able to do it, man? So that, that kind of like, I was like really? At least give me like five seconds to like, I don’t know maybe it’s just like a girl thing like - tell me it’s going to be like fine. Like you’re going to get through it.

In similarity to Rendon (1994), Thalia mentioned an invalidating experience where she felt that her cultural values were questioned when her economics professor asked her why she spoke

fluent Spanish when she also spoke fluent English. Thalia explained how she felt about this experience:

My parents worked very hard to make sure I didn't have a Spanish accent growing up, because my dad had been bullied for it when he was in California. So I remember taking classes when I was in elementary school to make sure that I was speaking Spanish without an accent, and English without an accent. And so my parents always worked very hard to make sure that that wasn't part of my identity and my life.

Thankfully, that comment from her professor did not stop her from seeing her culture as a powerful resource:

It's awesome to be in a crowd of people and just start speaking Spanish because people are like - you speak Spanish? Where did that come from? But to me it's kind of cool, it's like wearing an invisible cape and I get to vote in the Mexican elections, and I get to vote in the U.S. elections, and so it's a really neat thing to be a part of both countries and have those two identities carried with me.

In similarity Schroeder and Mynatt (1993) Rosalyn described her feelings of insecurity throughout her graduate program:

After I took that first class, I was like - yeah man, I've got this, like I'm totally prepared for my econ classes. But I guess with like every program it gets a little more challenging, and you start like - Am I doing this right? But when there were only men in the class, I did realize I was very quiet. Like I had an Econometrics class, only girl. Like at the beginning I'll be very welcoming like - hey guys, who are you? Hey, how are you doing? And try to like, like we had two engineering Ph.D. students in our class, I wanted to make

them feel welcome, because they're not in our program so like - hey, how's it going? But as soon as class started, I don't say a word.

Thalia experienced lower levels of understanding for her academic self-concept and career commitment in a department where men were the majority in resemblance to Ülkü-Steiner et al. (2000). Thalia mentioned how it was an invalidating experience for her when she talked to the Dean of the College of Business about offering a class at a time that did not interfere with her work schedule and how he did not help her:

A semester ago there was a class that I was not able to take because it was only offered during work hours. It's a class that I actually need to graduate, and it's a class that I need to take my thesis, so, when I brought it up to the Dean he said that I was the only one that had complained so he could not change the class, or he could not accommodate. So I had to push my thesis back pretty much a year, just so I could get through this one class, which is now finally being offered after hours. But just, I mean things like that. You start one program thinking that it's gonna be adaptable to your working schedule, and then all the sudden it's not. Those things are incredibly discouraging to stay in a program.

Thalia also described an invalidating experience when one of her economics professors told all of her classmates that he was going to fail her for not attending class when at the beginning of class he had said that he did not care about attendance:

My job requires a lot of after hour events. And I don't work 40 hours, I work well above that. And one of the first things I do when I started classes, I talk to my professors about my work schedule and let them know that I most likely will be missing classes

throughout the semester, and ask them what the appropriate protocol for that will be. Some professors let me know that it's fine, let them know what I'm doing. There was professor who said - I don't care, I don't have an attendance policy. And then when I missed more than 6 classes, he decided that he wanted to fail me and so he let my classmates know that he was gonna fail me. And when I went to talk to him about it, he basically didn't care, cause he said - you haven't learned the semester, you haven't been in class.

Thalia mentioned how her experience differed from the experiences of her classmates that were men when they were absent from the graduate economics classes: "I know I had other classmates who missed the class who were male and there wasn't those kind of comments made."

Graduate men economics students did not experience stereotypes. The experiences of men most likely differed because they have not been historically stereotyped (Steele et al., 2002). Faculty can implement academic validation by treating every student equally (Rendon, 1994). However, this was not always the case since Tom mentioned a complete opposite experience to Thalia in which his professors tried to accommodate his work schedule into their classes and class assignments:

They've been very helpful. Having to work full time, and being in school full-time has been a little tough, but they've been very very helpful with it, and very understanding. They're aware that I have to go into meetings, or stay at meetings. Or even travel out of town, but I think if you communicate with them obviously in a timely manner, they're actually very receptive to it. There was actually my whole career, my whole economics program, I've told them up front - hey, this is where I work at and these

are some of the things that may come about. And yeah they've accommodated some of the schedules to work around mine. I remember one of them, some of the homework, they've been like - hey, I know you told me about this meeting coming up in a couple of weeks, your time on this extended or before your turn it in late, you can turn it in here.

When asked what his experiences were in a graduate program where men were the majority

Miguel answered the following:

I think it's been comfortable, I think that's the right word. There's examples that are familiar, that help me better understand the material, the professors are men, and the YouTube videos of all the famous economists are men, and so, they tend to be white men, but it's still more of a connection than if it was a women in the classroom or in these videos.

Even though none of the graduate men economics student participants experienced stereotypes, all of them acknowledged some differences in their experiences between the graduate women economics students in their classes. Paul and Tom both acknowledged the intelligence of their women peers, as well as how they try harder than the graduate men economics students in order to succeed in their classes. Paul described the following:

I feel if anything, some of the females I've had in my M.S. program have been more of the smarter students in the class. The ones getting the A's. The ones asking the harder questions I never even thought about to ask.

Tom mentioned the following: "I think the girls are definitely what's it called? Smart. I think if anything professors see that. That girls are definitely trying a little bit harder."

Chapter 5 - Conclusion

Validation refers to a student's "inherent capacity to learn, become excited about learning, feel a part of the learning community, and feel cared about as a person, not just as a student" (Rendon Linares & Muñoz, 2011, p. 15). The research question was: How are graduate students validated throughout the process of their graduate education at a Master's in Economics program at a predominantly Hispanic-serving institution? Graduate women economics students and graduate men economics students were validated when their professors:

- Used creative learning experiences that emphasized their power to learn and potential to succeed.
- Showed a caring demeanor and provided valuable feedback.
- Fostered community engagement and cultural diversity.
- Encouraged their professional development.

Graduate women economics students and graduate men economics students suffered from invalidating experiences when their professors:

- Used passive pedagogies such as the do-it-yourself method, as well as the lecture format in their classes.
- Failed to provide mentorship opportunities or encouragement.
- Did not create an environment where help was offered, or when they did not inculcate cooperation.

Graduate women economics students specifically suffered from invalidating experiences of stereotypes in their classes.

After the data analysis of this study it seems that the Master's of Science in Economics at UTEP is not tailored to nontraditional students, who are the majority of students at UTEP. Women graduate degree-seeking students at UTEP that are part time students encompass 62% of the women graduate student population, and 53.5% of graduate men degree-seeking students at UTEP are part-time students (Mathew et al., 2015). The average semester credit hours in graduate economics in one semester are 2.3 hours (Mathew et al., 2015). Sixty six percent of graduate women degree-seeking students at UTEP are Hispanic, and fifty five percent of graduate men degree-seeking students at UTEP are Hispanic (Mathew et al., 2015). The average age of graduate students at UTEP is 32 years old (Mathew et al., 2015). However, the M.S. in Economics seems to be designed for the traditional economics student who is a middle-class 26 year old white male (Colander and Klammer, 1987) who has been socialized into the norms of the university by family members who have gone to college (Rendon, 1994). In fact, Rosalyn, Paul, and Miguel mentioned that the only mentoring that is available to students is if students wish to pursue a Ph.D. program in the future. Nontraditional students do not take advantage of university resources, such as faculty office hours because they usually work outside of campus and their schedules prevent them from going (Rendon Linares & Muñoz, 2011). However, faculty office hours are set at inconvenient times that interfere with the students work schedules. In fact, most of the participants mentioned that they had not asked their professors to accommodate their schedules because they worried that they would be a burden to their professors.

Every class offered at the M.S. in Economics program is given in lecture format (Mathew et al., 2015). However, all of the participants suffered from invalidating experiences with the lecture format as well as the do-it-yourself method. Faculty members need to design activities

within their classes in which students are able to witness their power to learn, and faculty members cannot expect their students to adapt to the do-it-yourself method. Also, faculty members cannot expect their students to take advantage of the institutional resources because they are not familiar with them (Rendon, 1994).

Rendon (1994) mentioned that participants in her study attributed the belief in their success to faculty members and family members who had validated their knowledge and their life experiences. Even though the participants in this study suffered from invalidating experiences, in resemblance to Rendon (1994), their success in graduate school in economics can be attributed to the validation they received from faculty members as well as family members. In fact, the success of the participants in this study in their graduate program can be attributed to how their validating experiences outweighed their invalidating experiences.

Recommendations

The following are recommendations for faculty members to implement academic and interpersonal validation. The recommendations are divided into program recommendations, pedagogical recommendations, and future research recommendations.

Program Recommendations

The first program recommendation is an orientation before the students begin their graduate program. Rendon (1994) mentions that a student's success depends greatly on whether he or she is validated in their first year at the university. The orientation program will familiarize students with the processes of graduate school. The main ways in which validation can be implemented through an orientation process are the following:

- Students will meet all of the members of the faculty who will ask students about their research interests and they will determine potential faculty advisors for the students based on each of their research interests.
- Students will receive detailed information about choosing the Concentration in Finance or the Thesis option, and they will be advised why each option would benefit their future the most based on their short and long-term goals.
- Students will develop a potential degree plan.
- Students will build relationship networks with members of their cohort, and they will participate in team building exercises that inculcate cooperation.
- Students will be taught how to use the software for their homework assignments.
- Students will be taught how to use the university's library resources, specifically where they can find journals that focus on economics.
- Students will be encouraged to join student organizations at UTEP which have student activities and student events in the evening in order for students to become engaged in their university.

The orientation process will have to be offered during the evening in order for students to be able to attend due to their busy work schedules.

The second program recommendation is to hire additional faculty members that are women in the Master's of Science in Economics program. Increases in women faculty are helpful for graduate economics students because this increases the admission and graduation of more women from graduate economics programs (Hale & Regev, 2014; Neumark & Gardecki, 1996), and decreases prejudices (Goldin, 1994). Also, women role models create positive experiences

for women in fields where men are the majority because they serve as support systems for other women, as well as examples of success (Richman et al., 2011).

Pedagogical Recommendations

The first pedagogical recommendation is for faculty members to schedule mentoring with their students. Schroeder and Mynatt (1993) mention the need for mentoring of women in graduate programs because of a woman student's feelings of insecurity. However, after the data analysis of this study it became apparent that all of the students would benefit from additional mentoring from their professors. Students will be paired with a faculty mentor in their orientation based on their research interests. Therefore, the faculty mentors should schedule meetings with students at least three times per semester in order to let them know of any mentoring opportunities in their community, as well as to help them with any questions that they might have, or to offer career advice to them.

The second pedagogical recommendation is for faculty members to design creative class activities where cooperation is encouraged. Faculty members can dedicate a small part of their class for the lecture. However, faculty members should dedicate most of the class period on activities in which students are able to witness their power to learn and potential to succeed (Rendon Linares & Muñoz, 2011). The class should be focused on learning processes, as opposed to learning outcomes (Rendon, 1995). Also, the lecture part of the class should include more graphs and visual representations because many of the students are visual learners. After the lecture is finished, students should be placed into groups and given exercises that they can work on that preferably deal with the regional economy and with the economies of where their students are originally from. Applying the theory into problems that deal with the regional

economy or with the economies of where the students are originally from will allow students to see themselves in the curriculum because it will reflect the student's personal histories and their background in what they learn (Rendon Linares & Muñoz, 2011). Meanwhile, the professor should dedicate an amount of time to sit and discuss the exercises with every group in the class, and ask every student within the group if they need help.

The third and fourth pedagogical recommendations for faculty members are the implementation of group projects, as well as for faculty members to offer their office hours in the evening at the school library or school cafeteria. Faculty members should assign one group project per semester in order for students to apply the theory into practical and regional problems. Also, the project will allow students to form meaningful relationships with their classmates. In regard to the fourth pedagogical recommendation, faculty members should dedicate at least two hours per week towards going to the school library or school cafeteria in the evening in order to accommodate the schedules of their students and answer any questions that they might have in a setting where it is easier for students to ask for help. The building of meaningful relationships between classmates, and the mentoring of students outside of the classroom, such as in the school library or school cafeteria create validating experiences for students (Rendon Linares & Muñoz, 2011).

The fifth and final pedagogical recommendation is for faculty members to provide encouragement and to show a caring demeanor to their students throughout their classes. Also, faculty members should want their students to succeed as persons, not just as students (Rendon, 1995; Rendon Linares & Muñoz, 2011). Therefore, they should be supportive when their students need to attend work events. Faculty members should let their students know what their

expectations are for when the students miss class for work events, and they should inform students of these expectations since the first day of class. Faculty members need to especially take into account that it is three times more stressful for graduate women economics students than for graduate men economics students to form relationships with men faculty members (Colander & Holmes, 2007). Therefore, stereotypical comments are invalidating to women students that already doubt their ability to succeed.

Future Research Recommendations

As was mentioned in Chapter 4, the invalidating experiences of most of the participants began in high school. Based on my analysis of these experiences it is apparent that high school students are not informed about the discipline of economics or about what being an economist entails, especially students whose families did not attend college. Also, one economics class in high school does not seem to influence whether students choose to pursue an education in economics. Even though the participants in this study did not feel a disconnect with the course material that was taught in their graduate program, they did feel a disconnect with the course material that was taught in their high school economics classes. Even though the experiences of validation of high school students in economics classes were not the focus of this study, future studies that focus on the experiences of validation of these students would greatly benefit the discipline of economics because it would enable educators to make changes in the curriculum and in the learning processes in order to implement validation and create interest in the subject of economics with their students.

The underrepresentation of women in economics was a recurring topic within this study. My belief that validation is what can contribute towards a greater representation of women in

economics was supported by the literature review and the data analysis in this study. Future studies that focus on gaining an understanding of the lived realities of women students would greatly benefit economics and other math-intensive fields. In fact, future narrative studies that focus on graduate student validation especially in math-intensive fields would be extremely beneficial towards these disciplines because educators would be able to implement validation and decrease stereotypes in their graduate programs.

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Appendix: Interview Protocol

1. Can we start by you identifying yourself. Who are you? Tell me about your family?
2. Are you a first generation student?
3. Tell me about your education and your extracurricular activities?
4. Tell me about your background in economics? Had you taken any economics classes in your undergraduate career or in high school?
5. Tell me about your research interests?
6. Tell me about what made you pursue a graduate career in economics? or who inspired you to pursue a career in economics?
7. Tell me about your academic experiences with the faculty members in your graduate program?
8. Tell me about the teaching methods of your professors?
9. Tell me about your personal experiences with the faculty members in your graduate program?
10. Tell me about the mentoring opportunities that you have had in your graduate program?
11. Tell me about your experience in your graduate program where men are the majority?
12. Tell me about who you consider to be your role models? Why do you consider them to be your role models?
13. Tell me about who you ask for help when you are struggling in school?
14. Tell me about your short term and long term goals?

Probes (in the case that I need further clarification of any response for any of the above questions)

Can you offer an example of what you mean when you say - ?

Earlier you mentioned - . How did that make you feel?

Can you expand on that?

Vita

Eva Quintana attended The University of Texas at El Paso for her Bachelor's, Master's and Doctoral education. She graduated with a Bachelor's in Business Administration with a Degree in Finance, and with a Master's in Business Administration with a Concentration in General Business. In 2015, Eva began her Doctorate in Educational Leadership and Administration.

Eva Quintana is a member of five Honors Organizations at UTEP due to her Grade Point Average and active participation: The National Society of Collegiate Scholars, Alpha Lambda Delta, Sigma Alpha Lambda, the University Honors Program, and Golden Key International Honor Society. She graduated with Honors from her Bachelor's in Business Administration, and with Honors from her Master's in Business Administration. Eva has earned a 4.0 Grade Point Average (from a 4.0 scale) in her Doctoral program.

Throughout her Master's and Doctoral education Eva Quintana worked as a financial analyst. Her research interests include the underrepresentation of women in economics and other math-intensive fields, and student validation in graduate education.

This dissertation was typed by: Eva Quintana, the author of this dissertation.