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A Master's Degree in Fashion Merchandising: A Valuable Investment?

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A MASTER'S DEGREE IN FASHION
MERCHANDISING: A VALUABLE INVESTMENT?

BY

KELLEY CAPRON

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE

IN

TEXTILES, FASHION MERCHANDISING, AND DESIGN

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2015

MASTER OF SCIENCE THESIS

OF

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ABSTRACT

The rising cost of college in the last decade has had a profound impact on the number of students requiring financial assistance for their college expenses, particularly through student loans. This is a serious issue for college programs as they try to recruit students and maintain high retention rates, but also for graduates of fashion degrees that face a challenging job market in today's complex and competitive fashion industry. To incur further expenses with a graduate degree, this study intended to estimate the value of a master's degree in fashion merchandising (MFM) from both a financial and career development perspective.

An online survey was distributed to MFM graduates who completed their degree from 2010 to 2014 through a convenience sampling technique. The questionnaire measured the costs and benefits from a financial perspective, as well as the inputs and outcomes from a career development perspective. These perspectives examined the various costs associated with investing in a MFM, the job market and career development opportunities facing MFM graduates, and areas of improvement for MFM programs to increase the value of the degree. A descriptive analysis was performed, two ANOVA tests were conducted measuring stress levels for paying back student loans, and a Pearson's Chi-square test was conducted to measure whether current employment status in the fashion industry was related to fashion experience. Only the Pearson's Chi-square test showed a significant result.

Findings of this study showed that participants spent at least two years in pursuit of the MFM. This sample of MFM graduates primarily relied on student loans, or spent additional time seeking other financial assistance. For those who borrowed

student loans, some developed stress levels for repayment of loans; however, debt levels were much lower than the average graduate student loan debt. The majority of participants secured full-time positions; however, less than half of these held positions in the fashion industry. Salary earnings were also much lower than the average master's degree holder. Many of these graduates agreed that their MFM will lead to a higher-level position but indicated that networking opportunities in MFM programs could be improved. The relevancy of MFM skills varied between those working in the fashion industry and those who were not; but fashion merchandising knowledge and soft skills were the most useful for jobs in the fashion industry. Most MFM graduates in this study were happy with their decision to pursue the degree and saw it as a valuable investment.

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CHAPTER 1. INTRODUCTION

The dramatic rise in the cost of college has caused many people to question the value of getting a college degree in the United States, both at the undergraduate and graduate levels (Avery & Turner, 2012; Goldin & Katz, 2009; Oreopoulos & Petronijevic, 2013). Tuition rates have steadily increased faster over the past several decades, which have had a profound impact on the number of students requiring financial assistance for their college expenses. Between 2001 and 2012, college prices for undergraduate degrees at public universities went up by 40% and by 28% for private nonprofit universities (NCES, 2013). In fact, the price index for college tuition has grown almost twice as fast as medical care and almost four times as fast as housing expenses between 2003 and 2013 (Kurtzleben, 2013). Along with increased tuition rates, the lack of federal funding and a decline in family incomes have resulted in more privately sourced loans with high interest rates (Baum & Ma, 2014; Brown, Haughwout, Lee, Scally, & Van der Klaauw, 2014; Woo & Soldner, 2013).

The rising costs of college is a serious issue for college programs trying to recruit students, but also for program retention rates, because investing in an education can be a complex and overwhelming endeavor (Oreopoulos & Petronijevic, 2013). Especially at the graduate level, both time and financial costs are major considerations. Rather than gaining more experience in the industry and increasing income levels, graduate students devote a lot of time pursuing their degree and spend on average about \$30-40K on their degree (Peterson's Staff, 2014). To further complicate matters, recent college graduates face a challenging job market because of

heightened competition within industries and the level of jobs that are actually available (Abel, Dietz, & Su, 2014).

Because of the uncertainties surrounding the job market for fashion merchandising positions and rising costs of college, of particular interest to the present study is the cost-benefit of pursuing a master's level degree in fashion merchandising (MFM) (U.S. Bureau of Labor Statistics, 2014). A MFM is a specialized degree offered at over thirty universities nationwide, which draws upon business concepts of the fashion industry in conjunction with textile and apparel knowledge (ITAA; Steele, 2013). To date, there are no studies providing direct evidence on the value of pursuing a MFM, particularly if there are advantages to having an advanced degree in fashion merchandising positions.

Because of the major decline in textile and apparel (T&A) positions due to deindustrialization of the manufacturing sector, along with intensified globalization, increased technology, and heightened competition, T&A companies are reevaluating their business practices and the skills that are required in this global industry (Dickerson, 2011; Minchin, 2012; Mittlehauser, 1997). As a result, the investment return for students pursuing a MFM comes with high uncertainties due to job availability, the specific skills needed in the industry, and the rapid pace in which the fashion industry changes (Dickerson, 2011; Minchin, 2012; Mittlehauser, 1997; Romeo & Lee, 2013; U.S. Bureau of Labor Statistics, 2014).

To gain insights into the value of pursuing a MFM, this study estimated the return on investment of a MFM from recent graduates' perspectives at US-based educational institutions between 2010 and 2014. An in-depth look at two primary

aspects, the financial return and career development, assisted in the analysis of whether or not a MFM is a valuable investment. Using an online survey method, this study explored the various costs associated with investing in a MFM, the job market and career development opportunities facing MFM graduates, and areas of improvement for MFM programs to increase the value of the degree. Results of this study provided empirical data reflecting the value of pursuing a MFM, helping T&A programs evaluate the educational product they are offering and improve the investment return of their program. Findings of this study also contributed to the understanding of the status quo of the US T&A industry, particularly in terms of the labor market, giving future MFM students a better view of the opportunities available to them if they invest in this degree.

The rest of the thesis is composed of four parts: chapter 2 discusses previous literature related to this research problem which leads to the conceptual model and three research questions, chapter 3 provides an explanation of the methodology used to evaluate the value of a MFM, chapter 4 presents the results of this research along with a discussion, and chapter 5 concludes with a summary of the findings, the implications of the study and suggestions for future research.

CHAPTER 2. REVIEW OF LITERATURE

This chapter provides the review of literature that leads to the conceptual framework for this study. The first section goes over the issue of the return on investment for a college education. The next section provides an overview of MFM programs across the United States. Then, factors affecting the investment return of a MFM are discussed. Lastly, the conceptual model used to evaluate the value of a MFM is introduced with three research questions.

2.1 Value of Getting a College Degree

The cost of a college education in the United States has caused major concern regarding the value of getting a college degree. From 2002 to 2012, public college tuition rates increased more than 40% on average, and private rates increased more than 28% for non-profit and 4% at for-profit colleges (Ginder & Sykes, 2013). Then from 2013 to 2014, public college tuition rates were raised yet again 2.9% for in-state students, 3.1% for out-of-state students, and 3.8% nationwide at private institutions on average (Baum & Payea, 2013a). Consequently, from 2004 to 2012 both the number of borrowers and the average debt per borrower increased by about 70%, surpassing credit card debt in 2010, to become the second largest form of household debt (Brown et al., 2014). In fact, roughly two-thirds of the nation's college graduates in 2012 had outstanding student loan debt with an average of about \$25,000 to \$30,000 per borrower for undergraduates, and \$57,600 for graduate students (Baum & Payea, 2013b; Delisle, 2014; Reed & Cochrane, 2013). A reduction in federal aid in 2013

caused students' cumulative private loan debt to substantially increase, and the growing national student loan debt reached well over \$1 trillion in 2014 (Brown et. al, 2014; Gascon & Noeth, 2013; Woo & Soldner, 2013). Specifically, graduate student loan debt makes up about forty-percent of the national student loan debt (Delisle, 2014).

Both the rising cost of college and growing student loan debt has made the return on investment for a college degree a hot topic for discussion. Avery & Turner's (2012) findings suggest that investing in higher education at the undergraduate level is worthwhile and the overall demand for a post-graduate degree is still high. However, others believe the decision to enroll in college should be viewed as more of a lottery with major probabilities of positive or negative returns (Goldin & Katz, 2009). Compared to a bachelor's degree or PhD, the benefits of pursuing a master's degree are less clear. Bachelor's recipients acquire the soft skills necessary for entry-level positions, such as critical thinking, effective communication, and teamwork, and PhD enrollment is often influenced by the investment return; however, a master's degree can be a major financial investment with unclear advantages for graduates in the job market (Blume-Kohout & Clack, 2013; Brooks & Everett, 2009).

2.2 Master's of Fashion Merchandising

A MFM is a degree that encompasses a broad set of specialized skills connecting business strategies and concepts to the fashion industry. For the purpose of this study, we define the fashion industry as any company that is involved with design/development, manufacturing, sourcing/distribution, trade policy/compliance,

branding, retail, and marketing/promotion across the entire global value chain from fiber to finished goods (Steele, 2013). Each part of this dynamic and fast-paced industry requires an extensive set of skills, which are constantly being reevaluated and adapted to meet current industry needs. While there is no unified definition about the scope of a MFM, this degree is widely offered by US-based educational institutions.

According to the International Textile and Apparel Association (ITAA), the premier academic organization of scholars, educators and students in the textile and apparel discipline, at least 37 institutions currently offer a MFM. Not all degrees are offered under the same title, and for some it is an area of concentration under the umbrella of a larger degree of study. For example, California State University at Northridge offers a M.S. in Family and Consumer Sciences with a specialization in Apparel Design and Merchandising, University of Georgia offers a M.S. in Textiles, Merchandising & Interiors, and the University of Rhode Island offers a M.S. in Textiles, Fashion Merchandising, and Design with a concentration in Fashion Merchandising (ITAA).

The typical course offerings of MFM programs are available through their university websites. The majority of MFM programs require completion of at least 30 credit hours of advanced or graduate level courses. As a graduate level degree, a MFM program typically incorporates large amounts of independent research and analytical thinking. A research methods course is mandatory; however, a thesis is not always a required component. In cases where a thesis is not required, students must complete a major paper, comprehensive examination, and/or an internship. Specific subject courses include apparel and product development, textile science, consumer behavior,

fashion/merchandising promotion, cultural and economic aspects of dress, e-tailing/retailing in apparel and textiles, and theories in merchandising. Research methods courses include research seminar, data analysis, strategic planning, statistics, tests and measurements. Some MFM programs are cooperating with their respective business departments to supplement key business courses, such as statistics, strategic planning, and organizational behavior. For example, graduate students at the University of Rhode Island with a fashion merchandising focus are permitted to take a limited number of credit hours from courses offered through the MBA program in addition to textile and apparel specific subject courses.

To increase graduates' employability and prepare students for the global fashion industry, T&A programs continue to reevaluate their curriculums by emphasizing the most important skills needed for fashion positions (Kozar & Connell, 2013; Romeo & Lee, 2013). First, previous studies have suggested that curriculums should focus more on the mature development of soft skills. Soft skills include critical and creative thinking, leadership, adaptability and teamwork, global competence, and effective communication skills (Chida & Brown, 2011; Ewers, 2005; Hodges et. al, 2011; Romeo & Lee, 2013). Second, T&A programs should connect students to internship opportunities in the industry's leading geographical areas, as these have also been found to secure employment in fashion (Hodges & Karpova, 2010; Robeck, Pate, Pattison, & Pattison, 2013). Third, there has been an ongoing discussion about whether or not MFM programs should incorporate more specific business skills to increase MFM graduates' employability within the industry (Foster, 2005; Hodges & Karpova, 2009; Kozar & Connell, 2013); especially since international market success

in the fashion industry has relied heavily on both managerial, leadership, and creative capabilities across a global network (Merlo & Polese, 2006). For example, Kozar and Connell (2013) conducted a comparative study of US master's-level graduate students in fashion programs with graduate faculty to distinguish between student and faculty perceptions of a fashion related graduate degree. Results showed that students pursuing master's degrees in fashion are primarily focused on how the graduate degree would help them to attain their career goals. Therefore, Kozar and Connell concluded that more fashion related graduate programs should offer courses similar to an MBA degree to prepare students for careers after graduation (Kozar & Connell, 2013).

Hodges and Karpova (2009) suggested that T&A programs incorporate more managing and marketing courses into their programs after their study showed that entrepreneurship was frequently cited as fashion students' career aspiration. Similarly, Brooks and Everett (2009) found that Australian post-graduate degree recipients, especially with business degrees, considered a bachelor's degree as a "bare minimum" and future employability was a key factor for their continued education. Thus, in addition to industry specific technical knowledge and soft skills that have frequently been cited as major factors for increased employability in the fashion industry, such as software knowledge, leadership, and effective communication, graduates must also be able to articulate the skills they possess (Cryer, 1998; Foster, 2005; Paulins, 2005). Because this present study is exploratory in nature, an investigation of what skills are actually learned from a MFM degree and are utilized in the industry will assist in understanding the value of the degree. The relevancy of these acquired skills to MFM

graduates will shed light on the effectiveness of MFM programs to increase graduates' employability in the fashion industry with an advanced fashion degree.

2.3 Factors Affecting the Investment Return of a MFM

To evaluate the investment return of a MFM, various factors must be considered such as the motivations for pursuing an advanced fashion degree, the current job situation facing graduates of a MFM, and financial concerns. All of these factors may impact graduates' perception of the degree and whether or not it would be considered a valuable investment. Through a discussion of previous related literature, the following explores the factors impacting the return on investment of a MFM and the importance of this research.

First, motivations for pursuing an advanced fashion degree may effect graduates' assessment on the value of a MFM. Although studied primarily at the undergraduate level, a consistent scholarly interest had been the motivation for majoring in fashion merchandising, as colleges and universities sought to increase enrollment during a time of serious financial concerns after 2008. In their 2009 study, Nancy Hodges and Elena Karpova conducted in-depth interviews with forty-one female fashion students enrolled at two large universities in the US. These findings revealed that students are motivated by their career goals and aspire to become part of the complex fashion industry through corporate and entrepreneurial opportunities (Hodges & Karpova, 2009). Then in their 2010 study, Hodges and Karpova developed a theoretical framework for mapping the decision-making process of students who decide to study fashion. Results showed that while industry related factors influenced

some students' choice of major, most chose to study fashion because of personal characteristics, such as interests and work values (Hodges & Karpova, 2010).

Likewise, an international study of 25 Russian apparel students showed that despite the exponentially rising costs of a college degree and limited loan availability, students continued to enroll in apparel programs because of subject interest, career goals, and the practical skills learned (Hodges & Karpova, 2008). Business majors were also influenced by their interest in the subject matter, followed by career and job opportunities, similar to fashion majors (Malgwi, Howe, & Burnaby, 2005). Although these studies revealed that transnational fashion and business majors are comparable to their motivations for pursuing their degree, these studies were done at the undergraduate level. Consequently, no reported studies have examined the cost benefit of obtaining a graduate level fashion degree, particularly in fashion merchandising.

A second factor impacting the investment return of a MFM is the uncertainty surrounding the nature of the industry on the availability of jobs for MFM-related positions. Despite the various skills, knowledge, and possible increased employability acquired from MFM programs, graduates face a challenging job market in the United States. Intensified globalization and competition led to the deindustrialization in the US, the significant reduction in the nation's T&A manufacturing sites, resulting in more than an eighty-percent decrease in industry employment from 1990 to 2011 in the entire US-based T&A industry (Dickerson, 2011; Minchin, 2012; Mittlehauser, 1997); albeit most job losses were manufacturing positions as T&A companies began employing offshore production plants. As retailers became more aware of the benefits of doing business globally along with major advancements in technology and

communication systems, the domestic industry transformed and shifted from a large production industry to a major distribution sector in a multinational market (Dickerson, 2011). These changes to the industry caused major uncertainties within the remaining industry sector, prompting companies to reevaluate how they do business with each other and also what additional skills they require of their employees because of this rapid technology advancement (Romeo & Lee, 2013). For instance, Irene M. Foster (2005) suggests that merchandising majors interested in retail planning careers should develop strong business backgrounds with industry-based software knowledge to increase their employability with these companies.

Specifically, even though the value of the US retail trade sector of clothing and clothing accessories stores (NAICS 448000) in 2013 was measured at \$244.5 billion and has a growing e-commerce sector, the employment outlook for higher-paying fashion merchandising positions in the retail trade sector of clothing and clothing accessories stores is limited (U.S. Census Bureau, 2015). Table 1 shows total employment numbers, along with a wage comparison of positions available in NAICS 448 with the national wage levels from 2010 to 2014, as reported by the *Occupational Employment Statistics* (OES) program from the U.S. Bureau of Labor Statistics at the U.S. Department of Labor (2014). According to Table 1, total employment numbers in this sector have remained above 1.3 million since 2010, but every other year total employment has significantly declined. Because a MFM is an advanced fashion degree, the percentage of higher-paying positions for MFM graduates was based on whether the mean wages in the major group categories, i.e. management, business, computer occupations, were above the annual mean wage in the US for all occupations

in each year. This was then divided by the total employment in NAICS 448000 to see how competitive the retail industry is for graduates seeking better paying jobs in this sector.

Despite the millions of jobs available in NAICS 448000, there are a very limited number of higher-paying positions available. By looking at the annual mean wage figures for NAICS 448000, it is clear that this sector has a very low annual mean wage when compared to the national average of wages across all occupations, even though these mean wages have been slightly increasing since 2010. Consequently, the number of positions available in the retail industry that pay more than the average salary in the US are only around 2 percent, making this a very challenging job market for MFM graduates.

Table 1.
Employment Outlook in NAICS 448000 2010-2014

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Total Employment in NAICS 448000	1,396,550	1,433,880	1,414,070	1,449,390	1,425,380
Annual Mean Wage in US	\$44,410	\$45,230	\$45,790	\$46,440	\$47,230
Annual Mean Wage for NAICS 448000	\$25,420	\$25,470	\$25,510	\$26,000	\$26,650
Percentage of NAICS 448000 Jobs Above Annual Mean Wage in US	2.1%	1.8%	1.8%	1.8%	2%

Data Source: <http://www.bls.gov/oes/tables.htm>. Note: Percentages were calculated by dividing the number of NAICS 448000 jobs above the annual mean wage in the US (in the major group categories) by the total employment in NAICS 448000.

Even though the complex fashion industry opens the door to a wide range of potential careers for fashion majors, finding and securing a satisfying position in the fashion industry may not be an easy task. If graduates have higher expectations of a MFM because it is an advanced degree, the return on investment could be lower if they face difficulty securing a higher-paying job; in contrast, if they have lower expectations because they are aware of the job market uncertainties, then the return on investment could be higher if they secure a position in the fashion industry or above the annual mean wage in the US. This is likely to depend on their knowledge of the nature of the industry.

In the past store-based retailing positions have been viewed as less desirable than that of corporate jobs, because of the lower compensation, less variety and autonomy, long hours and a higher turnover rate (Rhoads, Swinyard, Geurts & Price, 2002). Company loyalty has also been more negative from lower-level retailing positions (Paulins, 2005). But then in more recent studies, findings suggest that students have developed more realistic expectations for careers in retailing, despite the potential disadvantages of this sector. For example, Knight, Crutsinger & Kim (2006) conducted a survey of merchandising students to evaluate the holistic relationship between work experience/satisfaction and career intention/expectations. Data indicated that retail work experience is an important factor in their decision to pursue a career in retail, specifically from the emotional satisfaction with their retail job (Knight, Crutsinger & Kim, 2006). Then in 2010, Hodges, Karpova, and Lentz studied female graduates of T&A programs employed within the textile production sectors (NAICS 313, NAICS 314, NAICS 315) for less than five years. They found that

graduates were generally satisfied with their positions in the industry, even though they experienced frustrations and anxieties during the initial job search and from politics in the workplace (Hodges, Karpova & Lentz, 2010). Thus, graduates are faced with the challenge of not only finding positions in the industry, but one that meets their expectations, which could ultimately affect their perception of the value of a MFM.

A third factor related to the investment return of a MFM is the financial concern. Tuition costs vary in regards to whether students are enrolled full-time or part-time, pay in-state or out-of-state tuition and fees, and the length of time it takes to complete the degree. Since college tuition rates continued to rise over the past decade, students who pursued their degree earlier had lower tuition costs than those who waited until more recently (Ginder & Sykes, 2013). Additionally, financial assistance may or may not be available to certain students, as it depends on level of need for federal funding, credit history for private loans, and academic achievement for scholarships and assistantships (Student Financial Aid Services, Inc., 2014).

Whether or not graduates are international students may also be a factor affecting the investment return of a MFM. Because the fashion industry extends beyond the borders of the US, MFM programs in the US often attract both domestic and international students. Bringing international students into MFM programs strengthens the cultural understanding of this worldwide fashion industry and allows for broader global perspectives between students and faculty (NAFSA, 2014a). However, a graduate education for an international student is also an expensive process, as they are ineligible for federal aid, may face difficulties qualifying for

assistantships, private loans and scholarships, and can incur additional international student fees to the university and private loans (Hopkins, 2012). Even if MFM programs in the US are attractive to international students, all of these factors, as well as other personal considerations, play a major role in the cost assessment to choose to study abroad in the US (Mazzarol & Soutar, 2002).

The limited US government funding made available to international students can be sought through teaching assistantships or fellowships, and select scholarship awards; but unfortunately, only 2% of these students actually receives any funding (NAFSA, 2014b). Therefore, international students have major financial decisions to consider when comparing the cost benefits of pursuing a MFM in the US. Whether or not they received any financial assistance towards their degree could have a large impact on their perceived value of a MFM degree. In fact, this could have a major impact on the perceptions of all MFM graduates, both domestic and international.

2.4 Conceptual Model

Based on the previous literature and considering the paucity of research that specifically discusses a fashion merchandising graduate degree, the purpose of this study was to provide an empirical evaluation on the investment return of pursuing a MFM. Using the framework presented in Figures 1 and 2, this study attempted to answer three key research questions:

- 1) From students' perspective, what are the various costs associated with investing in a MFM in the United States?

- 2) What are the job market and career development opportunities facing MFM graduates in the United States?
- 3) How can MFM programs be improved to increase the value of the degree, particularly from the financial and career development perspectives?

Figure 1.
Measuring Value of a MFM: Financial Return

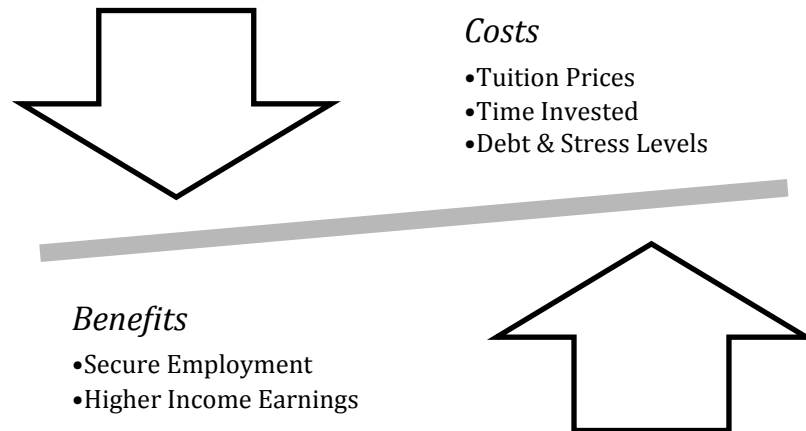
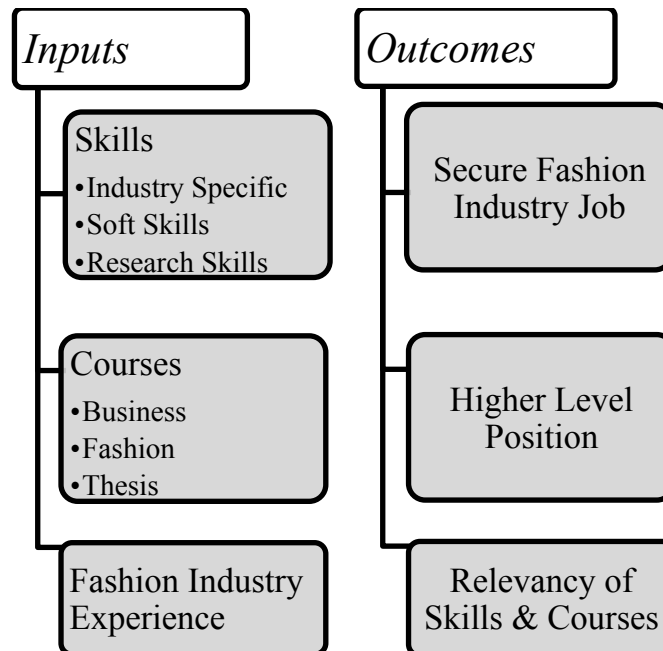


Figure 2.
Measuring Value of a MFM: Career Development



This study focused on the financial return and career development aspects to determine if it is a reasonable investment to pursue a MFM. Ultimately graduates would want to reduce their costs and enhance their revenue. The Human Capital Theory (HCT) suggests that individuals invest in their education by making immediate sacrifices, i.e. reduce earnings and incur tuition costs, because these costs will eventually lead to higher income flows and more personal satisfaction compared to someone who is less educated (Cornacchione & Daugherty, 2013). According to the HCT, the more that is invested in people, through education and skills training, the more economic value they will produce for society or themselves (Becker, 1964, 1993; Shultz, 1961). Furthermore, the HCT suggests that compared to someone with less education, an investment in oneself through a degree will likely lead to larger personal gains (Becker, 1964, 1993; Cornacchione & Daugherty, 2013; Shultz, 1961).

The financial return of the MFM was evaluated by comparing the costs of pursuing the degree with the benefits of earning a MFM. Such costs include the tuition prices; the time to complete the degree; and the levels of debt and stress accrued from borrowing student loans. The benefits of investing in a MFM are securing employment, particularly full-time employment, and earning a higher salary. A debt level comparison of the student loan debt of MFM graduates with the average national student loan debt level, as reported by the latest data available for undergraduate debt in 2012 and graduate debt in 2013, helped to understand whether MFM graduates are in better or worse student loan debt situations.

Because one of the benefits of pursuing this degree is securing employment, this study explored career paths that are available to MFM graduates to find out what

exactly is happening within the industry. The term “employability” has been used to describe the skills, knowledge, and attitude that graduates possess to enhance their attractiveness for employment (Mason, Williams, & Cranmer, 2009). HCT theory suggests that the specific skills learned from a degree should make an individual more competitive, increasing the graduate’s employability in the labor market to have a better chance at finding a job (Piróg, 2014; Tomlinson, 2008).

Specifically for this study, career development of MFM graduates was evaluated based on inputs to their employability (skills, courses, experience) with their outcomes, i.e. ability to secure a job in the industry, the level of positions that MFM graduates actually have, and the relevancy of the skills they learned from the MFM degree in their current jobs. According to Debra W. Stewart for the Council of Graduate Schools, the assessment of employability skills as they relate to job market outcomes is key to assessing the quality of a degree (Stewart, 2013). For example, students who graduate from master’s degree programs that require a major research component should be assessed on their ability to apply this research skill, among other “transferable” graduate skills needed to secure employment (Gilbert, Balatti, Turner & Whitehouse, 2004). By evaluating the costs, benefits, inputs, and outcomes of a MFM, this study helped to develop ways to improve MFM programs and offer valuable suggestions to potential graduate students of this degree.

CHAPTER 3. METHODOLOGY

3.1 Sampling

After obtaining IRB approval through the University of Rhode Island, protocol #684520-1, a convenience sample was drawn from a list of recent MFM graduates who graduated between the years 2010 to 2014 from all US-based institutions. A group of individuals that are chosen who are easily accessible to survey are categorized as a convenience sample (Creswell, 2013). The sample was obtained through email and phone contact with directors of T&A graduate programs listed on the International Textile and Apparel Association (ITAA) website. This study used a convenience sample because it increased the chances of reaching its research subjects, who may have changed their university emails, making it difficult to gain access to eligible participants. This five-year period was chosen in order to retain accessibility with alumni from institutions offering a MFM.

Because there are several thousand universities in this country and degrees in fashion merchandising are offered under different names, the ITAA website served as a legitimate starting point to reach these graduates. ITAA is a large nationally recognized T&A organization, which cooperates with T&A offering institutions throughout the US to disseminate knowledge to its members and strengthen curriculum resources. ITAA is not inclusive of all MFM offering institutions; therefore, additional US institutions were obtained through Fashion-School.org, a “comprehensive online resource for aspiring fashion industry professionals” (Prescott, 2015). Program directors at each of these institutions were determined through the university department websites, who were then contacted by email and phone

conversations. Participants were also recruited through an open invitation posted on the ITAA graduate student social media *Facebook* page.

3.2 Procedure

This study used an online survey method to collect data from MFM graduates. A self-designed structured online questionnaire was distributed using SurveyMonkey, the secure online survey software program protected and validated by Norton and TRUSTe, (Goldberg, 2015). The web-based questionnaire allowed for quick distribution, allowed more access to study participants in geographically diverse areas of the US, and stayed within budget constraints, identified as benefits to using the survey method (Andrews, Nonnecke & Preece, 2003). Data collection began on January 1, 2015. First, directors were emailed a request for a compiled list of graduates who met the research criteria, or if they preferred, to simply forward the invitation with the survey link, along with the consent form, to the alumni who graduated from their program between 2010 and 2014. See Appendix A for the email document sent to directors. A total of forty-five institutions were contacted in the initial phase of the recruitment process. See Appendix B for a table showing the list of institutions contacted.

Two weeks after the initial email, a follow up email and phone calls were made to programs that had not yet responded. At this point if there was no response from the university by February 1, 2015, a final attempt was made to recruit participants from their program with another follow up email and phone call. A few of the universities preferred to directly forward the survey link to their graduates; some provided a list of

eligible graduates; and a few others posted on their online *LinkedIn* professional page and graduate *Facebook* page.

Also during the recruitment phase, ITAA graduate members who belonged to the *Facebook* page were invited to participate in the survey through a *Facebook* posting of the logistics of the study, asking members to contact the researcher if they were interested in participating. Graduates who were interested and met the requirements were emailed an invitation to the survey along with the consent form. See Appendix C for the email document sent to graduates. In addition, some members posted the invitation to their university graduate *Facebook* page. Data collection ended on February 20, 2015.

Participants were required to read the consent form attached to the email invitation. The consent form included a basic description of the study as well as any potential for harm, confidentiality, and benefits of participating. Participants were made aware that they could discontinue their involvement at any time. In order to ensure confidentiality, participants were asked to refrain from including their names or any other identifiable information. A reminder of the informed consent was also included on the opening webpage of the online survey. By clicking on the link to begin the survey, participants acknowledged that they understood the terms and agreed to be included in the study.

3.3 Measurement

By following the framework as shown in Figures 1 and 2, the questionnaire measured several variables to answer the present study's three research questions. See

Appendix D for the questionnaire document. The financial return was measured through specific questions related to the cost and benefits of pursuing a MFM from a financial perspective. First, to measure the costs of a MFM, multiple-choice questions were asked to determine what types of students were graduates (full/part-time, international), how long it took them to complete their degree, and whether or not they received financial assistance. Graduates' student loan debt level was then compared to the national average of student loan debt, undergraduate debt from 2012 and graduate debt from 2013, to assess whether recent MFM graduates are in better or worse financial situations than the average student loan borrower. A multiple-choice ranking question measured one additional cost to determine graduate stress levels for paying back student loan debt, from no stress to very stressed, also taking into consideration graduates' salary level. Second, to measure the benefits of a MFM, multiple-choice questions were asked to determine what graduates' employment status is and to which salary group they belong. Salary levels were then compared to the benchmark salary for employees with a master's degree to determine whether recent MFM graduates have income levels near what is expected with an advanced degree. Because different types of students and financial situations will affect the results of these questions, parts of the analysis treated certain types of students separately. For example, consideration was given for students who were international as well as those who borrowed student loans.

The career development was measured through specific questions related to the inputs and outcomes of pursuing a MFM from a career development perspective. First, to measure the inputs of a MFM, multiple-choice questions were asked to determine

graduates' educational background and the specific skills learned, as well as graduates' experience in the industry. These types of questions assisted in measuring graduates' employability. Second, to measure the outcomes of a MFM, multiple-choice questions were asked to determine graduates' employment status within the fashion industry, the salary level of jobs that are taken, and the relevancy of the skills learned from a MFM in their job positions. These questions examined job availability for MFM graduates by determining whether or not MFM graduates are actually working in the fashion industry and how long it took them to find a job, and to determine which skills should be emphasized more in the MFM program.

In addition to the financial and career development, some questions were asked using a 5-point Likert type scale to reveal respondent's overall assessment of the return on investment for the MFM and their suggested improvements for MFM programs. In their 2006 study measuring the impact of retail work experience on career expectation and satisfaction, Knight, Crutsinger, and Kim also used a 5-point Likert type scale (Knight, Crutsinger & Kim, 2006). Similarly, Malgwi, Howe, and Burnaby (2010) used a 5-point Likert type scale to measure the influences on college major choices for business students. For this study, all 5-point Likert type scale questions measured participants' level of agreement or disagreement with each statement, where 5 indicated *strongly agree* and 1 indicated *strongly disagree*. Such questions measured whether or not they were happy with their MFM or thought it was a valuable investment. Additionally, this scale measured graduates' levels of agreement towards the relevancy of a MFM in the fashion industry for career and job opportunities. Measuring graduates' perspectives for questions related to the ways a

MFM benefits graduates in the industry assisted in evaluating how these graduates' perceive the value of a MFM. One open-ended question concluded the survey, which requested graduates' opinions on how they believed MFM programs could be improved to increase the return on investment of a MFM.

3.4 Statistical Procedure

A descriptive analysis was performed first to determine the frequencies of responses for developing a profile of the respondents and to develop insights into how recent MFM graduates perceive their degree. Multiple tests were further conducted to examine the impact of several factors on the financial return and career development for MFM graduates. Each of these tests was conducted using the software program IBM SPSS Statistics, Version 22.

First, one-way ANOVA tests compared the mean values for variables related to the financial return, i.e. stress levels versus employment status and stress levels versus salary group, to determine whether stress levels are affected by either of the variables. To explore whether employment status is a major factor affecting stress level, the first ANOVA test revealed if stress levels measured by four levels (namely no stress, limited stress, somewhat stressed, and very stressed), were significantly different in mean value based on employment status, which was moved into two groups (employed full-time/part-time/PhD student; not employed but looking for work). The null hypothesis for the first ANOVA proposed there was no significant difference in stress levels when compared to employment status, i.e. $H_0: \mu_1 = \mu_2$. The alternative hypotheses suggested that employment status did effect stress level,

meaning that the dependent variable values were not the same across employment groups, i.e. $H_1: \mu_1 \neq \mu_2$. If the p-value was statistically significant, the null hypothesis was rejected; if the p-value was not significant, the null hypothesis was not rejected. This test used a 95% confidence level. Because salary level after graduation may also affect stress levels for paying back student loan debt, the second ANOVA test revealed if stress levels were significantly different in mean value based on the graduates' salary group, which was arranged into two groups (less than \$35,000/year; more than \$35,000/year). In order to meet all assumptions for ANOVA and because the majority of graduates were making less than \$35,000/year, \$35,000/year was used as a benchmark for this test. The null hypothesis for the second ANOVA proposed there was no significant difference in stress levels when compared to salary group, i.e. $H_0: \mu_1 = \mu_2$. The alternative hypotheses suggested that salary group did effect stress level, meaning that the dependent variable values were not the same across salary groups, i.e. $H_1: \mu_1 \neq \mu_2$. If the p-value was statistically significant, the null hypothesis was rejected; if the p-value was not significant, the null hypothesis was not rejected. This test used a 95% confidence level.

Then, this study sought to test whether previous fashion experience was related to whether or not MFM graduates secured employment in the fashion industry. Hypothetically, more fashion experience should increase graduates' employability to secure positions in the fashion industry. Because this test involved just two independent and categorical variables and did not meet all the assumptions for ANOVA due to small sample sizes, the Pearson's Chi-square test was chosen in lieu of a one-way ANOVA test. The Pearson's Chi-square test revealed whether graduates'

employment status in the fashion industry, which had two categories (yes employed in fashion industry; not employed in fashion industry), was statistically associated with fashion industry experience, which also had two categories (0 to 2 years; 3 or more years). The null and alternative hypotheses are defined as such:

H_0 : For the population of MFM graduates, previous fashion industry experience and their current fashion employment status are not related.

H_1 : For the population of MFM graduates, previous fashion industry experience and their current fashion employment status are related.

If the p-value was statistically significant, the null hypothesis was rejected; if the p-value was not significant, the null hypothesis was not rejected. This study used a 95% confidence level.

CHAPTER 4. RESULTS

The survey collected data from 49 participants; however, 8 participants reported that they did not graduate with a MFM by answering “No” to question #1, which was *Did you receive a master’s degree in fashion merchandising or related title? A. Yes B. No*, and were not included in the data analysis. One additional participant answered “Yes” to question #1, which reported that they did receive a MFM; however, they stated that their concentration was actually textile science. Because this study estimated the value of a master’s degree in fashion merchandising specifically, this participants’ data was also not included in the data analysis. All remaining domestic and international students who met the requirements were included in this study, as long as they received a MFM or concentrated on fashion merchandising. Therefore, survey data from a total of 40 graduates were used in the study.

A reliability test for the six 5-point Likert type scale questions was measured using Cronbach’s Alpha. Cronbach’s alpha is a measure of the internal consistency reliability for a group of items, to see whether there is a correlation between the variables that make up the scale (Muijs, 2011; Osborne, 2008). According to this measurement, values at or above 0.7 are preferred for a survey in the social sciences (Andrew, Pedersen, McEvoy, 2011). Cronbach’s alpha is .744 for the present study scale, which indicates a desirable level of internal consistency for the 5-point Likert scale in this study.

4.1 Profile of Respondents

Based on the results of this study, the profile of respondents shows that the MFM took at least 2 years to complete, primarily as a full-time student. According to Table 2, the majority of MFM graduates in this study were full-time students and completed their degree in 2 to 4 years. Of the 35 graduates who reported studying full-time, 77.5% (n=31) finished in 2 to 4 years, and the remaining 22.5% (n=9) completed the degree in less than 2 years. Just 12.5% (n=5) of participants were part-time students; however, all completed their degree in two to four years. These results are similar to the national average of 2 years for completion of a master's degree (USNEI, 2008); however, a MFM could take longer if prerequisites are required or students are completing it part-time. International students made up 25% (n= 10) of the study population, all of whom reported as full-time students.

MFM graduates acquired knowledge and skills from a bachelor's degree in fashion, completing a thesis, and through business courses. Table 2 shows that a large percentage of graduates reported having a bachelor's degree in a fashion-related area (65%, n=26), and an even higher percentage (77.5%, n=31) completed a thesis. A business background was also predominant among most of the graduates: 60% (n=24) took at least some business courses, 17.5% (n=7) had a business minor, 12.5% (n=5) had a business degree, and only 10% (n=4) reported they had not taken any business courses.

Although a fashion undergraduate degree was common, most graduates responded to having had less fashion industry experience before getting their MFM. The majority of graduates had less than 2 years of experience if at all (61.5%, n=24),

15.4% (n=6) reported having experience between 3 to 5 years, and 23% (n=9) had more than 5 years of experience.

Most MFM graduates positively assessed their return on investment for their MFM. Table 2 shows that almost all of the graduates in this study are at least somewhat in agreement that a MFM is a valuable investment (75%, n=27); just 9 (25%) graduates disagreed or found it difficult to say. More than half of the graduates are very happy with their decision to pursue a MFM, about 83.8% (n=31) were at least somewhat happy, including most international students. Of those who are happy to have pursued a MFM, there was almost an equal split between those working in the fashion industry (n=16) and those who are not working in the industry (n=15); however, those who were very happy (n=24) were primarily working in the industry.

Table 2.
Profile of Respondents

Value	<i>n</i>	<i>Percentage*</i>
Type of Student		
Full-Time	35	87.5
Part-Time	5	12.5
International	10	25.0
Time Invested in MFM		
Less than 2 years	9	22.5
2 to 4 years	31	77.5
Complete Thesis		
Yes	31	77.5
No	9	22.5
Bachelor's Degree in Fashion		
Yes	26	65.0
No	14	35.0
Business Courses		
Business degree	5	12.5
Business minor	7	17.5
Some business courses	24	60.0
Never taken any	4	10.0
Fashion Industry Experience		
0 to 2 years	24	61.5
3 to 5 years	6	15.4
More than 5 years	9	23.0
MFM is a Valuable Investment		
Strongly agree	7	19.4
Somewhat agree	20	55.6
Difficult to say	4	11.1
Somewhat disagree	2	5.6
Strongly disagree	3	8.3
Happy with Decision to get MFM		
Strongly agree	24	64.9
Somewhat agree	7	18.9
Difficult to say	2	5.4
Somewhat disagree	2	5.4
Strongly disagree	2	5.4

*This table refers to the percentage among the qualified sample.

4.2 Evaluation of Respondents' Financial Return

The financial return of a MFM was evaluated based on graduates' employment status, salary group, financial assistance towards the MFM, and debt and stress levels, as shown in Table 3 through Table 5.

First, most graduates in this study have found full-time positions but are making less than the annual mean wage of \$63,400 for employees with a master's degree in all occupations in the US, as suggested by 2012 BLS data. According to Table 3, 39 graduates reported employment status and salary levels. Of these, the majority of graduates are employed full-time (69.2%, n=27), 20.5% (n=8) have part-time positions or are looking for work, and only 5.1% (n=4) of graduates are pursuing their PhD. Two of the four PhD students were international students when studying for their MFM. Most of the graduates reported making \$55,000 a year or less, with the majority of respondents belonging to the less than \$35,000 a year salary group. However, 33.3% (n=13) of graduates were within range of the average master's degree salary in the US, earning between \$55,000 and \$80,000. Just 3 graduates of this entire study were making above \$80,000 a year; one of these was an international student.

Second, more graduates relied on student loans. According to Table 3, 52.5% (n=21) of graduates relied on student loans. Of these who took out student loans, only 2 graduates had debt levels higher than \$30,000. The remaining debt levels were as follows: 7 graduates had less than \$10,000, 5 graduates borrowed \$10,000 to \$20,000, and 7 graduates had between \$20,000 and \$30,000. Out of the 10 international students in this study, 2 reported accumulating \$20,000 to \$30,000 in student loan

debt, 1 received no financial support, and 7 relied on support from the university. It is important to note that this survey did not ask international students what types of loans they were able to borrow. Although these results are consistent with public data regarding the increased dependency on student loans to pay for a college degree, MFM graduates in this study graduated with student loan debt levels that were much less than the average graduate student loan debt of \$57,600 in 2013 (Baum & Ma, 2014; DeLisle, 2014).

Third, financial assistance was also received through sources other than student loans. According to Table 3, a little over one-half of MFM graduates received support from the university, such as research and teaching assistantships and other fellowships from the MFM program to complete their MFM (52.5%, n=21). Some graduates received financial support from sources outside the University, such as a private endowment and family support (32.5%, n=13). Just 12.5% (n=5) of participants reported having received no financial support.

Fourth, stress levels were evident, albeit varied, for those who borrowed student loans to pay for their MFM. Eleven graduates leaned slightly more to the somewhat to very stressed levels, while ten graduates showed limited to no signs of stress for paying back their student loans. Both international students who borrowed student loans showed some level of stress; however neither of them reported high stress levels. Table 4 and Table 5 show the stress level comparisons between employment statuses and between salary groups. According to Table 4, it appears that higher stress levels were evident in three graduates who were unemployed but also in some graduates working full-time. Then Table 5 shows that higher levels of stress

were mostly in graduates making less than \$55,000 a year, but lower levels of stress were related to both lesser and greater salaries. It should be noted that Table 3 through Table 5 only show the percentages and frequencies of stress levels. Whether or not stress levels were statistically different based on employment status or salary group needed to be determined based on the results of ANOVA.

Table 3.
Financial Return

Value	<i>n</i>	<i>Percentage*</i>
Employment Status		
Full-time	27	69.2
Part-time	2	5.1
Not currently employed but looking for work	6	15.4
PhD Student	4	5.1
Salary Group		
Less than \$35,000/year	14	35.9
\$35,000 to \$55,000/year	12	30.8
\$55,000 to \$80,000/year	10	25.6
More than \$80,000/year	3	7.7
Financial Assistance		
Loans	21	52.5
Support from University	21	52.5
Support outside University	13	32.5
No financial support	5	12.5
Debt Level		
Less than \$10,000	7	17.5
\$10,000 to \$20,000	5	12.5
\$20,000 to \$30,000	7	17.5
More than \$30,000	2	5
Stress Level		
No stress	3	14.3
Limited stress	7	33.3
Somewhat stressed	7	33.3
Very stressed	4	19.0

*This table refers to the percentage among the qualified sample.

Table 4.
Stress Level Comparison for Employment Status

		Employment Status				<i>Total</i>
		Full-time	Part-time	Not currently employed but looking for work	PHD student	
Stress Level	No stress	2	0	0	1	3
	Limited stress	5	1	1	0	7
	Somewhat stressed	6	0	1	0	7
	Very stressed	2	0	2	0	4
<i>Total</i>		15	1	4	1	21

Table 5.
Stress Level Comparison for Salary Group

		Salary Group				<i>Total</i>
		Less than \$35,000/year	\$35,000 to \$55,000/year	\$55,000 to \$80,000/year	More than \$80,000/year	
Stress Level	No stress	1	2	0	0	3
	Limited stress	2	0	4	1	7
	Somewhat stressed	2	3	2	0	7
	Very stressed	3	0	1	0	4
<i>Total</i>		8	5	7	1	21

Because the majority of student loan borrowers in this study exhibited some signs of stress for paying back student loan debt, ANOVA was conducted to determine whether significant difference existed between stress levels and employment status or salary groups. Only the 21 graduates who reported having student loan debt were included in this analysis. The results for ANOVA are explained in the following, as shown in Table 6 and Table 7.

Table 6 shows the ANOVA results for effects of employment status on stress levels. There were no statistically significant differences in group means as determined by one-way ANOVA ($F(1,19) = 2.563$, $p = .126$). Based on the p-value of 0.126, we fail to reject the null hypothesis; there is no statistically significant difference in stress levels for paying back student loan debt among graduates with different employment status.

Table 7 shows the ANOVA results for effects of salary levels on stress levels. There were no statistically significant differences in group means as determined by one way ANOVA ($F(1,19) = 1.260$, $p = .276$). Based on the p-value of 0.276, we fail to reject the null hypothesis; there is no statistically significant difference in stress levels for paying back student loan debt among graduates with different salary levels.

Table 6.
ANOVA Test Results Stress v. Employment

	N	Mean	Standard Deviation
Employed (Full/Part/PhD)	17	2.4118	.93934
Not Employed	4	3.2500	.95743
Total	21	.25714	.97834
	df	F-Value	P-Value
Between Groups	1	2.563	.126
Within Groups	19		
Total	20		

Table 7.
ANOVA Test Results Stress v. Salary

	N	Mean	Standard Deviation
Below \$35,000/year	8	2.875	1.12599
Above \$35,000/year	13	2.3846	.86972
Total	21	.25714	.97834
	df	F-Value	P-Value
Between Groups	1	1.260	.276
Within Groups	19		
Total	20		

4.3 Evaluation of Respondents' Career Development

The career development of a MFM was evaluated based upon whether or not graduates were working in the fashion industry and how long it took them to find a job, as well as the relevancy of the MFM in the industry, as shown in Table 8 and 9 and in Figure 3 through 6.

First, there were fewer MFM graduates who are actually working in the fashion industry compared to those who are working outside the fashion industry in this study. According to Table 8, slightly less than half (48.7%, n=19) of all graduates in this study reported that they were actually working in the fashion industry, and 51.3% (n=20) were not fashion-employed. PhD students were considered employed in the fashion industry. With the exception of PhD students, of those who are working in the industry, most were able to secure a position in the industry in 3 months or less (33.3%, n=13). It took 6 graduates from three months to one year to find a fashion-

related position and only 1 graduate more than one year. The majority of these fashion-employed graduates had a bachelor's degree in fashion (78.9%, n=15). Table 9 shows that most had taken at least some business courses (63.9%, n=12) and some even had a business minor or degree (31.6%, n=6). MFM graduates that are not working in the fashion industry mostly have some kind of a business background but half do not have a bachelor's degree in fashion (50%, n=10). According to Table 9, 85% (n=17) of the graduates who are not working in the industry did take some business courses or get a business degree. Interestingly, 4 out of the 5 graduates in this study who had a business degree were not actually working in the industry, perhaps because there were better job opportunities available. It should be noted that this study did not ask graduates to indicate why they are not working in the industry.

Second, skill relevancy and benefits for MFM graduates is dependent upon whether they are working in the fashion industry, as shown in Figure 3 and Figure 4. Graduates were encouraged to report all skills that were relevant to their current positions of employment. The most relevant skills for the 19 graduates working in the fashion industry are fashion merchandising related knowledge (78.9%, n=15) and soft skills (73.7%, n=14). Research skills were also reported as relevant, but only 36.8% (n=7) of graduates found them to be useful in their fashion positions. These results are consistent with previous studies supporting the practicality of industry specific knowledge and soft skills for fashion industry jobs (Chida & Brown, 2011; Hodges et al, 2011; Romeo & Lee, 2013) In contrast, for the 20 graduates not working in the fashion industry, research skills were found as the most relevant (65%, n=13), followed by soft skills (55%, n=11), and surprisingly 30% (n=6) still found their

fashion-merchandising knowledge relevant in their current non-fashion industry positions. According to Table 8, the majority of MFM graduates significantly benefit from the skills and knowledge they learned from their MFM in their current position (70.2%, n=26). Likewise, Figure 3 shows that the specific skills learned from a MFM are still relevant regardless of whether graduates are working in the fashion industry.

Third, the results of this study found that the MFM degree is not necessarily required for positions obtained by MFM graduates. According to Table 8, a little less than half of MFM graduates at least somewhat agreed that a MFM is required for their current position (45.9%, n=17). However, this percentage was only slightly higher than those who disagreed that a MFM was needed for their position (35.1%, n=13).

Fourth, MFM graduates expect their advanced degree to have more advantages in the industry, such as obtaining a better position and connecting them to key people in the industry. Less than half of all graduates agree that a MFM will help them obtain a higher-level job (48.6%, n=18). Figure 5 shows that graduates who are not working in the industry are in less agreement that a MFM will help them obtain a higher-level job. Perhaps this is due to difficulty they may have faced finding employment in the industry. Although more than half of graduates (56.7%, n=21) reported that their MFM helped them to network with others in the industry, 27% (n=10) somewhat to strongly disagreed, and 16.2% (n=6) found it difficult to say. According to Figure 6, there was not a clear pattern between those working and not working in the fashion industry in terms of whether the MFM helped them to network; however, the majority or graduates who strongly disagreed were not working in the fashion industry.

Table 8.
Career Development

Value	<i>n</i>	<i>Percentage*</i>
Working in fashion industry		
Yes	19	48.7
No	20	51.3
Length of time to find employment in fashion industry		
0 to 3 months	13	33.3
3 to 6 months	2	5.1
6 months to 1 year	4	10.3
More than 1 year	1	2.6
A MFM is required for current position		
Strongly agree	10	27.0
Somewhat agree	7	18.9
Difficult to say	3	8.1
Somewhat disagree	5	13.5
Strongly disagree	8	21.6
Benefit from MFM skills in current job		
Strongly agree	15	40.5
Somewhat agree	11	29.7
Difficult to say	4	10.8
Somewhat disagree	3	8.1
Strongly disagree	2	5.4
A MFM will help obtain a higher-level job		
Strongly agree	4	10.8
Somewhat agree	14	37.8
Difficult to say	10	27.0
Somewhat disagree	2	5.4
Strongly disagree	4	10.8
MFM helped to network with others in industry		
Strongly agree	11	29.7
Somewhat agree	10	27.0
Difficult to say	6	16.2
Somewhat disagree	3	8.1
Strongly disagree	7	18.9

*This table refers to the percentage among qualified samples.

Table 9.

Industry Status and Business Background Comparison

		Business Background				Total
		Business degree	Business minor	Some business courses	Never taken any	
Are you currently working in the fashion industry?	Yes	1	5	12	1	19
	No	4	2	11	3	20
Total		5	7	23	4	39

**Figure 3.
Relevancy of Skills Comparison**

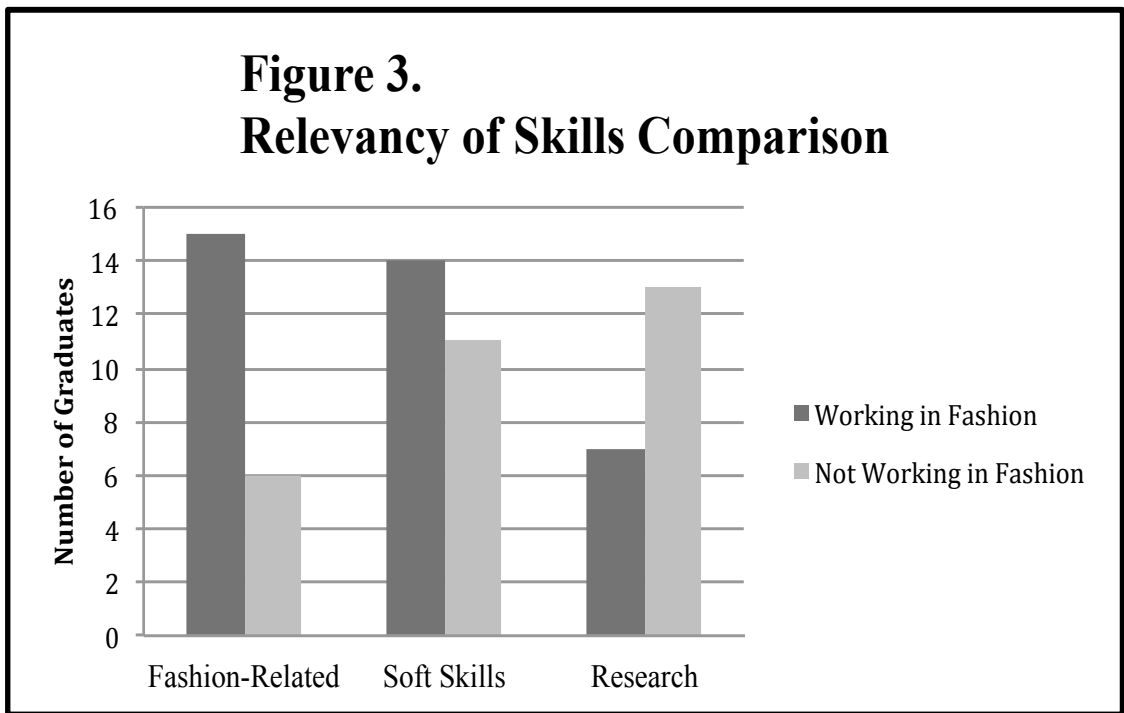


Figure 4.
Benefit from MFM Skills in Current Job

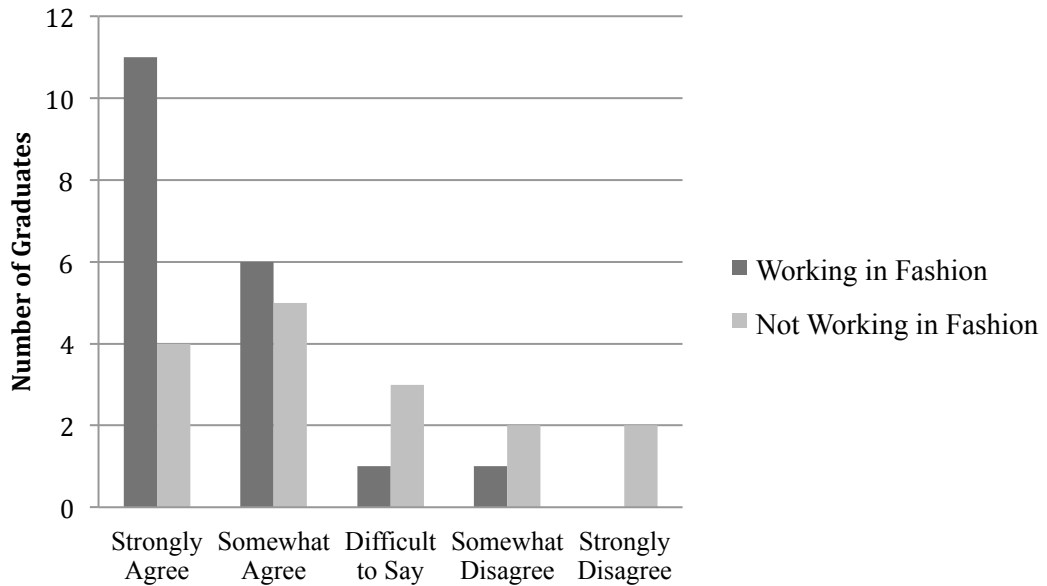
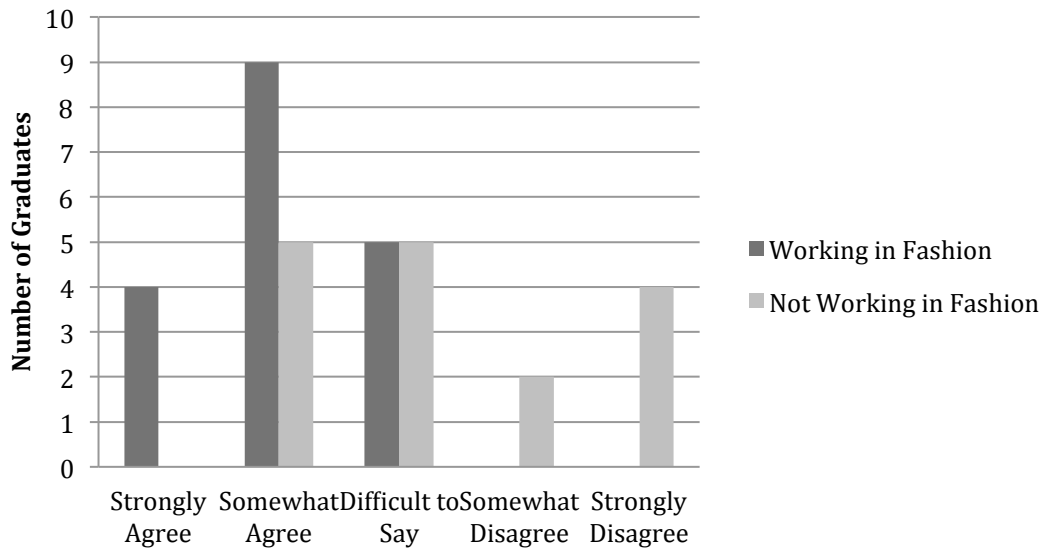
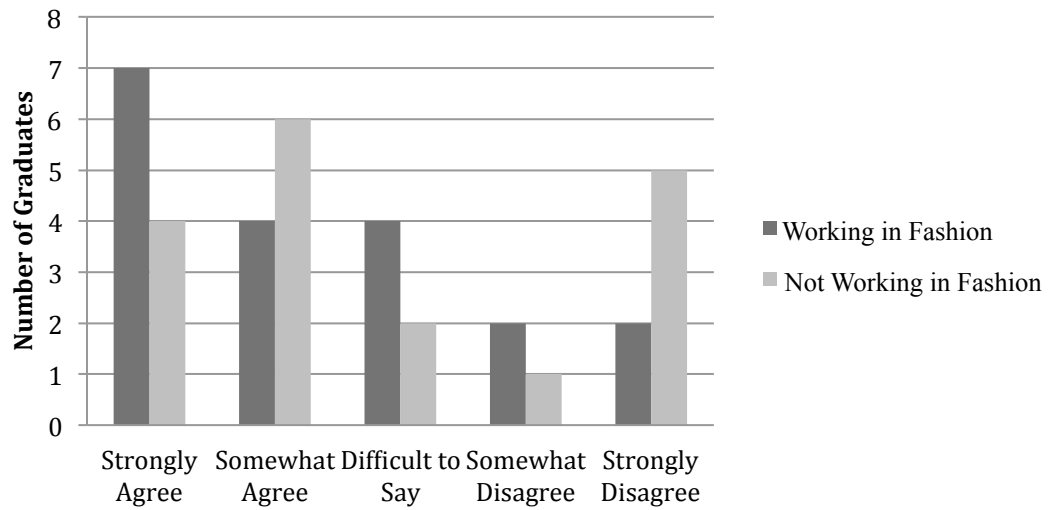


Figure 5.
MFM Will Help Obtain Higher-Level Job



**Figure 6.
MFM Helped Network with Others in
Industry**



Because less than half of MFM graduates in this study are actually working in the industry, a Pearson’s Chi-square test was performed to examine whether there was a relationship between fashion industry experience and current fashion employment status. Only the 39 graduates who reported on both variables were included in this analysis. According to Table 10 and Table 11, the relationship between these variables was statistically significant, $X^2(2, N = 39) = 5.912, p = 0.02$. Based on the p-value of 0.02, we reject the null hypothesis and accept the alternative hypothesis that for the population of MFM graduates, previous fashion industry experience and current fashion employment status are related. Graduates with more experience in the fashion industry were more likely to secure employment within the fashion industry, as shown in Table 10 and Table 11.

Table 10.
Pearson's Chi-square Test

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.912 ^a	1	.015		
Continuity Correction ^b	4.419	1	.036		
Likelihood Ratio	6.090	1	.014		
Fisher's Exact Test				.022	.017
Linear-by-Linear Association	5.760	1	.016		
N of Valid Cases	39				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.31.

b. Computed only for a 2x2 table

Table 11.
Pearson's Chi-square Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.389	.015
	Cramer's V	.389	.015
N of Valid Cases		39	

4.4 Discussion

Results of the descriptive analysis, ANOVA tests, and Pearson's Chi-square test can be explained through the following aspects.

First, the results showed that these MFM graduates took on various costs associated with investing in a MFM. Time is a primary cost for pursuing a MFM, as it likely takes two to four years to complete, even as a full-time student. Most graduates had to accrue some amount of student loan debt and/or spend additional time seeking

assistance from the university in scholarship or spend working as a teaching/research assistant to offset tuition cost. This was especially true for international students who had much higher debt levels and relied on university support. Fortunately, the majority of MFM graduates had lower student loan debt than the national average for both undergraduate (\$25,000-\$30,000) and graduate (\$57,600) debt levels (Baum & Payea, 2013b; Reed & Cochrane, 2013; Delisle, 2014).

While not a large amount of stress, graduates who did take on student loan debt developed some levels of stress. Taking on various levels of stress along with student loan debt is yet another potential cost, although further studies are needed to determine if these stress levels are a result of specific employment situations and income levels after graduation. There was no evidence from ANOVA showing that stress levels change based on how much graduates are earning and if they are employed; this is likely due to the small sample sizes. Perhaps there are other factors increasing or decreasing stress levels, such as graduates' household income, availability of emotional support, or spousal financial support. Furthermore, 2010 to 2014 was not a period of great economic growth either. Despite the time and financial costs involved, results did suggest that MFM graduates overall are generally happy with their decision to get their MFM degree.

Second, the results showed that the job market and career development opportunities facing MFM graduates are less distinct. The HCT suggests that the skills learned from a degree should increase employability (Piróg, 2014; Tomlinson, 2008), which the results seemed to support from a general point of view since this study showed that a MFM seems to give graduates an advantage to secure full-time

positions. However, less than half of graduates are actually working in the fashion industry. Perhaps this is due to the difficulties they face trying to secure a job after graduation, a lack of interest in the jobs that are available to them, or there are better opportunities in other industries. The Bureau of Labor Statistics indicates that the annual mean wage for employees with a master's degree is \$63,400 (U.S. Bureau of Labor Statistics, 2013). Even though the majority of graduates had a bachelor's degree in fashion and had some sort of a business background, most of their earnings were much less than what the benchmark suggests for an employee with a master's degree, and even below \$55,000 a year. The lack of experience in the industry reported by the majority of respondents could be suggestive of these lower wages, as well as the poor economy during these years.

Third, graduates in this study were seemingly optimistic that their MFM is a valuable investment and many believed a MFM will help them obtain a higher-level position, although further studies are needed to determine what influences their value perceptions for an advanced degree. Even though income levels were much lower, these positive value perceptions seem to support the *human capital theory* (HCT) because most MFM graduates studied as full-time students, which incurred tuition costs and reduced earnings, but the degree eventually lead to higher personal gains that the degree is valuable (Becker, 1964, 1993; Cornacchione & Daugherty, 2013; Shultz, 1961).

CHAPTER 5. CONCLUSION

5.1 Findings

This study intended to evaluate whether a MFM is a valuable investment from recent graduates' perspectives. Under the framework presented in Figures 1 and 2, the costs were compared with the benefits for the financial return and the inputs were compared with the outcomes from a career development perspective. The results showed that:

First, participants took on various costs when investing in their MFM. The majority of graduates spent at least two years in pursuit of the degree and 87.5% spent additional time seeking financial assistance. For student loan borrowers, 85.7% developed stress levels for repayment of loans but acquired lesser amounts of student loan debt than the average graduate degree recipient.

Second, most participants found full-time positions; however, only 48.7% secured positions in the fashion industry. 43.2% of participants disagreed that their MFM helped to increase networking opportunities. Salary earnings were also much lower than the average master's degree holder. The Pearson's Chi-square test showed a significant relationship between industry experience and securing positions in the fashion industry. The relevancy of MFM skills varied between those working in the fashion industry and those who were not; but fashion merchandising knowledge and soft skills were the most useful for jobs in the fashion industry.

Third, 83.8% of participants were happy with their decision to pursue the degree. 48.6% of graduates in this study agreed that a MFM would lead to a higher-

level position. The overall result showed that 75% of MFM graduates in this study saw their pursuit of a MFM as a valuable investment.

5.2 Implications of the Findings

Findings of this study have several important implications.

First, a few specific improvements can be made to increase the value of a MFM. MFM programs could offer more opportunities for students to acquire more soft skills needed in the industry, as cited by several previous studies (Chida & Brown, 2011; Foster, 2005; Hodges et. al, 2011; Hodges & Karpova, 2009; Kozar & Connell, 2013; Romeo & Lee, 2013). Fashion-merchandising knowledge, soft skills, and research skills were all relevant to MFM graduates in their current positions, but soft skills were almost equally as important to those working within and outside the fashion industry.

Specific fashion-merchandising knowledge is the most relevant to those working in the fashion industry. Even though the majority of MFM graduates completed a thesis, research skills were reported as more useful to those working outside of the fashion industry. Based on these findings, perhaps it would be beneficial for MFM programs to balance their program between fashion industry specific knowledge and research skills. This is especially important to those who may be transitioning from an entirely different educational background and lack the industry specific skills.

Furthermore, the results of this study do not indicate why graduates are not working in the fashion industry after graduation, but making graduates more

employable specifically to the fashion industry may be a key improvement for programs to consider, as indicated by several open-ended responses from MFM graduates. For example, participants stated a need for a stronger business component including more courses in statistics and excel, as well as professors with real-world industry experience and not just research to provide more insight into the industry.

Another major suggestion for MFM programs from graduates indicated a stronger partnership between MFM programs and the fashion industry. Although most graduates felt that a MFM helped them to network with others in the industry, several graduates stated that a MFM is not valued as an advanced degree in the industry, suggesting that industry partnerships would help to foster a better understanding of how this degree lends itself to more valuable employees. Additionally, many graduates mentioned a need for opportunities to gain experience in the industry while pursuing their MFM so that they will have a stronger advantage to secure a position after graduation. This is consistent with a 2013 study suggesting the need for more internships, in order to secure employment in the fashion industry (Robeck, Pate, Pattinson & Pattinson, 2013). With these suggestions in mind, perhaps the most important improvement for MFM programs is to reevaluate their specific mission for their program, whether it is to increase graduates' employability with specific industry knowledge to find a job specifically in the fashion industry or to broaden graduates' skill sets as an advanced degree recipient to secure a full-time position regardless of which direction they choose to go after graduation.

Second, potential graduate students of a MFM should be clear on their expectations of the degree as well as an understanding of the nature of the industry to

increase its value. Because it is a master's degree, students should be aware that most MFM programs require a research component (ITAA), which may not be the most important skill needed to succeed in the fashion industry. Furthermore, depending on students' financial situation, they may want to weigh the cost of getting an advanced degree versus gaining more industry experience if they already have a bachelor's degree in fashion. If the option is available, it would benefit students to take specific business courses, especially those developing soft skills, in conjunction with courses offered through the MFM program to increase employability in the fashion industry. Students must also understand that the fashion industry is very competitive, and even with an advanced degree, salary earnings are likely to be much less than the average master's degree employee. Nevertheless, as these results suggest, furthering one's education will likely be a valuable investment.

5.3 Limitations and Suggestions for Future Research

Despite meaningful and interesting results, this research also had some limitations that could be avoided in future research.

First, due to time constraints and limited resources, many universities offering a MFM were not included in this study. For example, some MFM programs did not have a listserv with recent graduates' contact information and would have needed staff available to track them down. Also, some universities had an extensive IRB (Institutional Review Board) process of their own and it could have extended the study past appropriate deadlines. Reliability of the study could be improved if more Universities could be included in the analysis to increase the sample size. Thus, more

time is needed to obtain a larger sample size if using a convenience sample like the present study.

Second, only recent graduates were considered for this study, those who graduated between 2010 and 2014. This limited the total sample size because many universities only had a few graduates who met these requirements. Obtaining a larger sample size would improve the reliability of the study if the scope of the study were broadened to perhaps the last decade. Furthermore, during the period of 2010 to 2014, the US had a stable but still low economy, which may have affected survey results, graduate school enrollment, and job availability.

Third, this study did not ask why graduates were or were not actually working in the fashion industry. This is a limitation because results of this data could affect the result in measuring the return on investment from a career development perspective. Perhaps a MFM does increase graduates' employability, but graduates ultimately make the decision whether or not to work in the fashion industry and it may not be due to the job availability. Additionally, this study did not consider gender implications. Because the majority of the students enrolled in fashion degrees are female, participants' gender may have affected their mobility to move to a fashion city with more job opportunities if they were married or had children.

From this study, future studies could be conducted adding specific questions to the survey. For example, questions related to what actually causes stress levels for paying back student loans for MFM graduates could be included and why participants secure a job in the fashion industry or not. The survey should also expand on questions regarding international students, such as what types of loans they borrow and their

level of difficulty for getting financial assistance. Perhaps employers in the fashion industry could be interviewed to get their perspectives on how they value a MFM. Additionally, interviewing MFM graduates to gain a better understanding of how they define value would be meaningful. This study may also be expanded to investigate the value of a MFM on a global scale, by comparing the financial and career development perspectives between US-based institutions and international institutions.

APPENDICES

Appendix A: Participant Recruitment Email to Directors

[Date]

Dear [*insert MFM director name*],

My name is Kelley Capron and I am a fashion merchandising graduate student at the University of Rhode Island. I am writing to request your assistance with participant recruitment for my thesis study, which intends to estimate the investment return on a master's degree in fashion merchandising (MFM) from recent graduate's perspectives. IRB has approved this study, protocol #684520-1, as it presents minimal risk to participants.

For the purpose of this study, I am looking to recruit participants who have graduated between 2010 and 2014 with a MFM. In order to recruit the necessary number of participants for this study, would it be possible to please email me a list of graduates' emails from your program, who meet these requirements?

Participants will be emailed a link to the survey using Survey Monkey. The survey should only take about 5-7 minutes of graduates' time and all answers will be kept confidential. There is no compensation for responding nor is there any known risk. Participation is strictly voluntary and all responses will be kept anonymous. They may refuse to participate at any time. If you wish, attached is the link to the survey, which you can email to the recent graduates as well.

Thank you for taking the time to assist me in my educational endeavors. The data collected will provide useful information regarding the ways to increase the value of the degree and improve MFM programs. Should you have any questions about the study, feel free to contact me at kelley_capron@my.uri.edu.

Thank you. Your assistance is much appreciated.

Sincerely,

Kelley Capron (student researcher)
Dr. Sheng Lu (principal investigator)

Appendix B: Institutions Contacted for Participant Recruitment

Auburn University	Fontbonne University	North Carolina State University	South Dakota State University	University of Missouri
Arkansas	Framingham State University	Nebraska	Texas State University	University of Minnesota
Alabama	Florida State University	North Dakota State University	Texas Tech University	University of North Carolina – Greensboro
Ball State University	Illinois State University	Northern Illinois University	University of California – Davis	University of North Texas
California State University-Northridge	Iowa State University	Ohio University	University of Delaware	University of Rhode Island
Central Michigan University	Kansas State University	Ohio State University	University of Georgia	University of Wyoming
Cornell University	Kent State University	Oklahoma State University	University of the Incarnate Word	Washington State University
Colorado State University	Lim College	Oregon State University	University of Indiana	Western Michigan University
Eastern Michigan	Louisiana State University	San Francisco State University	University of Kentucky	West Virginia University

Appendix C: Participant Recruitment Email to MFM Graduates

[Date]

Dear [graduate's name],

My name is Kelley Capron and I am a fashion merchandising graduate student at the University of Rhode Island. I am working on my thesis study, which intends to estimate the investment return on a master's degree in fashion merchandising (MFM) from recent graduates' perspectives. I am writing to invite you to please participate in a short questionnaire regarding your MFM experience and career development opportunities post-graduation. This study has been IRB approved, protocol 684520-1, as it presents minimal risk to participants.

The survey should only take about 5-7 minutes of your time and answers will be kept confidential. There is no compensation for responding nor is there any known risk; however, the data collected will provide useful information regarding ways to increase the value of the degree and improve MFM programs.

In order to ensure that all information will remain confidential, please do not include your name. Participation is strictly voluntary and you may refuse to participate at any time.

Thank you for taking the time to assist me in my educational endeavors. Should you have any questions, feel free to contact me at kelly_capron@my.uri.edu.

Sincerely,

Kelley Capron (student researcher)
Dr. Sheng Lu (principal investigator)

Appendix D: MFM Graduate Questionnaire

Questions 1-16: Multiple Choice

1. **Did you receive a master's degree in fashion merchandising or related title (i.e. specialization/concentration in merchandising, textile management, consumer sciences, apparel studies, etc.)? A. Yes B. No**
If unsure that your degree applies, please write the title of your Master's degree below: _____
2. **When you were pursuing your MFM, were you a full-time or part-time student?**
 - Full-time
 - Part-time
3. **Were you an international student? A. Yes B. No**
4. **Did you complete a thesis? A. Yes B. No**
5. **Do you have a bachelor's degree in any fashion-related area? A. Yes B. No**
If yes, please provide a brief description of the degree title: _____
6. **Have you ever taken any business courses in either your undergraduate or graduate studies?**
 - Business degree
 - Business minor
 - Some business courses
 - Never taken any
7. **How many years did it take to earn your MFM degree?**
 - Less than 2 years
 - 2-4 years
 - More than 4 years
8. **Did you work in any part of the fashion industry before getting your MFM, including all types of full-time, part-time, or internship positions? (For this study, the fashion industry refers to any company that is involved with design/development, manufacturing, sourcing/distribution,**

trade policy/compliance, branding, retail, and marketing/promotion across the entire global value chain from fiber to finished goods.)

- 0-2 year
- 3-5 years experience
- More than 5 years experience

9. Are you currently working in the fashion industry? A. Yes B. No

10. If yes, how long did it take you to find employment in the fashion industry since you graduated with your MFM?

- 0-3 months
- 3-6 months
- 6 months - 1 year
- More than 1 year
- Not Applicable

11. What is your current employment status?

- Full-time
- Part-time
- Not currently employed but looking for work
- Not currently employed and not looking for work
- PhD student

12. What knowledge or skills do you find most important to your current job?

(Check all that apply)

- Fashion merchandising related knowledge (consumer behavior, branding, sourcing)
- Research skills (quantitative, qualitative, statistics)
- Soft skills (ability to work independently, teamwork, communication, critical thinking, time management)
- Other [please specify]

13. To which salary group do you belong?

- Less than \$35,000/per year
- \$35,000 to \$55,000/per year
- \$55,000 to \$80,000/per year
- More than \$80,000/per year

14. Did you receive financial assistance towards tuition and expenses for your MFM? (Check all that apply)

- Loans
- Financial support from the University, such as research assistant, teaching assistant, other fellowships provided by the MFM program
- Financial support from sources other than the University, such as private endowment, and family support
- Received no financial support from the above categories

15. If you took out student loans to pay for your MFM, how much debt specifically from your MFM did you have at graduation?

- Less than \$10,000
- \$10,000 to \$20,000
- \$20,000 to \$30,000
- More than \$30,000
- Not applicable

16. How do you rate your level of stress for paying back MFM student loan debt?

- No stress
- Limited stress
- Somewhat stressed
- Very stressed
- Cannot determine

Questions 17-22: 5-pt Likert Scale (5-strongly agree, 4- somewhat agree, 3- difficult to say, 2- somewhat disagree, 1-strongly disagree, Not Applicable)

17. A MFM is required for my current position.
18. A MFM will help me obtain a higher-level job in the fashion industry.
19. Getting a MFM is a valuable investment.
20. I significantly benefit from those skills I learned from my MFM program in my current job.
21. My MFM program helped me to network with others in the fashion industry.
22. I am happy with my decision to get my MFM degree.
23. **Do you have any suggestions to improve the value of MFM programs nationwide in terms of financial return or career development?**

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