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Diversity Management, Career Planning, and Career Advancement for Women

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
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Walden University
2020

Abstract

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MPhil, Walden University, 2020

MA, Wayne State University, 1999

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Dissertation Submitted in Fulfillment

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Abstract

Gender disparity in the United States automotive industry is a pervasive problem, and the most significant gender gap is in critical decision-making positions. This study addressed diversity management, career planning, and women's career advancement in the United States automotive industry. The quantitative correlational study aimed to investigate how diversity management and career planning are related to women's advancement in the United States automotive industry to improve the representation of women in management and senior-level positions. The gender gap in management was examined through the organizational justice theory and grounded by the glass ceiling metaphor. The sample was 92 full-time employees of a mid-Atlantic region automotive company. Data were collected through SurveyMonkey using the Perceived Facilitators to Career Advancement Scales, the Perceived Barriers to Career Advancement Scales, and the Job Descriptive Index Scales. Multiple regression analysis was used to analyze the data. The research questions addressed the individual and combined relationship between diversity management and career planning to career advancement. The results indicated a significant relationship between the linear combination of diversity management and career planning to the advancement of women. The individual relationship between career planning and career advancement was found to be significant. However, there was no significant relationship between diversity management and career advancement. The implication for positive social change is that the study provided collective baseline data on women's advancement in the automotive industry. As a result, this study expands current knowledge about women in male-dominated industries in the United States.

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Dedication

I dedicate this doctoral study to God without whom this dissertation would not be possible. A special feeling of gratitude to my daughter, extended family, close friends, and extended network, who have been my source of strength throughout this process, and I am forever grateful. Your prayers and words of encouragement motivated me to complete this journey when I felt life's challenges were insurmountable.

Most importantly, I dedicate my dissertation to my 21-year-old self, who thought her dream to earn a Ph.D. was impossible. Despite being a single mother, working through undergraduate school, I never let my circumstances discourage me from accomplishing my goals. 'Dreams' by Langston Hughes encouraged me to hold fast to my dreams. Although achieving this goal was over twenty years delayed, it is no longer a dream deferred.

Acknowledgments

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Chapter 1: Introduction to the Study

The number of women in the United States workforce has grown dramatically over the past 60 years. The Bureau of Labor Statistics (BLS, 2018a) defined *labor force* as those employed or those who are actively seeking employment. The BLS reported there were almost 75 million women in the labor force in 2017, equaling almost 47% of the total United States workforce. Women are more present in the overall United States workforce, and the women in the workforce are highly educated. Women earned more than half of all bachelor's (57.2%) and master's degrees (59.2%) in 2015 (United States Department of Education [DOE], 2016). Despite these advancements, women continue to struggle to overcome gender bias in the workplace, particularly for middle management and executive level positions in male-dominated fields (Catalyst, 2014).

Gender bias is a more significant problem for women working in male-dominated fields and industries. Women make up fewer than 25% of employees in male-dominated fields, such as construction, transportation, technology, and utility industries (Catalyst, 2017b). Beaman, Duflo, Pande, and Topalova (2012) reported that many factors affect gender diversity in male-dominated fields. Factors affecting low female representation in male-dominated fields include perceived self-efficacy, occupation choice, compensation, and representation in decision-making positions (Beaman et al., 2012). Still, the gender gap in these fields suggests the number of women in leadership positions could grow via gender diversity employment pipelines.

The general topic of this study was women's perceptions of fairness in procedures and the distribution of resources to alleviate artificial and invisible barriers to

advancement. For some organizations, the implementation of policies and practices, like diversity management (DM) and career planning (CP), creates opportunities for women to thrive in the workplace (O'Neil, Hopkins, & Sullivan, 2011; Spurk, Kauffeld, Barthauer, & Heinemann, 2015). There was a need to investigate how DM and CP are related to the career advancement as a blueprint for filling the talent pipeline with highly skilled women in the automotive sector (O'Neil et al., 2011; Spurk et al., 2015).

A more diverse workforce can affect organizational performance. Kim and Starks (2016) noted gender diversity at the board level could increase firm value. Women make unique contributions to decision-making processes by offering functional expertise, which is sometimes missing when boards lack gender diversity (Kim & Starks, 2016). Similarly, Reinert, Weigert, and Winnefeld (2016) found a positive correlation between (a) corporate return on investment and (b) gender-diverse management. Badal and Harter (2014) also found a relationship between gender diversity and positive organizational performance at the business-unit level. Not all work fields, however, are gender-diverse, which may specifically be affecting the organizational performance of male-dominated industries.

Chapter 1 includes the background of the study, problem statement, research questions and hypotheses, the theoretical foundation, the nature of the study, a definition of terms, assumptions and limitations, the scope of the research, and delimitations. Also presented are the (a) significance of the study, (b) significance of the study to the management field, (c) significance for women in male-dominated industries, and (c) significance of positive social change. The information in the significance section

suggested more quantitative research was needed to determine the significance of how DM and CP are related to the advancement of women in the United States automotive industry.

Background of the Study

The influx of women into the United States workforce over the past 70 years contributed to a gradual social movement where women moved from caregiver roles in the home to economic contributors (Budgeon, 2014; Catalyst, 2017a). Social and political movements including the feminist movement, equal opportunity legislation, academic achievement, career aspirations, and shifts in family responsibilities led to the feminization of the workforce (Budgeon, 2014). Women's participation in the labor force has fluctuated over time, peaking in 1999 at 60% (BLS, 2018a; Catalyst, 2017a). There were approximately 75 million women employed in the United States labor force in 2017 (Bureau of Labor Statistics [BLS], 2018a). Unfortunately, women are still underrepresented in decision-making positions (McKinsey & Company, 2015), and a lack of women in decision-making positions may negatively affect the number of women available to *enter* decision-making positions (Catalyst, 2017a; McKinsey & Company, 2016). Decision-making positions are managers, directors, vice presidents and higher. Women in these positions often serve as mentors and sponsors for women in the pipeline (Toossi, 2015).

The increase of female participation in the workforce did not significantly impact female representation at the board level (Alliance for Board Diversity, 2016; Catalyst, 2018). Gender diversity is thus lacking at the highest levels. For example, the

representation of women on Fortune 500 boards peaked in 2016 at 1,100 (20%) of over 22,000 board members (Alliance for Board Diversity, 2016; Catalyst, 2018). Toossi (2015) suggested organizations implement programs and initiatives to expand the gender profile of their boards and executive teams. Numerous studies have found evidence to suggest DM and CP positively influence the pipeline of women into decision-making positions and ultimately position women for board membership (Alliance for Board Diversity, 2016; Catalyst, 2017a, Catalyst, 2018, McKinsey & Company, 2016). Similarly, these programs could result in a significant increase in the number of women in middle management and senior leadership positions (Toossi, 2015).

Gender diversity initiatives vary by organization. The type of programs and policies implemented are based on factors such as company size, available resources, and organizational culture. For example, a small corporation in a female-dominated industry workforce is likely to have different program needs than a small corporation in a male-dominated industry. The male-dominated firm may have recruitment and mentoring programs designed to attract, hire, retain, and promote women. Researchers stated women who engaged in DM initiatives adapted to an organization's culture by participating in mentoring and networking. Women who actively participated in DM are likely to advance in the pipeline (Ellemers, 2014; Olson, Parsons, Martins, & Ivanaj, 2015). Likewise, CP which consists of (a) career management, (b) development assignments, and (c) geographic mobility were reported to be what women need if they are to advance into management and senior leadership (Cook & Glass, 2014; French & Strachan, 2013). Unfortunately, the variances in DM and CP programs and initiatives

outcomes suggests a need for more research to examine how DM and CP are related to the advancement of women (Williams, Kilanski, & Muller, 2014).

Workplace Inequality

The number of women in the labor market has risen over the last half century. During this time women have attained more skills and qualifications, and the number of women in entry-level positions is equal to men. Despite these achievements, Devillard, Sancier-Sultan, and Werner (2014) wrote women encountered a more significant number of invisible and artificial barriers to career advancement than their male counterparts. Moreover, the gender gap increased as women advanced into C-suite-level management positions (Devillard et al., 2014). There are greater gender differences in career advancement in male-dominated industries and fields where slower rates of advancement and gender bias are by-products of gender inequality (Zawadzki, Danube, & Shields, 2012). While federal statutes have been enacted to eradicate gender inequality in the workplace, these laws have not eliminated glass ceiling barriers (Budgeon, 2014). Organizational leaders interested in the advancement of women must understand how DM and CP are related to the career advancement of women (Devillard et al., 2014).

Women in Male-Dominated Industries

Because women comprise less than a quarter of all employees in male-dominated industries, which include but are not limited to manufacturing, construction, finance, technology, law, politics, and the oil and gas industry, there is an unconscious bias to advance men over women (Appelbaum, Shapiro, Didus, Luongo, & Paz, 2013; Catalyst, 2017a; Clevenger & Singh, 2013). Unconscious bias towards men contributes to the

gender advancement gap at the managerial and senior level (Watkins & Smith, 2014). Unconscious gender bias is described as constructs and mental models that are based on beliefs about gender that are influenced by standards, values, traditions, and experiences. Watkins and Smith (2014) stated the career trajectory of women who work in male-dominated industries is often hindered by programs and practices that are unconsciously biased towards men and reflect stereotypically masculine criteria.

Watkins and Smith (2014) stated the underrepresentation of women at the senior level contributed to a workplace culture that promoted male biases and led to subjective gender standardization in talent management systems that value masculinity. Talent management systems in male-dominated industries fail to adequately support the career advancement of women (Catalyst, 2017a). Male-dominated industries tend to have a culture where talent management policies and practices are influenced by masculine stereotypes for acceptable behaviors and norms. For example, developmental and promotional opportunities often excluded women because of masculine stereotypes and pro-male biases (Watkins & Smith, 2014). Consequently, the gender imbalance at the executive and senior-levels resulted in less female mobility in male-dominated industries and business sectors (Appelbaum et al., 2013; Walker & Bopp, 2011). The gender diversity profile of the automotive industry may be a result of an androcentric (male centered) talent management system. An androcentric talent management system focuses or centers on the development of male interests. Programs and initiatives are created intentionally or unintentionally from a male point of view.

Significance of the Study

The business case for increasing diversity in the workforce is inconsistent. There is evidence of the paradoxical effects of diversity in the workplace in studies where diversity influences positive and negative outcomes (Credit Suisse, 2012; Fujimoto et al., 2013; Garnero, Kampelmann, & Rycx, 2014; Shore et al., 2009). For example, diversity policies may increase engagement and job satisfaction with one group, but disengagement and job dissatisfaction may increase in another group. A review of the literature indicated there is a gap in what is known about how DM and CP are related to the advancement of women in the United States automotive industry. This study is significant because it may add balance to the inconsistent empirical evidence about the viability of a holistic gendered strategy for alleviating visible and invisible glass ceiling barriers in the workplace.

Organizational leaders are experiencing pressure to increase their firms' gender diversity profiles and succession pipelines (Credit Suisse, 2012). Credit Suisse (2012) researchers reported that some organizations with gender diverse boards have gained a competitive advantage. McKinsey and Company (2013) asserted that firms with gender diversity at the board level also had greater gender diversity in middle management positions and better organizational performance than those organizations with homogenous boards. Kellerman and Rhode (2017) stressed that women executives and board members can serve as role models, mentors, and sponsors for women who aspire to attain higher-level positions. They presented evidence that suggested firms that have women as board members and in the C-Suite tend to have more women in managerial

and the senior level roles (Kellerman & Rhode, 2017). Furthermore, gender diversity at the senior level and in non-traditional roles like engineering and IT could embolden women in college or those transitioning into new careers to contemplate a career in the automobile sector. Additionally, other male-orientated professions may benefit from the inclusion of women at all levels, such as manufacturing, legal, information technology, and research and design professions.

Interest in understanding gender issues in the automotive industry is high. Several organizations have dedicated resources to understand the glass ceiling phenomenon in the automotive industry (Catalyst, 2014; Deloitte, 2015; inForum, 2012). Organizations such as AutomotiveNext, Southern Automotive Women's Forum, Women in Automotive, and the National Association of Minority Automotive Dealers hold annual conferences where gender issues are a focus. These conferences are ideal venues for presenting the results of this study. This study can be used as a blueprint for how companies could better provide their employees with equal access to resources and opportunities alleged to affect the career trajectory of women toward managerial and leadership positions.

Significance to the Management Field

Increasingly, governmental and interest groups pressure organizational leaders to improve their gender diversity profiles by infusing their succession pipeline with women. This pressure creates opportunities for women to develop leadership skills and competencies as they ascend into positions of increasing authority (Credit Suisse, 2010; McKinsey & Company, 2012, 2013). Credit Suisse (2010) researchers suggested organizations with gender diverse boards gain competitive advantage. Furthermore,

McKinsey and Company (2013) asserted that firms with gender diversity at the board level had greater organizational performance than homogenous boards.

Additionally, the presence of successful senior-level female role models holding C-suite and board positions in the industry could embolden other women to contemplate careers in all aspects of the automobile sector. The results of this study are significant to the field of management because they help fill the knowledge gap in the literature about gender in the workplace. Also, insights from this study can aid human resource leaders as they work to implement talent management policies for the recruitment and promotion of women into management and senior-level positions.

Significance to Women in Male-Dominated Industries

Unfortunately, gender incongruences in corporate America exist. Researchers agree that leadership stereotypes and societal attitudes about behaviors and qualities of effective leaders, among other things, contribute to glass ceiling barriers for women (Cook & Glass, 2014; Koenig, Eagly, Mitchell, & Ristikari, 2011). Moreover, qualities commonly attributed to a specific gender and certain leadership styles contribute to the barriers women encounter in attaining leadership roles.

Koenig et al. (2011) described the disparity between what people consider effective leadership qualities and the predominant communal qualities associated with women. Koenig et al. confirmed through a meta-analysis of various paradigms (e.g., think manager-think male, agency-communion, and the masculinity-femininity) that stereotypical beliefs about women's roles and capabilities produce biased evaluations of women as leaders (Koenig et al., 2011). Role incongruity results in gender discrimination

at the senior and board levels, which is why it is unsurprising that many leaders who demonstrate agentic qualities (e.g., confident, competitive) are male. The confirmation of cultural stereotypes about leadership, and the cultural preference for women to embrace communal gender roles, present quandaries for women who aspire to positions of power and authority (Koenig et al., 2011).

Significance to Women in the Automotive Industry

The automotive industry is competitive and requires organizations to incorporate diversity initiatives into their business strategies (Basar, 2015). Each business unit within an organization must understand how a diverse workforce contributes to competitive advantage. Understanding the overall impact of women as internal and external stakeholders positively affects organizational performance, thus bolstering the business case for a diversity strategy and active CP for women. A greater understanding of these principles provides insight into the business imperative for fairness in the workplace. The eradication of extreme pay gaps, inflexible work schedules, poor work culture, insufficient professional networks, and short developmental assignments may increase the number of women at senior and executive levels. Eradicating these barriers can potentially increase the number of women interested in the automotive industry and the overall female talent pipeline.

Empirical research on the perception of DM and CP, and their relationships to career advancement for women in the automotive industry could be more robust. A study of the predictive relationship of DM, CP, and career advancement using organizational justice theory as the framework could expand the existing body of scholarly literature.

The results could make a meaningful contribution to the current research on DM practices and organizational justice perceptions that affect the development of female talent in the automotive industry. Basar (2015) stressed that women should actively engage in navigating glass ceiling barriers to advance to positions of authority. This study is significant as I provided greater insight into the correlation between DM and CP, and their impact on career advancement. Researchers may be encouraged by the results and be compelled to conduct additional empirical research on how gendered DM and CP relate to the career advancement of women in non-traditional careers and industries.

Significance to Positive Social Change

Positive social change may be a byproduct of this study because HR professionals and diversity and inclusion practitioners can replicate this study in their workplace and use the results. They can use the results, for example, to assess the efficacy of their existing initiatives or implement DM and CP policies and initiatives where none exist (Hoobler, Lemmon, & Wayne, 2014). Hoobler et al. (2014) posited that senior-level female managers mitigated workplace obstacles to advancement when engaged in structured career management initiatives. Similarly, this study can be used as a blueprint for how companies could better offer their employees equal access to resources and opportunities alleged to affect the career trajectory of women into managerial and leadership positions. The research results validated the implementation of diversity and inclusion policies and programs as part of the overall business strategy, thus understanding of the relationship between contributory factors to women's success in the automotive industry may increase.

Subsequently, this study's finding may help to reduce the gap in what is known about how DM and CP are related to the advancement of women in the United States automotive industry. These results offer an increased understanding of the relationships that explicitly and implicitly influence the career trajectory of women into management and senior leadership positions. Additionally, researchers could conduct quantitative research on the relationships among gender, industry type, and organizational fairness. Organizational justice theory provided a three-dimensional approach to assess whether a shift to DM programs from affirmative action and equal employment regulations results in comparable outcomes.

Women in the Automotive Industry

The automotive sector's gender diversity profile suggests a bias towards men. In 2014, the BLS (2014) indicated approximately 1,400,000 women were employed in motor vehicle-related manufacturing, which was just 27% of all motor vehicle-related manufacturing employees. If automotive industry organizations became more gender-balanced, there might be more women in senior leadership positions and the pipeline (Appelbaum et al., 2013; Badal & Harter, 2014; Kim & Starks, 2016; Reinert et al., 2016). Devillard et al. (2014) wrote that closing the gender gap requires senior leadership engagement. Industry leaders must believe in the business case for a gender-balanced workforce, which can occur through DM and CP programs (Devillard et al., 2014). The notion that women in leadership is good for the bottom line is the business case (Singal, 2014). Researchers posited the presence of women in leadership positions positively

affects organizational financial performance (Hoobler, Masterson, Nkomo, & Michel, 2018).

Although researchers have focused on specific factors of DM (Credit Suisse, 2012; D'Netto, Shen, Chelliah, & Monga, 2014) as part of gender-diversity and corporate performance, few have investigated how DM and CP are related to the advancement of women in the United States automotive industry. Few studies exist about the advancement of women working in professional, managerial, and executive positions in the automotive sector, which suggests a gap in knowledge of how DM and CP are related to the advancement of women in the United States automotive industry. This study, thus, was designed to investigate how DM and CP are related to the advancement of women in the United States automotive industry. The results provide insight into the advantages of DM and CP as strategies for career advancement of women. Organizational leaders can use the results of this study to develop effective DM and CP initiatives to increase the number of women in the talent pipeline for leadership positions.

Problem Statement

Despite women overcoming some employment glass ceiling barriers, gender disparity persists for women working in positions of authority (Appelbaum et al., 2013; Clevenger & Singh, 2013; Harvard Business Review, 2013; Smith & Monaghan, 2013). Deloitte (2015b) attributed the lack of women in leadership positions to limited access to social networks, few key leaders as role models, flexible work practices, and lack of sponsorship. The number of barriers increase as women advance in their careers (Sabharwal, 2015). Female leaders and executives often encounter situations where they

have been set up for failure, pushing them over the glass cliff. Sabharwal (2015) stated that women are less likely to succumb to glass ceiling barriers and the glass cliff when they perceive and experience fairness in the workplace. Diversity Management and CP are tools that might alleviate some of the barriers to the career mobility of women in the workplace.

The scarcity of women in managerial and leadership roles in the United States automotive industry further increases the likelihood women will continue to face barriers to advancement (Deloitte, 2015). The general problem is the androcentric system within the United States automotive industry creates an environment that undermines initiatives designed to mitigate barriers that hinder the upward mobility of women into managerial and leadership positions (O'Neil & Hopkins, 2015; Sabharwal, 2013). The specific problem is that it is unknown how the relationship of DM (independent/predictor variable) and CP (independent/predictor variable) relate to the career advancement (dependent/criterion variable) of women in the United States automotive industry. Automotive industry leaders may use the results to develop programs to increase the number of women in the talent pipeline for leadership positions.

Purpose of the Study

The purpose of this quantitative correlational study was to investigate how DM and CP are related to the advancement of women in the United States automotive industry to improve the representation of women in management and senior-level positions. The variable of interest was gender because research indicates women encounter barriers to career advancement and entering leadership in male-dominated

industries (Catalyst, 2015; Deloitte, 2015). The research design was correlational, which allowed for the examination of what predictive relationships, if any, existed among the independent and dependent variables (Curtis, Comisky, & Dempsey, 2016). The sample frame was female employees of one automotive firm in the United States. The sample was female, full-time, salaried employees with at least a four-year college degree, and a minimum of two years of experience working in one automotive company. The data were collected using the Perceived Barriers to Career Advancement scale, the Perceived Facilitators to Career Advancement scale, and Job Descriptor Index scale. An increase in women employed in managerial and leadership roles could contribute to women's career advancement in male-dominated industries such as the automotive industry (Deloitte, 2015; Martin & Barnard, 2013).

Research Questions and Hypotheses

The research questions were designed to address the purpose of the study. I selected multiple regression analysis to examine the correlation amongst the DM perceived facilitators scales (Appendix B), CP perceived barriers scales (Appendix C), and career advancement JDI scale (Appendix D) for women in the United States automotive industry. The questions below addressed the general and specific problems identified in the problem statement. There were 10 questions. The general question was followed by nine specific questions that addressed DM and CP relationships to career advancement. The DM variables were (a) informal networks, (b) mentoring, and (c) cultural fit. Career planning variables are (a) career management, (b) developmental

assignments, (c) difficulty getting developmental assignments, (d) career management processes, (e) relationship development, and (f) geographic mobility.

The general research question was: What is the relationship between the linear combination of DM and CP to the advancement of women working in the androcentric system within the United States automotive industry?

H_0. The linear combination of DM and CP is not related to the level of the career advancement of women working in the androcentric system within the automotive industry.

H_a. The linear combination of DM and CP is related to the level of career advancement of women working in the androcentric system within the automotive industry

Specific Research Question 1: What is the relationship between informal networks and the career advancement of women in the automotive industry?

$H1_0$. There is no relationship between informal networks and the career advancement of women in the automotive industry.

$H1_a$. There is a significant relationship between informal networks and the career advancement of women in the automotive industry.

Specific Research Question 2: What is the relationship between mentoring and the career advancement of women in the automotive industry?

$H2_0$. There is no relationship between mentoring and the career advancement of women in the automotive industry.

$H2_{a.}$ There is a significant relationship between mentoring and the career advancement of women in the automotive industry.

Specific Research Question 3: What is the relationship between cultural fit and the career advancement of women in the automotive industry?

$H3_{0.}$ There is no relationship between cultural fit and the career advancement of women in the automotive industry.

$H3_{a.}$ There is a significant relationship between cultural fit and the career advancement of women in the automotive industry.

Specific Research Question 4: What is the relationship between problems developing relationships and the career advancement of women in the automotive industry?

$H4_{0.}$ There is no relationship between problems developing relationships and the career advancement of women in the automotive industry.

$H4_{a.}$ There is a significant relationship between problems developing relationships and the career advancement of women in the automotive industry.

Specific Research Question 5: What is the relationship between problems managing one's own career and the career advancement of women in the automotive industry?

$H5_{0.}$ There is no relationship between problems managing one's own career and the career advancement of women in the automotive industry.

$H5_{a.}$ There is a significant relationship between problems managing one's own career and the career advancement of women in the automotive industry.

Specific Research Question 6: What is the relationship between problems obtaining developmental assignments and the career advancement of women in the automotive industry?

*H*6$_{0.}$ There is no relationship between problems obtaining developmental assignments and the career advancement of women in the automotive industry.

*H*6$_{a.}$ There is a significant relationship between problems obtaining developmental assignments and the career advancement of women in the automotive industry.

Specific Research Question 7: What is the relationship between problem getting developmental assignments and the career advancement of women in the automotive industry?

*H*7$_{0.}$ There is no relationship between problem getting developmental assignments and the career advancement of women in the automotive industry.

*H*7$_{a.}$ There is a significant relationship between problem getting developmental assignments and the career advancement of women in the automotive industry.

Specific Research Question 8: What is the relationship between problems with organizational career management processes and the career advancement of women in the automotive industry?

*H*8$_{0.}$ There is no relationship between problems with organizational career management processes and the career advancement of women in the automotive industry.

*H*8$_{a.}$ There is a significant relationship between problems with organizational career management processes and the career advancement of women in the automotive industry.

Specific Research Question 9: What is the relationship between difficulty getting geographic mobility and the career advancement of women in the automotive industry?

*H*9$_{0.}$ There is no relationship between problem difficulty getting geographic mobility and the career advancement of women in the automotive industry.

*H*9$_{a.}$ There is a significant relationship between geographic mobility and the career advancement of women in the automotive industry.

Theoretical Foundation

Imenda (2014) wrote a theoretical framework that provides the foundation for a quantitative study. The theoretical foundational roadmap influenced all aspects of the research design, implementation, and data analysis (Imenda, 2014). Greenberg's (1990) organizational justice theory provided the theoretical framework for the study. A derivative of equity theory, organizational justice theory is a multidimensional construct allowing for the measurement of an employee's perceptions of workplace fairness (Fujimoto, Härtel, & Azmat, 2013). Fujimoto et al. (2013) described fairness in the workplace using three subjective acuities: (a) distributive justice, (b) procedural justice, and (c) interactional justice. Organizations perceived as having great organizational justice tend to have engaged employees who are content with their ability to advance. Moreover, the employees in organizations with greater organizational justice believed the resources are distributed reasonably and equitably (Brown, Lent, Telander, & Tramayne, 2011; Germain et al., 2012; Hancock & Hums, 2015; Johnson, 2012; Shaw, Park, & Kim, 2013). Healthy employer-employee relationships build trust and loyalty, and trust and loyalty contribute to increased job satisfaction and corporate social responsibility. For

this study, the predictive relations between DM and CP for career advancement were quantified using the three classifications of Greenberg's (1990) organizational justice theory.

Researchers have used organizational justice theory to investigate barriers to advancement in the workplace (Bukhari & Sharma, 2014; Downes, Hemmasi, & Eshghi, 2014; Powell & Butterfield, 2015). The career advancement of women who are working in professional, managerial, and senior-level positions in the United States automotive industry were examined through a post-positivist lens using organizational justice theory (Greenberg, 1987, 1990) as the theoretical framework. Examining the results using organizational justice theory offered a framework to explain the relationship of DM and CP, and their impact on the career advancement of women (Brown et al., 2011). Chapter 2 contains a more detailed explanation of the theoretical framework.

Nature of the Study

The quantitative method was appropriate for this correlational study because this method allows researchers to generalize the results (Frankfort-Nachmais & Nachmais, 2008). Using a quantitative methodology decreased errors that might have resulted from causal oversimplification. Causal oversimplification is the fallacy that there is a single justification for an outcome when there are various reasons (Read, 2014). Read (2014) defined causal oversimplification as the fallacy of a single cause that distorts research findings to the point of error and creates a false impression of a causal relationship. Oversimplification distorts the causal background of actions by reducing a complex array of causal factors to a single cause.

Although this was a quantitative study, I also considered a qualitative approach because of its appropriateness for exploring a specific phenomenon. A qualitative method's usefulness to identify themes would have failed to offer insight into the predictive relationship between the independent and dependent variables (Guercini, 2014). Ultimately, the desire to understand beyond the participants' experiences and perceptions warranted the use of a quantitative approach.

The quantitative method was appropriate for this study as the purpose was to investigate the relationship, if any, between the independent and dependent variables. Data was collected from women employed in the automotive industry organization studied. Eligible participants were full-time, college-educated, salaried female employees who had at least two years of tenure in the organization. The data collection method was a cross-sectional survey. Multiple linear regression, which is a predictive analysis (Austin & Steyerberg, 2015), was selected to analyze the data, answer the research questions, and explain the possible relationships among the independent and dependent variables. Multiple linear regression analysis was used to determine (a) the statistically significant relationships, if any, of the linear combination of the DM facilitators to career advancement scale and the CP barriers to career advancement scale, and (b) their relationship to the career advancement of women. Chapter 3 offers a detailed explanation of the research design and methodology.

Definitions

The purpose of the definition section was to provide readers an understanding of the operational terminology used in this study. Terminology that may not be well known

to readers was detailed to give the reader a framework. Some of these terms had a specific meaning which was attributed to the context of this study. These terms were identified as such. Moreover, I substantiated the terminology with peer-reviewed sources.

Automotive industry: The automotive industry is comprised of corporations and activities associated with the manufacturing, wholesale, and maintenance of motor vehicles, including mechanisms such as engines, transmissions, and body parts. Its principal purpose is the production of passenger automobiles and light trucks (BLS, 2014; Sultana et al., 2013).

Career advancement: Akin to upward mobility, career advancement occurs when an individual possesses higher valued human capital, high performance, and perceived worth to an organization. It is an upward career progression accomplished through successive positions over a length of time (Harris, Pattie, & McMahan, 2015).

Career planning (CP): Career planning is a coordinated effort between an employee and manager. In CP, individuals set career-related goals by assessing (a) current situations, goals, and competencies; and (b) the necessary knowledge and skill development for upward mobility (Spurk et al., 2015). Career planning was measured separately as explained in Chapter 3.

Cultural fit: Cultural fit is the probability that an employees' values and behaviors are in alignment with an employers' core values and organizational culture (Castellanos, Gloria, Besson, & Havey, 2016).

Diversity: Diversity is what distinguishes individuals from one another via visible and invisible traits (Boulouta, 2013).

Diversity management (DM): Diversity management is a human resource practice to increase or maintain variances in human capital while ensuring the variance in human capital does not hinder organizational performance. Diversity management also consists of HR programs to perpetuate heterogeneity in the workplace and reap the benefits of labor force diversity (Spurk et al., 2105). Diversity management components to be measured were (a) informal networks, (b) mentoring, and (c) lack of cultural fit.

Gender diversity: Gender diversity refers to gender representation in corporations. In this study, gender diversity refers to the female to male ratio in the workplace where differences between genders provides insight into the values and professional experiences that contributes to organizational performance (Boulouta, 2013).

Gender equality: Gender equality suggests men and women have the same opportunities, resources, limitations, and accountabilities to succeed in the workplace. The concept of gender equality emphasizes fairness regardless of gender, which suggests gender discrimination does not exist (Hammarström et al., 2014).

Glass ceiling: The United States Department of Labor (1995) defined the glass ceiling as those barriers to the advancement of women and minorities within organizational hierarchies to managerial and decision-making positions regardless of their accomplishments and capabilities.

Glass cliff: The phenomenon that explains the barriers and challenges women encounter in leadership roles (Sabharwal, 2015).

Informal networks: The networks across teams and business units that are a viable source for bonding and information sharing. Informal networks are also called the grapevine or water cooler talk (Zappa & Robbins, 2016).

Male-dominated industry: Male-dominated industry refers to an industry dominated by men where women make up fewer than 25% of the workforce (Germain et al., 2012).

Mentorship: Mentorship is a formal or informal relationship between a mentor and mentee. This relationship is usually time bound and provides the mentee with guidance, support, and an opportunity for socialization (Bagaka's, Badillo, Bransteter, & Rispinto, 2015).

Original equipment manufacturer (OEM): The OEM is the original equipment manufacturer of automobile components (Reis, Heitor, Amaral, & Medina, 2016).

Professional women: Gino, Wilmuth, and Wood Brooks (2015) defined professional women as those who attain high-level positions within organizations. In this study professional women were analysts, consultants, managers, directors, vice presidents, and presidents.

Assumptions

Assumptions are inherent in research. Critical analysis in research requires a researcher to make assumptions (Leedy & Ormrod, 2010; Simon & Goes, 2013). Assumptions occur in research and are often out of a researcher's control. Leedy and Ormrod (2010) wrote researchers must present assumptions that are critical to the

problem statement. When researchers are clear about their assumptions, they are less likely to misinterpret the problem or experience ambiguity about the problem.

The primary assumption was women achieve career advancement through integrated interventions. The evidence-based approach of this study allowed for inferences about the factors that contribute to the vertical mobility of women in a male-dominated industry (Valantine & Collins, 2015). Existing evidence suggests DM and CP initiatives positively influence the career advancement of underrepresented groups (Berman & Bourne, 2015; Madsen, Longman, & Daniels, 2012).

Truthfulness was another research assumption. It was assumed the participants answered the survey questions truthfully. Security measures were incorporated into the research design to ensure participant anonymity and confidentiality, which should have increased the likelihood participants would feel comfortable answering the survey questions truthfully. Furthermore, data collection methods did not breach participant privacy. Nonspecific demographic information, such as length of tenure with the organization, was collected to ensure responses are from those who meet the inclusion criteria.

Willful participation was another assumption. I assumed participants would understand the intent of the study, and that they would read and understand the informed consent. Informed consent was obtained using a three-stage process. First, permission from the university's ethics committee was obtained through the institutional review board (IRB) process. Second, the human resources director at the organization provided written consent for the study to move forward with organization employees. Finally,

participants signed a consent form that outlined the (a) confidentiality measures, (b) purpose of the study, (c) data collection method, and (d) how the collected data would be used. This multi-stage process ensured the integrity of the study and the ethical treatment of participants.

The final assumption was the generalizability of the research findings to women working in other nontraditional occupations. Generalizability is a relevant criterion to assess the quality of a study (Polit & Beck, 2010). The aim of the study was to generalize the results to women in other male-dominated industries. Researchers can replicate this study using women employed in other male-dominated industries, assuming they have shared characteristics and experiences.

The assumptions grounded the study and allowed for examination of the social impact of the role of organizational justice in career advancement. Furthermore, the assumptions were the foundation for the study and correlated the research gap to existing scholarly literature (Alvesson & Sandberg, 2013). Understanding the predictive relationship of contributors to career advancement served as the rationale for the presumption that a correlational study was the best approach for making inferences about how DM and CP are related to the advancement of women in the United States automotive industry.

Scope and Delimitations

The scope references the parameters governing the study. Researchers use the scope to provide clarity and the parameters of the study. The parameters serve as the

framework to examine the problem (Simon & Goes, 2013). A study's scope, problem statement, and purpose statement must align (Simon & Goes, 2013).

Within the scope of this research, I included the female employee population of one automaker in the United States. Individuals were identified using the study site's employee database. Those included were full-time salaried female employees with at least two-year tenure, a four-year degree, and who were working in professional, managerial, and senior level positions. Regular, full-time employees usually work a full schedule, which is typically 40 hours per week. A salaried employee is an employee paid a predetermined amount each pay period on an annual basis. Salaried employees received a full salary for work each week regardless of the number of days or hours worked.

Furthermore, the organization categorizes all jobs by grades, and jobs in Grades 6-9 are professional-level employees. The professional-level positions are critical to the succession pipeline and are analysts, senior analysts, specialists, senior specialists, consultants, and senior consultants. Grades 10-11 are expert managerial positions. Individuals in these positions have direct reports or specific expertise. Grades 12-16 are senior-level positions with titles such as director, senior director, vice president, senior vice-president, executive vice-president, and senior executive vice-president. Organizational leaders consider the professionals and managers ranked as *high performer/high potential* for succession planning.

Study participants had to meet the inclusion criteria. Participants had to be (a) college-educated, (b) full-time employees, (c) salaried, and (d) tenured at least two years within the organization. Employees who met these conditions would more than likely

meet the eligibility requirements to be considered for promotion into managerial and senior-level positions, such as director and senior director positions. Subjects were invited to participate in a self-directed, online survey to investigate the predictive relationships of DM and CP, and their impact on career advancement. The research questions focused on what correlation, if any, exists between the independent and dependent variables. The Perceived Barriers to Career Advancement and the Perceived Facilitators to Career Advancement scales enabled me to investigate the hypotheses. Ideally, the results of the study would provide insight into the relationships between DM and CP and the impacts of these programs on the career advancement of women in the automotive industry. Within the organization studied, both DM and CP are used to recruit, retain, and promote women into management and senior-level positions.

Delimitations

Delimitations detail what will not be included in a study (Leedy & Ormrod, 2010; Simon & Goes, 2013). Delimitations provide a framework, context, and lens to understand the problem. Delimiters help guide the problem and minimize information that goes beyond the scope of the problem (Leedy, & Ormrod 2010; Simon & Goes, 2013).

A college degree was a participation criterion. Women with less than a four-year degree and those working in non-professional roles were excluded from the study. The reasons for these delimitations are (a) only college-educated women working in analyst, specialist, and consultant positions are viable candidates for advancement into managerial

and leadership roles and (b) women who met the inclusion criteria had likely eliminated some glass ceiling barriers.

Ideally, I would have examined only middle managers and senior-level employees; however, like other male-dominated industries, the number of women in this group was insufficient, which limited the number of eligible participants for a sufficient sample pool. The inclusion of women working in the previously described professional, managerial, and senior-level positions increased the number of participants, assuming the women met the other inclusion criteria.

Another delimitation was the breadth of the quantitative design. Although many studies have examined women in other male-dominated industries, limited quantitative research exists about women in the automotive industry (Burton, 2015; French & Strachan, 2013; Germain et al., 2012; Kretschmer & Kretschmer, 2013; Walker & Bopp, 2011; Worrall, 2012). The significance of this study lays in the ability to generalize the results. Selecting a correlational design provided insight into how DM and CP are related to the advancement of women in the United States automotive industry.

Limitations

Limitations are inherent in social science research. Often considered shortcomings outside of the control of the researchers, limitations are those aspects of the research design or methodology that guide or influence the interpretation of the research results (Simon & Goes, 2013). The generalizability of the results was a principal limitation of this study (Simon & Goes, 2013). Generalizability allows a researcher to make assumptions based on various acts of reasoning (Polit & Beck, 2010). The goal was to

generalize the research findings to other populations; however, industry type, gender, or industry composition may limit the generalizability of the results to other populations (Simon & Goes, 2013).

Another limitation may have been the use of the theoretical framework. A theoretical framework provides direction for the quantitative research design (Imenda, 2014; Simon & Goes, 2013). Quantitative researchers use theory to explain or predict the relationships between variables. A quantitative approach, however, cannot capture communicative data about ideas, beliefs, and motivations that trigger behavior. Researchers use a qualitative design to gather information about ideas, beliefs, and motivations (Imenda, 2014). Qualitative methods incorporate analytical procedures to explore and understand the meaning associated with human or societal problems. Researchers who are interested in understanding the human phenomenon that influence behavior employ a qualitative or mixed method approach (Imenda, 2014).

The theoretical framework limits the lens used and therefore restricts the generalizability of the results. A naturalistic realization was one of the several measures used in the study to minimize the theoretical limitations. A naturalistic realization is a reflexive approach called *analytic generalization*, which consists of focusing on the conceptualization of ideas and data instead of on the methodology (Polit & Beck, 2010). Polit and Beck (2010) emphasized that naturalistic realization aids understanding of the transferability of research findings to new contexts.

As previously described, limitations and biases are inherent in research. Bias will be limited or minimized, in part, by establishing sampling criteria. The process of sample

selection is susceptible to selection bias, and the result can mean that the sample is not reflective of the general population (Simundic, 2013). Selection bias can occur in multiple phases of the research design. Potential bias occurs because of (a) inadequate description of the qualified population, (b) erroneousness of the sampling frame, and (c) irregular analytic measures in the targeted population. Clearly identified inclusion and exclusion criteria limit selection bias (Ginkel, Davis, & Michael, 2010).

Finally, the geographic location of the organization under study was a limitation. The organization was in the Mid-Atlantic region of the United States, where the population has limited experience working in the automotive industry. Participants had to have worked for the company for at least two years because two years allows an employee to have experience with the organizational culture and to understand the automotive industry better. As previously stated, the two-year tenure requirement ensured participants had enough industry experience and that they had adequate exposure to the company's professional development resources.

Summary and Transition

The career evolution for women working outside the home is an interesting paradigm. The Bureau of Labor Statistics reported that in 2017 approximately 75 million women aged 16 or above worked in the United States civilian institutional workforce, representing 46.9% of the labor force (BLS, 2018). The labor force described in the BLS report included individuals who were employed or actively seeking employment. Of this population, women represented 44% of management, business, and financial operations (BLS, 2018b). Furthermore, women's educational attainment has exceeded that of men

over the past 20 years. For the class of 2014-15 greater than half of the bachelor's degrees (57.2%) and master's degrees (59.2%) were earned by women (United States Department of Education [DOE], 2016).

Overall women are making strides in the labor force; however, there are labor segments that have failed to advance the careers of women at a similar rate. Kretschmer and Kretschmer (2013) proposed that the higher the position, the wider the gender gap. In 2016, women held 1,100 (or 20.2%) of the Fortune 500 board seats and 26 (or 5.2%) of senior-level positions at S&P 500 companies (Catalyst, 2018). As previously stated, the representation of women on boards is significant because women in management and senior-level positions may benefit from their presence, especially in male-dominated companies (McKinsey & Company 2013). Male-dominated industries are defined as sectors where women account for 25% or fewer (Catalyst, 2017b). Women in these industries are concentrated in entry-level positions and low-level management. Researchers suggested that the gender gap in these sectors is rooted in a culture that is gender biased (Kretschmer & Kretschmer, 2013).

There are numerous contributors to the gender gap at the senior level and in male-dominated industries. Although women's self-selection and lack of interest may contribute to this disparity, there seem to be other barriers contributing to this phenomenon (Adams, Flynn, & Wolfman, 2015; Clevenger & Singh, 2013; Germain et al., 2012; O'Neil et al., 2011). A primary contributor to the lack of women in male-dominated industries is the androcentric (male-centered) culture. Women in an androcentric culture experience gender bias due to the lack of women decision-making

roles; have limited access to challenging assignments; lack sponsorship; and fail to establish mentoring relationships and social networks (Adams et al., 2015; Clevenger & Singh, 2013; Germain et al., 2012; O'Neil et al., 2011). Diversity initiatives and CP could provide women fair access to resources and information needed to advance.

As the gender profile of the United States labor force evolves, firms must also evolve. For example, in 2014 Mary Barra was appointed CEO of General Motors in the United States (Catalyst, 2016). She became the first woman to lead a United States automotive organization. Despite this and other successes for women, there remains a lack of women in the pipeline for management and senior-level positions (Catalyst, 2014, 2014, 2018; Deloitte, 2015b). In a survey of women in numerous industries, the automotive industries had the greatest recruitment and retention opportunity (Deloitte, 2015, 2015b). Insight into how DM and CP are related to the advancement of women could create opportunities for women to advance throughout the pipeline.

This quantitative correlational study addressed the problem that suggests the number of women diminishes significantly in positions of increasing responsibility and authority despite educational attainment (DOE, 2016). The intricacy of this problem requires a willingness of leaders to have a solid understanding of how DM and CP are related to the advancement of women in the United States automotive industry. The investigation method for this study provided insight into the theoretical framework. There are three components of organizational theory (Greenberg, 1990), including (a) distributive justice, (b) procedural justice, and (c) interactional justice. These components

underpin the theoretical framework and frame understanding for how employees conceptualize fairness in the workplace.

Additionally, the glass ceiling metaphor offers the reference point for understanding the real and artificial barriers (i.e., structural bias, cultural bias, attitudinal bias) that inhibit the trajectory of women in their place of work into authority positions (Sabharwhal, 2013). The results of this study can assist leaders to examine DM practices in their organizations to address perceived and real career barriers for women. Ultimately, organizational leaders can use the results of this study to affect positive social change by supporting DM and CP as part of their talent management strategies to implement viable programs and initiatives that can aid in the professional development and career mobility of women.

Chapter 2 presents a comprehensive critical analysis and synthesis of peer-reviewed journal articles, relevant trade journal articles, and industry and government studies related to the topic of study. Previous scholarly research concentrated on (a) career advancement and (b) gender inequity in male-dominated industries. The literature review identifies the gap, which validated the need for this study. Chapter 2 also offers a detailed overview of the research topic, relevant theories, and results from an evaluative review of related studies and the methodologies of the studies reviewed.

Chapter 2: Literature Review

The number of women working in managerial and senior level positions in the automotive industry is low. Notwithstanding educational attainment and professional gains, women continue to encounter glass ceiling barriers (Appelbaum et al., 2013; Clevenger & Singh, 2013; Harvard Business Review, 2013; Hoobler, Lemmon, & Wayne, 2011; Smith & Monaghan, 2013). Factors such as the *think leader, think male* phenomenon, social structures, and self-selection contribute to an industry culture grounded in masculinity (Kaatz & Carnes, 2014). The general problem is the androcentric culture within the United States automotive industry creates an environment that undermines initiatives designed to mitigate the artificial and invisible barriers hindering the upward mobility of women into managerial and leadership positions (O'Neil & Hopkins, 2015; Sabharwal, 2015). The specific problem is that it is unknown how the relationship of DM and CP relate to the career advancement of women in the automotive industry. Automotive industry leaders, thus, need to better understand how DM and CP are related to the advancement of women. The purpose of this quantitative correlational study was to investigate how DM and CP are related to the advancement of women in the United States automotive industry to improve the representation of women in management and senior-level positions. Shifts in United States demographics require organizational leaders to rethink their business strategies to retain competitive advantage (Cook & Glass, 2014; French & Strachan, 2013).

Women accounted for almost 47% of the United States workforce (BLS, 2018). Catalyst (2015) described how women have a higher educational achievement level,

increased earning power, and control or influence over household spending. Women influenced 80% of car sales and 46% of new car sales. Despite these cultural shifts, women are predominately employed in non-decision-making positions in male-dominated industries (Catalyst, 2015). Women have equal access to opportunities and resources when leaders remove glass ceiling barriers and having more women in leadership positions could lead to a competitive advantage and increase organizational performance (Cook & Glass, 2014; French & Strachan, 2013; Hoobler et al., 2011; McKinsey & Company, 2012, 2013; Michailidis et al., 2012).

Interest in research about the barriers to advancement has evolved now that women make up a significant portion of the workforce (Budgeon, 2014); thus, obtaining knowledge about barriers to mobility in higher level positions is a reasonable progression for researchers. Researchers studying corporate talent pipelines found that more women in positions at higher levels, such as C-suite and board levels, leads to more women in leadership positions overall (Cook & Glass, 2014, French & Strachan, 2013; Hoobler et al., 2011; McKinsey & Company, 2012, 2013; Michailidis et al., 2012). McKinsey and Company (2015) studied women in line jobs (i.e., with profit and loss responsibility and a focus on operations) and in staff roles (i.e., supportive positions in human resources, legal, and communications). McKinsey and Company found that the number of women in managerial roles affected whether women moved into senior and executive-level positions. The results of the study are worth noting because managerial roles serve as developmental positions for future leaders (McKinsey & Company, 2015).

Organizations that want to perform at a high level and retain competitive advantage must look to their performance metrics (i.e., talent pipeline data) and health metrics (i.e., culture and climate data) for opportunities to improve gender equality (McKinsey & Company, 2015). McKinsey and Company (2012, 2013) described how parity in succession planning processes increases the diversity pipeline that leads to managerial roles. Moreover, researchers proffered that gender diversity mitigates equality issues like (a) the gender pay gap, (b) limited opportunities for developmental assignments and promotions, and (c) lack of access to resources (Cook & Glass, 2014; French & Strachan, 2013; Hoobler et al., 2011; McKinsey & Company, 2012, 2013; Michailidis et al., 2012). Increasing the number of women in talent pipelines could create opportunities for women to acquire necessary senior-level skills and competencies.

Chapter 2 includes an explanation of the literature search strategy, a review of the theoretical foundation, and a review of the literature about DM and CP, and career advancement of women. Organizational justice theory offered the theoretical foundation for this quantitative correlational study. What follows first is a description of the literature search strategy.

Literature Search Strategy

The Walden University Library database offered the online database resources needed to locate pertinent literature by using keywords and phrases. An electronic search using Boolean keywords or phrases such as *diversity*, *gender diversity*, *diversity management*, *career advancement*, *career planning*, *male-dominated industry*, *automotive industry*, *women in leadership*, *organizational justice*, *glass ceiling*, *gender*

equity, and *gender equality*. The literature review search generated material in the fields of ethics, feminism, human resource management, management, sociology, organizational science, psychology, history, and legal. The databases searched included Sage Premier Journals, Business Source Complete, Academic Search Complete, ABI/Inform, Emerald Management, Journal ProQuest Central, PsycINFO, and Science Direct.

Google Scholar provided a secondary source for literature to ensure an exhaustive search. I linked the University of Michigan and Michigan State University to a Google Scholar account to access articles not available via the Walden University Library. Google Scholar alert notifications indicated when new articles became available. A snowball strategy (Petersen, Vakkalanka, & Kuzniarz, 2015) provided additional relevant articles; a review of the reference lists and citations of germane articles identified additional resources. Back (i.e., reference lists) and forward (i.e., citations) snowballing offered a systematic approach to conducting the review.

Another method used to identify the most relevant research about the topic was the funnel approach (Booth, Sutton, & Papaioannou, 2016). I examined broad-based research and then focused on specific research that related to the topic. The initial peer-reviewed journal search yielded over 2100 articles from 1948 through 2018. The articles selected focused on the correlations among DM, CP, and career advancement for women. Additional research about organizational justice theory and the glass ceiling metaphor provided insight into women's perceptions of fairness in the workplace. This search consisted of seminal and current research. Relevant articles published from 2013 through

2018 account for approximately 85% of the literature review to meet Walden University's standards for research rigor.

Theoretical Foundation

The concept of justice in the workplace is broad. Justice has evolved beyond theories of inequity to include a wide range of organizational frameworks (Greenberg, 1987). Early research focused on the examination of an individual's subjective response to choices, actions, and authorities (Colquitt, 2012). Researchers studied employee perceptions of workplace fairness (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Flint, Haley, & McNally, 2013; Greenberg, 1990). Justice or fairness in the workplace impact organizational effectiveness at multiple levels. Workplace climate, employee satisfaction, and organizational performance are a few of the areas influenced by employee perceptions of fairness in the workplace (Bell & Khoury, 2016). The four-dimensions of organizational justice theory (Greenberg, 1990) provide a framework to investigate female employee perceptions of their career advancement in the workplace. What follows next is a description of the four-dimensional framework of organizational justice theory.

Organizational Justice Theory

Researchers have studied the concept of organizational justice to understand employees' overall perceptions of fairness in organizations and correlated "behavioral, emotional, and cognitive reactions" (Nicklin, McNall, Cerasoli, Strahan, & Cavanaugh, 2014, p. 244). Nicklin et al., (2014) indicated organizational justice explains an individual's perceptions of institutional fairness based on a four-dimensional framework. The dimensions are (a) *distributive justice*, which considers the fairness of outcomes; (b)

procedural justice, which considers the fairness of decision-making processes by which outcomes are achieved or decisions are determined; (c*) interpersonal justice*, which considers perceptions of the quality of treatment as procedures and policies are enacted; and (d) *informational justice*, which considers the truthfulness and justification of the information shared with employees regarding decision-making (Colquitt, 2012; Jespen & Rodwell, 2012; Nicklin et al., 2014.) The organizational justice literature presents multiple approaches to examine perceived fairness and the range of outcomes in the workplace (Azeem, Abrar, Bashir, & Zubair, 2015; Gelens, Dries, Hofmans, & Pepermans, 2013; Nicklin et al., 2014). Ryan and Wessel (2015) highlighted that a complete understanding of the four-dimensional framework leads to improved organizational performance. Ryan and Wessel described some of the outcomes organizations can study that lead to improved organizational performance including employee (a) perceptions of fairness, (b) turnover, (c) commitment, and (d) job satisfaction.

There are reactive and proactive approaches to organizational justice theory. Colquitt et al. (2001) described how equity theory was created in the 1960s, broadening knowledge of fairness, which stemmed from a social exchange framework. Researchers suggested that employees perceive fairness as a ratio of their individual inputs and outputs compared to other employee's inputs and outputs (Colquitt et al., 2001; Downes et al., 2014; Greenberg, 1990; Ryan & Wessel, 2015). Social justice theory once dominated organizational research; however, researchers in the 60s began to test hypotheses about pay equity, job-related reward systems, and employee behavior

(Greenberg, 1987). This shift allowed researchers to study concepts beyond the limitations of equity theory to include contexts such as pay structures, succession planning, and performance evaluations. New research emerged that offered a variety of lenses to broadly examine justice, which included responses to unfairness and the promotion of justice.

Organizational justice theory provided the theoretical foundation for this study about how DM and CP are related to the advancement of women in the United States automotive industry. Organizational justice theory explains fairness perceptions in the workplace (Greenberg 1987). Greenberg (1987) defined organizational justice theory by describing reactive and proactive approaches to organizational justice. Eventually, researchers incorporated interactional justice into Greenberg's organizational justice framework (Chen, Mao, Hsieh, Liu, & Yen, 2013). Chen et al. (2013) described how organizational justice theory evolved to include types of interpersonal treatment. Interpersonal treatment included interpersonal and interactional fairness. Interactional fairness is affected by an employee's evaluation of how their supervisors demonstrated dignity, respect, and civility through the implementation of policies and procedures. Researchers expanded interactional justice to include informational justice (Chen et al., 2013; Colquitt et al., 2001; Ryan & Wessel, 2015). Informational justice includes how employees feel about managers' explanations for the implementation of processes and procedures or distribution of rewards.

Organizational justice theory was appropriate for this study because it allowed for the investigation of perceptions of fairness in the workplace. The purpose of this

quantitative correlational study was to investigate how DM and CP are related to the advancement of women in the United States automotive industry. The goal was to gain information that automotive industry leaders could use to improve the representation of women in management and senior-level positions. The results of this study may provide insight into women's perception of fairness. Understanding women's perceptions of fair treatment in the workplace may mitigate artificial and invisible barriers and increase job satisfaction, engagement, and performance.

Organizational justice theory offered insights to understand female employee reactions to DM and CP, which were designed to diminish factors that lead to gender discrimination in the workplace and aid women in overcoming glass ceiling barriers (Michailidis et al., 2012). Fujimoto et al. (2013) wrote there was limited research about a possible relationship between organizational justice and managing diversity. This study expands research on the relationship of tactics designed to alleviate glass ceiling barriers, illuminate organizational justice perceptions, and increase career advancement for women in the automotive industry. Specifically, the research questions were posed to better understand the perceived fairness of DM practices such as mentoring, training, networks, developmental assignments, and CP. Fujimoto et al. called for future research to test their Diversity Justice Management Model, which provided guidelines for managers to ensure benchmarks and discussions for fairness occur to enhance real and supposed fairness outcomes. This study helps further conceptualize women's perceptions of career advancement and fairness in the workplace by using the four elements of organizational justice: distributive justice, procedural justice, interactional justice, and

informational justice. What follows is a description of the research about distributive justice.

Distributive justice. Many factors influence the organizational climate and culture. Although there are many contributors, equity plays a critical role in employee engagement, retention, and job satisfaction (Joseph, Ang, & Slaughter, 2015). When employee contributions justify the distribution of rewards (i.e., compensation and promotions), employees perceive they are treated equitably (Ryan & Wessel, 2015). Ryan and Wessel (2015) described how individual perspectives about equal distribution are subjective. In some instances, managers distribute outcomes to employees based on the most significant need or equal distribution despite contribution. The authors indicated culture and diversity influence how allocations are distributed (e.g., equity, equality, or needs based). Distributive justice theory allows for investigation into the contributions of job satisfaction, employee engagement, turnover, and performance (Joseph et al., 2015).

Distributive justice theory is derivative of multiple justice theories. Earlier research focused on social exchanges and the fairness of outcomes (Greenberg & Cohen, 2014; Colquitt & Zipay, 2015). Homan's exchange theory, which extended Skinner's behavioral theory propositions, focused on human behavior that resulted from decision outcome, fairness, and balance (Colquitt, 2012). Researchers suggested that unfair distribution of rewards for equal work performed under comparable conditions caused distress and unease (Joseph et al., 2015). If not quickly remedied, organizations are at risk of adverse employee social reactions affecting work performance, job satisfaction, and

employee engagement (Agarwal, 2014; Cullen, Edwards, Caspar, & Gue, 2014; Wang, Lu, & Siu, 2015).

Employees' perceptions of work relations depend on their opinions of variable factors and perceived fairness. Adam's equity theory explained social reaction, which is in response to decision outcomes (Greenberg, 1990). Adam reaffirmed Homan's finding that employees who perceive themselves to be in inequitable situations exhibited negative behaviors resulting in decreased performance (Greenberg, 1990). Though equity is the most suitable approach to research justice perceptions, there are other social norms to consider (Colquitt, 2012). Social exchange theory (SET) provided the framework for equity theory. Colquitt, Conlon, Wesson, Porter, and Ng (2001) wrote that although the correlation of output-input ratios is objective, the process was subjective based on values emphasized for the inputs (e.g., academic achievement, intelligence, and knowledge). The breadth of research about distributive justice demonstrates there are several ways to examine employee reactions to reward apportionment.

Rawls (1971) laid the framework for distributive justice theory. Rawls wrote there are two principles of justice: political and social. Political justice means each person has an equal right to receive fundamental liberties based on the governing system. Whereas social justice means that individuals need to align social and financial inequities to create or achieve the highest benefit for those who are the least advantaged. Furthermore, each person should have an equal chance for career advancement (Rawls, 1971). Many researchers have studied distributive justice principles beyond Rawls' approach (Colquitt,

2012), which confirms the adaptability of the theory to various allocation norms depending on the context (Colquitt, 2012).

Distributive justice theory has served as the framework for studies related to various aspects of diversity and fairness in the workplace. In a study of a state-owned bank in China, Frenkel and Bednall (2016) investigated employee expectations of career advancement and organizational performance. The researchers opined that SET explains the correlation between inducements and rewards in the workplace. Corporate culture provides the norms that govern organizational citizenship behavior (OCB) and influences employee perceptions of organizational support. Although rewards are not a primary driver of an increase in performance or job satisfaction, employee perceptions of fairness may affect organizational performance and perceived organizational justice. Frenkel and Bednall used an integrative model that suggested discretionary work effort occurs when certain factors are present. The authors discussed the relationships between training opportunity, promotion opportunity, career expectation, and discretionary work effort (Frenkel & Bednall, 2016). Although the Frenkel and Bednall model did not include distributive justice, the results of a second test, which incorporated distributive justice, failed to highlight a direct or significant effect on employees' perceptions of fairness, their obligation to work, and overall organizational performance. Frenkel and Bendall (2016) recommended future research be conducted about supervisor and employee expectations of fairness and employee perceptions of fairness in the workplace.

Joseph et al. (2015) applied distributive justice theory to investigate the relationship between relative pay gap and career movement. To understand the risks of

unfair treatment of employees, Joseph et al. used human capital and stigmatization theories to study the link between relative pay gap, variances in job mobility decision-making, and gender. Realizing that job mobility is not binary, the researchers used a multifaceted approach to understand variations in job mobility and pay equity. The researchers found there was a direct correlation between job mobility and pay equity (Joseph et al., 2015).

Joseph et al. (2015) expanded knowledge about the job mobility of IT professionals when there was a relative pay gap for those doing equal work. An employee's job destination as it related to the relative pay gap was the primary focus. Joseph et al. researched three types of job movement: (a) turnover to another IT position in another firm, (b) turn away within to a non-IT position, and (c) turn away between to a non-IT position in a different firm (Joseph et al., 2015). The researchers used the National Longitudinal Survey of Youth to analyze the work history of almost 360 IT professionals. The researchers used a survival analysis, which is a statistical approach that considers the timing of an individual’s job movement and offers understanding into the justification for the movement, to gauge the influence of pay disparity on job movement. Joseph et al. used Cox regression analysis to (a) include predictors in a standard regression form for easy interpretation of data, (b) justification for the effects of shortening and abridging observations, and (c) the exclusion of covariates, which are otherwise required in other forms of analysis. Hypotheses about the correlation between pay and job mobility allowed for examination of variances in the relative pay gap and the chances for job mobility and job mobility patterns based on gender and evaluated

employee movement about stigmatization assertions based on gender stereotypes (Joseph et al., 2015). The results highlighted that although there was a difference between how male and female IT professionals responded to pay gaps, substantial pay gaps increased the likelihood of turnover, turn away-within, and turn away-between. The researchers expanded the job mobility paradigm to include *vertical progression* (i.e., career advancement). Furthermore, the authors indicated that greater relative pay gaps increased the likelihood of job mobility, regardless of gender. Other researchers substantiated the influence of pay inequity on female job mobility and perceptions of fairness (Downes et al., 2014; Sabharwal, 2015; T. Wang, Zhao, & Thornhill, 2015).

Distribution justice theory is one of the fundamental dimensions of organizational justice, which is at the core of leader-member exchange in the workplace. Employees who trust their employers to distribute resources and outcomes justly exhibit reciprocal behaviors that advance organizational performance and shape corporate culture. Social exchange theory best sums up this paradigm in that it suggests that high-quality relationships are linked to an employer's willingness to fairly award various resources in exchange for employees abiding by specific rules. Perceived fairness of outcomes in the workplace fosters a culture of trust in leader-member exchanges. In keeping with Colquitt et al. (2013), social outcomes manifest when there is a definite relationship between justice paradigms and OCB.

Procedural justice. Perceptions about gender differences affect perceptions of procedural justice. Procedural justice is defined as employee perceptions of fairness including perceptions of their organizations' processes and procedures beyond how the

organizations achieve their outcomes (Bell & Khoury, 2016; Flint et al., 2013; Nicklin et al., 2014; Ryan & Wessel, 2015). Employees who believe their agency needs are met tend to have a higher opinion of procedural fairness in the workplace. This is particularly true for women as they are more likely to have experienced greater social inequities (Bell & Khoury, 2016). When employees believe organizational decisions and procedures are fair, the result is higher employee engagement, increased job performance, less turnover, and positive citizenship behaviors (Triana, Wagstaff, & Kim, 2012).

Procedural justice is an alternative to distributive justice. Choi and Yoon (2014) said procedural justice refers to the fairness of organizational decision-making. When employees feel they have significantly contributed to decision-making processes, they are more likely to consider the procedures as fair. Participation in decision-making processes has positive outcomes, including (a) the prevention of bias, (b) consistency in work results, (c) consideration of the effect of the decisions on others, and (d) allowance for employees to shape the corporate culture as it relates to moral and ethical standards (Flint et al., 2013). Furthermore, Triana et al. (2012) wrote the procedural justice perceptions contributed to a range of employee attitudes and results such as employee satisfaction, engagement, citizenship behaviors, job performance, and commitment.

Perceived procedural justice not only affects employees personally, but it also influences the felt treatment of others and commitment to workgroup outcomes (Frenkel & Bednall, 2016). When distinguishing between procedural justice and distributive justice, Bell and Khoury (2016) referred to the pioneering research of Thibault and Walker (1975). Thibault and Walter (1975) suggested perceived fairness of procedures

addressed individual's primary agency need to shape their environments by considering how decisions that affect them are decided and outcomes are achieved. The focus for distributive justice is primarily on the perceived fairness of decision outcomes. Engagement in processes and in decision-making influences the perceptions of procedural justice (Bell & Khoury, 2016).

Procedural justice is subjective, and Leventhal (1980) identified six rules to analyze procedural fairness. Leventhal's rules for judging procedural fairness were: (a) consistency of the rules, which suggested procedures should be applied consistently across individuals; (b) the circumvention of bias or of self-interest and limiting presumptions; (c) the accuracy rule, which emphasizes the accurate collection of information and opinions about outcome processes; (d) the correctability rule, which is the opportunity to adjust managers' decisions; (e) the representative rule, which states the distribution process should reflect the ideals and trepidations of the groups affected by the process; and (f) the ethicality rule, which considers the compatibility of the distribution procedures with individual ethical and moral standards (Triana et al., 2012). Each of these rules could be used to critique perceived bias or unfairness of the processes that affect employee work outcomes. Moreover, researchers linked procedural justice to organizational results and the work experience of workers.

Minority groups in the workforce, including women and ethnic minorities, encounter barriers that they sometimes attribute to perceived injustices. The implementation of laws and policies to ensure gender equality in the workplace helped women overcome invisible and visible barriers to career advancement, but their impact is

limited (Budgeon, 2014). Researchers use the glass ceiling metaphor to describe the difficulties associated with the upward mobility of women, and they later expanded the metaphor to explain the challenges encountered by ethnic minorities (Cook & Glass, 2014). Cook and Glass (2014) described how problems with diversity in the workplace are often rooted in employee perceptions of fairness. Ultimately, perceptions of unfairness associated with the discriminatory treatment of women and ethnic minorities affects (a) organizational outcomes, (b) organizational citizenship behaviors, and (c) the diversity climate in the workplace (Azeem et al., 2015; Choi and Yoon, 2014; Downes et al., 2014).

Procedural justice affects organizational culture and outcomes. Choi and Yoon (2014) conducted a quantitative study of the impact of perceptions about glass ceiling barriers, organizational fairness, and citizenship behavior. The authors found perceptions of barriers significantly influenced procedural justice perceptions and job satisfaction. The results of the study affirmed that the male-oriented leader structure in a Korean airline industry significantly contributed to policies and decisions that failed to treat women equally. Similarly, Bell and Khoury (2016) examined the role of procedural justice in fulfilling the agency needs of women in the workplace by building upon research that suggested procedural justice is vital to women. When women engage in decision-making that influences their environment, procedural justice perceptions of social disparities are mitigated (Bell & Khoury, 2016). Bell and Khoury found women's perceptions of justice correlated with the organization's ability to satisfy agency needs by implementing policies that led to self-actualization and gender equity. Indeed, attitudes of

procedural justice and glass ceiling barriers directly affect women's citizenship behaviors in the workplace.

The glass ceiling metaphor has evolved to include minorities and women. Recent studies have highlighted significant correlations between organizational outcomes and perceptions of procedural fairness (Flint et al., 2013; Triana et al., 2012). How people perceive they are treated and how they view the treatment of others influences their perceptions of procedural justice. Triana et al. (2012) described how personal values about diversity moderate the negative relationship between perceived biases toward minorities and perceptions of procedural justice. Personal values about discrimination can change perceptions of justice, which influences organizational citizenship behaviors. Furthermore, Flint et al. (2013) found that when women and ethnic minorities perceive there is a glass ceiling and discrimination in the workplace, organizational outcomes and organizational commitment (e.g., job satisfaction, turnover, and absenteeism) are negatively affected. Researchers agreed that procedural justice includes employee perception of how the organization treats them.

Furthermore, procedural justice includes an individual's value for diversity and perceptions of discrimination or unfair treatment against minorities (Azeem et al., 2015; Choi & Yoon, 2014; Downes et al., 2014; Triana et al., 2012). Leventhal (1980) described six rules for judging procedural justice: consistency, bias suppression, accuracy, correctability, representativeness, and ethicality. Using the rules authenticates perceived discrimination against women and ethnic minorities in the workplace (Azeem et al., 2015; Choi & Yoon, 2014). Procedural justice in the workplace includes fairness in

processes and procedures, and when organizations apply procedural justice, employee perceptions are that the organizational processes and procedures align with ethical and moral principles.

Interactive justice. As previously described, Colquitt (2012) defined four dimensions of organizational justice. The third and fourth dimensions of organizational justice were interpersonal justice and informational justice. Interactional justice values include interpersonal components of justice (Clay-Warner, Culatta, & James, 2013). Interpersonal justice components include employee perceptions of interpersonal relationships in the workplace, specifically with management (Chen et al., 2013). In some studies, researchers characterized interactive justice as both interpersonal and informational justice (Ryan & Wessel, 2015). For this study, interpersonal and informational justice were investigated separately.

Bies and Moag (1986) introduced interactive justice concepts, which included interpersonal and informational dimensions. Employee perceptions of fairness in social exchanges and interactions are part of interpersonal justice. Examples of interpersonal justice included employee perceptions of how managers demonstrated respect for employees (Mathisen, Ogaard, & Marnburg, 2013; Ryan & Wessel, 2015). Interpersonal justice behaviors include ethical behavior, professional consideration and respect, open-door policies, and explaining policies, practices, and procedures (Jepsen & Rodwell, 2012; Zapata, Olsen, & Martins, 2013). The definition of informational justice, however, includes employee perceptions about why and how leaders disseminate information. Informative justice includes perceptions about procedural fairness as the adequate

justification of actions or allocation of decision-making procedures (Jepsen & Rodwell, 2012; Zapata et al., 2013). Based on previous research, it is possible to conclude that informational justice helps shape perceptions of decision outcomes. Though researchers found a correlation between interpersonal and informational justice (Colquitt, 2001), the relationship was not statistically significant; therefore, interpersonal, and informational justice are not the same paradigm.

Managing interactional justice perceptions in the workplace is difficult due to a broad range of norms across social groups (Triana et al., 2012). Shifting employee demographics require organizations to adapt as the workforce becomes increasingly diverse (Martin Aláczar, Miquel Romero-Fernández, & Sánchez Gardey, 2013). Employee perceptions of fairness vary based on culture, gender, ethnicity, generation, sexual identity, and sexual orientation (Triana et al., 2012). Organizations that have a diversity and inclusion strategy are likely to be viewed by their employees as fair. The plan should attempt to address current and emerging issues of workplace equality and equity (Ryan & Wessel, 2015).

Researchers have investigated interactional components of justice as they related to leader-member exchange theory (LMX) (Chen et al., 2013), workplace friendships (Chen et al., 2013), feelings of belonging and cohesion (Mathisen et al., 2013), and conflict resolution (Mathisen et al., 2013). Mathisen et al. (2013), for example, investigated gender and perceived boardroom dynamics. Mathisen et al. explored the degree to which 491 female directors from 149 Norwegian Board of Directors experienced cohesion, justice, conflict, and fairness compared to their male counterparts.

The results of this study suggested there was no significant difference in the way directors behaved regardless of gender perceived justice, nor did they perceive boardroom social dynamics differed. Chen et al. (2013) studied interactive justice, LMX, and workplace friendship. Chen et al. supported the results of Mathisen et al. (2013) who asserted that perceptions of interpersonal treatment, such as being in the in-group and positive social exchange relationships, yielded positive organizational outcomes and better LMX. Chen et al. also provided empirical evidence to support the assertion that employee perceptions of interactive justice resulted in positive LMX relationships, which positively influenced perceptions of fair treatment and high-quality social exchange relationships. A diverse workforce necessitates organizations enact HR policies, so employees perceive the justice of outcomes, social exchanges, procedures, and processes.

Used in this study was Colquitt's (2001) four-dimensional framework of justice. The goal was to investigate women's perception of fairness and advancement. The four dimensions are distributive justice, procedural justice, interpersonal justice, and informational justice. Colquitt’s paradigm allows for an understanding of how fairness is valued in the application of DM and CP initiatives for the advancement of women in the United States automotive industry. Each justice dimension explains perceptions about career advancement and organizational outcomes, like employee attitudes, turnover intentions, job satisfaction, employee engagement, organizational commitment and trust, and OCB (Azeem et al., 2015; Jepsen & Rodwell, 2012).

The glass ceiling metaphor has evolved to include minorities. Recent studies have highlighted significant correlations between organizational outcomes and perceptions of

procedural fairness (Flint et al., 2013; Triana et al., 2012). Employees' perception of treated by their managers and their views about their managers' treatment of others inform their beliefs about procedural justice (Bell & Khoury, 2016; Flint et al., 2013). Personal values toward discrimination can change employee perceptions of fairness in the workplace, and perceptions of fairness influence an individual's organizational citizenship behaviors. Flint et al. (2013) wrote that when women and ethnic minorities perceived barriers existed, negative organizational outcomes and commitments resulted. Researchers agreed that perceptions of procedural justice include perceptions of fair treatment (Azeem et al., 2015; Choi & Yoon, 2014; Downes et al., 2014; Triana et al., 2012). Procedural justice also includes an individual's value for diversity and perceptions of unfair treatment against minorities. Leventhal's (1980) six rules for judging procedural justice is an appropriate resource to investigate perceived workplace discrimination against women and ethnic minorities.

Gender equality in the workplace remains a barrier to career advancement (Choi & Yoon, 2014). Shattering the glass ceiling in male-dominated industries like the auto industry may be more challenging than in non-male-dominated industries (Choi & Yoon, 2014). Organizational justice allows researchers to examine fairness through multiple lenses, including distributive justice, procedural justice, interpersonal justice, and informational justice (Colquitt, 2001). First, Colquitt described how the concept of distributive justice is based on the idea of the fairness of the distribution of rewards within an organization. Second, Colquitt defined procedural justice as employee perceptions of fairness and transparency in management decision-making. Colquitt also

described how procedural justice is the fairness of procedures and processes for the allocation of resources and outcomes. Procedural justice relates to the present study and the research questions because it allows for the investigation of the relationship between PM practices and CP. Third, interpersonal justice is the perceived fairness in social exchanges and interactions. Last, informational justice enables the exploration of formal CP and DM programs like leadership training, employee resource groups, informal networks, and executive mentoring. Unlike distributive justice, the components of organizational justice allow for a comprehensive approach to investigate how women perceive fairness in the workplace as it relates to access and opportunity for career advancement.

The research questions built upon earlier research focused on employee perceptions of fairness in the workplace (Bell & Khoury, 2016; Choi & Yoon, 2014). Diversity management and CP have been offered as solutions used to positively impact gender diversity and create opportunities for women to advance into management and senior leadership roles (Bell & Khoury, 2016; Choi & Yoon, 2014; Frenkel & Bednall, 2016; Olson, Parsons, Martins, & Ivanaj, 2015; Triana et al., 2012;). The goal was to investigate how DM and CP are related to the advancement of women in the United States automotive industry. It also addresses the gap in the research about how DM and CP are related to the advancement of women in the United States automotive industry.

Literature Review Related to Key Variables and/or Concepts

Legislative Support for Women

Demographic shifts in the workforce have led to the implementation of DM policies, which are very different from affirmative action (AA) and Equal Employment Opportunity Commission (EEOC) policies (Holvino & Kamp, 2009; Susskind, Brymer, Kim, Lee, & Way 2014). Although AA, EEOC, and DM's beliefs and implementation have some similarity, they are grounded in dissimilar principles. Affirmative action is rooted in the Civil Rights movement (Susskind et al., 2014). The intent of affirmative action legislation was to level the playing field by eliminating or preventing discrimination for protected classes by requiring government agencies or businesses that received government funds to develop a workforce representative of the communities where they do business (Susskind et al., 2014). Affirmative action measures address past discrimination of minorities and women.

The EEOC is a federal agency whose policies protect individuals from discrimination based on disability, genetic information, age, religion, race, sex, national origin, or color. The Title VII Equal Pay Act of 1963, Title I of the Americans with Disabilities Act of 1990, and the Lilly Ledbetter Fair Pay Act of 2009 are examples of laws enforced by the EEOC. However, DM involves a strategy that advances beyond compliance and legal policies (Richard, Roh, & Pieper, 2013). Although often confused, EEO policies and DM have vastly different meanings and significance for worker rights.

Discourse on workplace equity has shifted from privilege, discrimination, and equality, to diversity and inclusion (Holvino & Kamp, 2009). Human resource

practitioners have rebranded AA and EEOC practices as DM. Typically, a DM strategy includes redirection of a firm's resource to policies and programs that provide a competitive advantage and increase their legitimacy as progressive, inclusive, and fairness-oriented workplaces. Such a strategy encompasses valuing diversity through the recognition and appreciation of different genders, cultures, backgrounds, ethnicities, personalities, and experiences (Richard et al., 2013; Williams, Kilanski, & Muller, 2014). Organizations committed to changing the diversity profile of their workforce understand the value of moving beyond equal opportunity and affirmative action laws.

Yang and Konrad (2011) purported successful DM practices contribute to (a) positive reputations, (b) reducing discrimination, and (c) performance and profitability improvement. Diversity management is significant for positive change as it addresses the benefits of diversity in male-dominated firms. Specifically, gender diversity programs incorporate "practices…that involve the removal of barriers to employment of historically marginalized groups" resulting in employment equity and value creation (Yang & Konrad, 2011).

Among the arguments for gender integration, Cook and Glass (2014) found that gender diversity of decision-makers minimizes gender bias. Indeed, firms with gender-integrated boards have more women in CEO and other senior leadership positions (Cook & Glass, 2014). Organizational leaders who understand the contributory factors to the success of women in decision-making positions may positively impact organizational performance (Roberge & van Dick, 2010).

More industries benefit from gender diversity at all levels; however, the auto industry failed to progress at the same pace (inFORUM, 2012; National Automotive Dealer Association [NADA], 2016). In 2009, women held just over 3% of executive-level positions (inFORUM, 2012). Deloitte (2015) indicated that women leaders in automotive organizations reported that the industry should become more engaged in actively attracting women (Deloitte, 2015; inFORUM, 2012). The research suggested female interest in the industry increased with targeted recruiting, mentoring, and female representation during college visits (Deloitte, 2015a; inFORUM, 2012).

Similarly, gender parity in United States auto dealerships is lacking. Women made up just under 19% of employees working at auto dealerships in 2015; however, only 8% of women working in the automotive industry held leadership positions (NADA, 2016). Dealership owners may want to reconsider their talent acquisition and management strategies considering, 85% of automotive buying decisions and 65% of service repair decisions are made by women (NADA, 2016). A focus on gender diversity could create an opportunity for dealers to increase sales and profitability.

Diversity Management

Diversity management is the term used to describe the policies and practices used to manage diversity in the workplace. Although it is a relatively new principle, scholars in multiple disciplines have studied DM concepts (Okcu, 2014; Singal, 2014; Sabharwal, 2015). Diversity management is a cross-disciplinary approach to understanding social justice and diversity using applied behavioral science applications (Sabharwal, 2015). Academic disciplines that include DM are sociology, human resources management,

education, law, gender studies, and psychology. As a values-based system, DM addresses diversity and social justice at the organizational level (Greene & Kirton, 2015). Social justice is defined as fairness and the elimination of subjugation of the underprivileged or underrepresented (Hooley & Sultana, 2016), while diversity refers to an individual's internal factors, external factors, personality differences, and behaviors (Williams et al., 2014). Rajut and Talan (2017) described how DM is the management of employee sociocultural variances that are primarily managed to accomplish organizational goals.

Organizations are responding to rapid changes in employee demographics by incorporating DM strategies that integrate organizational systems, policies, and initiatives. Polat, Arslan, and Dincer (2017) suggested successful organizations approach diversity through a managerial lens and require versatility in managerial styles, leadership skills, and organizational policies and programs. Effective leaders practice DM by ensuring organizational culture includes the concepts and practices of diversity into decision-making and knowledge-building processes (Polat et al., 2017). Diversity management helps to foster an environment where organizational performance and employee perceptions of fairness are high (Rajut & Talan, 2017).

Societal shifts have affected organizational decisions. More women are entering corporate America; however, women are not advancing into managerial and leadership positions, which may have a negative impact on organizational performance (Credit Suisse, 2012). Researchers hypothesized gendered DM is a mechanism for the career advancement for women (Ellemers, 2014; Olson, Parsons, Martins, & Ivanaj, 2015).

The effectiveness of DM programs and their relationship to the advancement of women into managerial and senior level positions is contradictory (Van den Brink & Stobbe, 2014; Williams et al., 2014). Researchers have reported contradictory data on the relationship of DM and the career advancement of women (Van den Brink & Stobbe, 2014; Williams et al., 2014). In general, earlier empirical research focused primarily on DM in relation to corporate culture, glass ceiling barriers, or organizational performance (Credit Suisse, 2012; Wilson, 2014). Specifically, gender-focused DM research uncovered common themes, such as attitudes towards gender bias in the workplace, career mobility, and pay inequity. Kalev, Kelly, and Dobbins (2006) performed a longitudinal study of 700 firms focusing on the efficacy of diversity programs and policies intended to advance women and minority representation into middle and senior management. More recently, Di'Netto, Shen, Chelliah, and Monga (2014) and Williams et al. (2014) examined female worker perceptions of the efficacy of DM in male-dominated sectors (e.g., manufacturing, the oil and gas industry). The variances in program and policy outcomes suggest the need for more research to examine how DM and CP are related to the advancement of women in the United States automotive industry (Williams et al., 2014).

Career planning is important in the career development process. Numerous models for career development emphasize the stages of CP (Spurk et al., 2015). The Super's Life-Career Rainbow Model, National Career Development Guidelines Model, and Kaye's Six Stages of Career Development are standard models used to develop career paths (Banks, 2006). Women may choose either of these models; however, they

focused on Caucasian men and did not consider women (Banks, 2006). Models specific to the needs of women define their unique needs, personal objectives, and expectations (Han & Rojewski, 2015). Future research should examine the unique characteristics of women and the effectiveness of gender-oriented CP activities (Lent, Ezeofor, Morrison, Penn, & Ireland, 2016).

Women in top management attribute their success to gender diversity appreciation, organizational support, and leadership commitment (Somerville, Elliott, & Gustafson, 2014). Well-implemented DM and CP programs and policies could enable organizations to support the career aspiration of women by providing resources to mitigate perceived and existent obstacles. The results of this study may help to reduce the literature gap on how DM and CP are related to the advancement of women in the United States automotive industry. Diversity management initiatives include mentoring and sponsorship programs, employee resource groups, informal networks, developmental assignments, and training programs (Ellemers, 2014; Olson et al., 2015). Coupled with active CP, DM programs can positively impact the career mobility for women (Ellemers, 2014; Olson et al., 2015). This study aimed to examine how DM and CP are related to the advancement of women in the United States automotive industry. Overall, this study may help to reduce the gap in empirical studies focused on the relationship between gender DM and comprehensive CP for the career mobility of women in male-dominated industries and fields.

Career Planning

Organizations realize the value of gender diversity and are seeking ways to attract, retain, and promote high performing female talent (Evers & Sieverding, 2013; Younger et al., 2015). Corporations are implementing programs for the CP and upward movement of women because women offer perspectives different from their male counterparts (Younger et al., 2015). The business case for gender diversity in managerial and leadership positions has prompted organizations to implement inclusion initiatives to increase the number of women in talent pipelines. Leaders identified high potential women at the early stages of their career and created career development programs and unique opportunities to build their managerial and senior leadership competencies and skills (Younger et al., 2015). Women who actively engage in CP with an assortment of career maneuvers to develop highly comprehensive skill sets and offer access to career movement opportunities are better prepared than women who passively take part in CP (Laud & Johnson, 2012).

The foundation for CP models is social cognitive career theory (SCCT). Lent, Brown, and Hackett (1994) developed SCCT. Grounded in Bandura's (1989) social cognitive theory, SCCT allows for an understanding of the relationship between career choice and performance (Cunningham, Doherty, & Gregg, 2007; Lindley, 2005). Lindley (2005) described how the SCCT framework addressed environmental factors to career development "by which self-efficacy, outcome expectations, and goals interact with demographic variables, contextual factors, and life experiences to influence interest development, career choice, and performance" (p. 271). The SCCT factors are useful for

understanding the underrepresentation of women in male-dominated industries (Lent, Brown, 1994; Lent, Lopez, Jr., Lopez, & Sheu, 2007). When appropriately used, SCCT allows for greater understanding of women's career selection, leadership desires, and outcome expectations for advancement.

As the value of women in the C-Suite and boardrooms shifts, organizations are intentionally developing plans to recruit, hire, retain, and promote high potential women. Researchers argued the importance of CP for women who aspired to advance into coveted C-suites and boardrooms (Evers & Sieverding, 2013; Younger et al., 2015). Younger et al. (2015) found that female employees perceived CP as beneficial when there was organizational support for career mobility and diversity.

Younger et al. (2015) studied the impact of interventions for professional female workers in India. The authors conducted an exploratory study using the Pathways to Success model to understand the complexities of interpersonal and professional challenges that hinder the development of women's professional identities and job achievement. Similarly, Lent (2013) emphasized the importance of CP and career-life preparedness as a means for workers to guide their career development. Moreover, barriers and interruptions decline when organizations offer a breadth of career services and programs to help employees thrive in the workplace (Evers & Sieverding, 2013; Lent, 2013; Younger et al., 2015). Career planning, thus, is central to managing professional barriers. Barrier coping mechanisms and support-building methods are just two of the solutions for various stages of career development. Career planning interventions, such as formal mentoring, social networks, self-directed training,

workshops, and coaching, enable women to actualize their career aspirations. Additionally, these initiatives and programs improve women's self-awareness, offer skills, and career navigation tactics, and motivate career self-directedness (Evers & Sieverding, 2013; Laud & Johnson, 2012; Lent, 2013; Spurk et al., 2015; Younger et al., 2015).

Demulier, Le Scanff, and Stephan (2013) alleged CP influences career mobility. The underlying processes of CP consist of activities and behaviors integral to career development. Career goals, self-efficacy, and outcome expectancies are the social cognitive variables that influence CP (Demulier et al., 2013). Previous researchers studied the efficacy of CP in the foodservice sector, sports, medicine, and academia (Demulier et al., 2013; Evers & Sieverding, 2013; Laud & Johnson, 2012; Lent, 2013; O'Neil et al., 2011; Spurk et al., 2015; Younger et. al., 2015). Therefore, CP models could influence the career advancement of women in the United States automotive industry. This study examined how DM and CP are related to the advancement of women in the United States automotive industry. Limited empirical research existed about the advancement of women in the auto industry; thus, this study extends the current research.

Career Advancement

More women are entering the workforce; yet, women remain underrepresented in management and senior leadership positions (Alliance for Board Diversity, 2016; Somerville et al., 2014). After progressing toward integrated professions in the 1970s and 1980s, the pace of movement into management and senior leadership positions gradually stalled a little over a decade later. Occupational segregation, which is the distribution of

workers segregated based on characteristics such as gender, may have contributed to disparities (Stier & Yaish, 2014). There are many reasons women have had limited access to opportunities to build the skills and competencies to advance (Barbulescu & Bidwell, 2013; Lawson, Crouter, & McHale, 2015). Self -selection, occupational segregation, and access are frequent contributors to occupational gender segregation (Cha, 2013; Stier & Yaish, 2014). Gender desegregation in the workplace is unlikely as societal norms sustain old beliefs about appropriate professional choices for women and men, therefore contributing to gender pay gaps (Barbulescu & Bidwell, 2013; Lawson et al., 2015).

The gender divide in the workplace may have begun subconsciously. School curricula often influence career decisions (Risman & Davis, 2013). Children make decisions about their career choices after exposure to activities that help inform their career aspirations. Children are gender role socialized to view careers as masculine or feminine (Risman & Davis, 2013). Educators and school counselors unknowingly socialize students to pursue careers associated with traditional gender roles. Risman and Davis (2013) noted that the gender social structure, which is described as gendered preferences to act based on identities constructed through interactions with family, school, work, and other environmental factors, informed gender role perceptions.

During the 20th century, the intermediate and secondary school curriculum shaped children's concept of sex roles and occupations (Barbulescu & Bidwell, 2013). It was common, for example, for girls to take part in sewing and home economics classes while males acquired vocational skills in metal and wood shop classes. This example of gender role socialization informed the college degree choices of women and men

(Barbulescu & Bidwell, 2013). Female students predominantly selected careers in education, health, and social work, and male students chose careers in science, mathematics, and technology (Lawson et al., 2015). Not only has occupational segregation directed women to more female-oriented jobs, it suppressed the wages of women because higher paying jobs are male-oriented [see Figure 1] (Lawson et al., 2015). Furthermore, women often self-select female-oriented occupations to fill the needs of the community and so they experience less bias (Barbulescu & Bidwell, 2013).

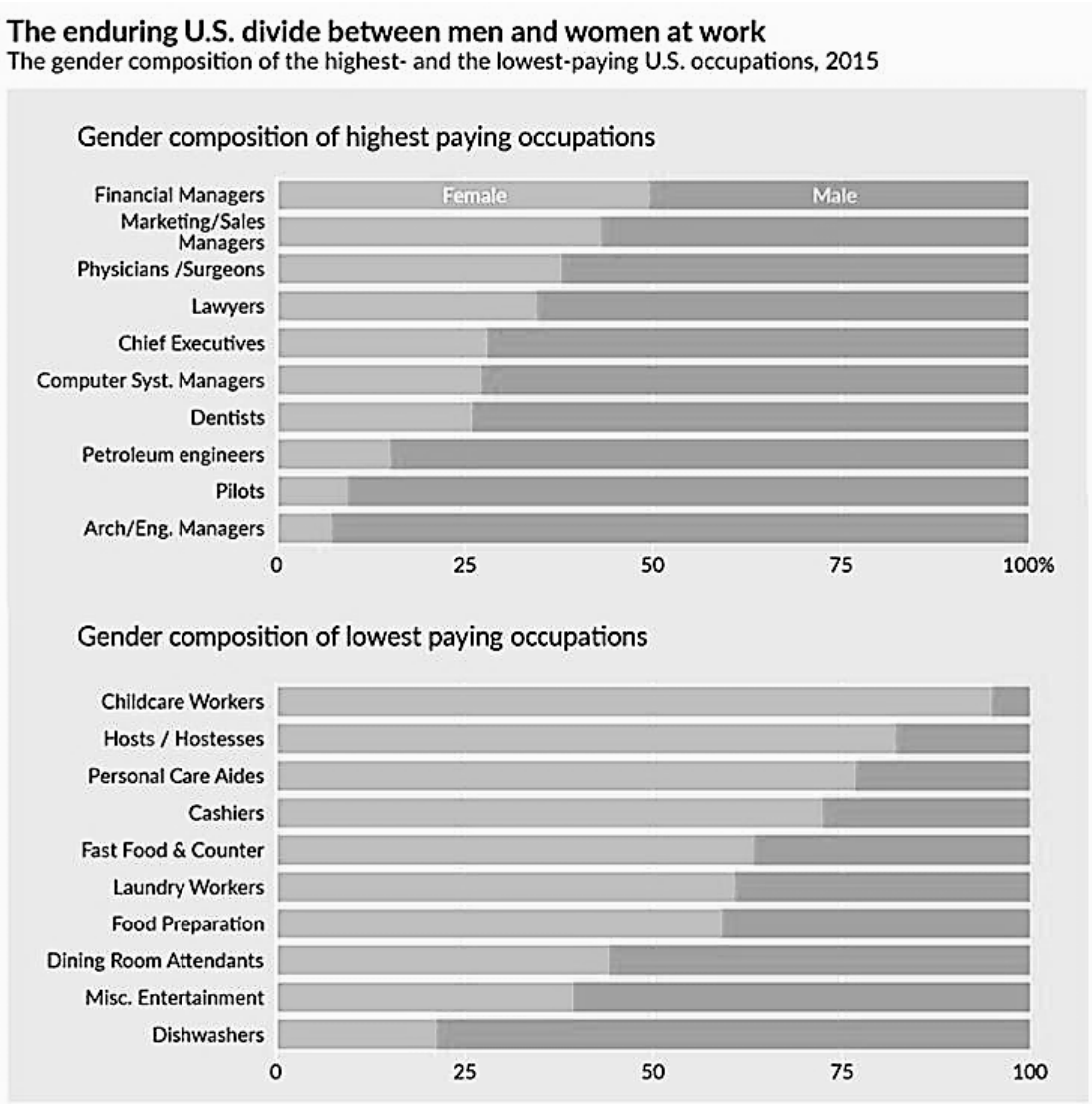

Figure 1. The gender divide in workplaces in the United States. Reprinted from Equitable Growth.org. Retrieved from http://equitablegrowth.org/human-capital/gender-segregation-at-work-separate-but-equal-or-inequitable-and-inefficient.

Self-selection accounts for the slowed momentum toward gender integration in the workplace. Steir and Yaish (2014) purported women often have dual roles as primary caregivers and household income contributors. Although more women work outside the home, they frequently maintain their familial responsibilities within the home. Research suggests women seek careers that provide work/life balance and align with their lifestyle

values (Barbulescu & Bidwell, 2013). Consequently, work flexibility outweighs career mobility and pay equity. Personal time and flexibility are more attractive to women who find themselves in dual roles (Barbulescu & Bidwell, 2013).

Gendered occupational segregation is rooted in the norms, values, and behaviors taught to children at an early age. Parents, educators, and social institutions, such as churches, scouting organizations, and athletics, influence the attitudes of children toward gender (Lawson et al., 2015). Like these institutions, an organization's culture and social structure influence career choice and advancement opportunities. The male-centric power structure is prevalent in male-dominated organizations. Male leaders working in male-dominated organizations value agentic behaviors. Thus, these attitudes towards acceptable practices have contributed to women encountering the double-glazed glass ceiling (Fielden & Jepson, 2016). Existing research affirms that female managers who desire career mobility are likely to face another barrier to advancement into senior-level positions; thereby becoming victims of the double-glazed glass ceiling (Feldman & Jepson, 2016).

Invisible and visible barriers preventing women from advancing into managerial and leadership positions permeate the organizational system. Ellemers (2014) stressed that gender-based barriers to senior management positions include corporate practices and policies like training and career development, promotion policies, and compensation practices. Barriers also includes behavioral double-bind situations, communication styles, stereotypes, preferred leadership styles, power differences within corporate cultures, pressure to maintain the status quo (i.e., the *good-old-boys* network), and tokenism in top

management circles. Human resource professionals have relied on gendered CP resources, DM policies and programs to help mitigate or remove barriers (Benschop, Holgersson, Van den Brink, & Wahl, 2015). Inconsistencies in earlier research findings (Ellemers, 2014; Kaiser, Hogan, & Craig, 2008; Sharp, Franzway, Mills, & Gills, 2012; Van den Brink & Stobbe, 2013; Williams et al., 2014) stressed, however, the need for further gender-focused research to determine how DM and CP are related to the advancement of women in the United States automotive industry.

Women in Male-Dominated Industries

Despite anti-discrimination legislation and affirmative action, women remain underrepresented in male-dominated industries (Di'Netto et al., 2014; French & Strachan, 2015; Hancock & Hums, 2015; Watkins & Smith, 2014). Although the potential for increased earning opportunity exists, women have not pursued male-oriented careers in fields such as science, sports, legal, medicine, construction, and manufacturing at the same rate as men (Di'Netto et al., 2014; French & Strachan, 2015; Hancock & Hums, 2015; Watkins & Smith, 2014). While progress toward equitable representation is growing, traditional hierarchies and male-oriented norms create work cultures unconducive for work/life balance and the career advancement of women (Cha, 2013; Martin & Bernard, 2013).

The low representation of women in management and higher could be attributed to numerous factors. Bias is pronounced in the workplace. Von Hippel, Sekaquaptewa, and McFarland (2015) stated women in male-dominated professions or industries might

experience bias related to their gender. Agentic characteristics are more valued than communal characteristics in masculine fields (Martin & Phillips, 2016).

Negative gender-based stereotypes regarding ability, emotional state, characteristics, skills, and leadership style are sometimes attributed to women (Sabharwal, 2015). For example, perceptions about women's lack of commitment to their careers is a stereotype (von Hippel, Sekaquaptewa, & McFarland, 2015). Women are said to be more focused on their families and less focused on their career mobility (von Hippel, Sekaquaptewa, & McFarland, 2015). Moreover, researchers posited that stereotypes about gender contributed to the lack of recruitment and advancement of women at the same rate as their male counterparts (von Hippel, Sekaquaptewa, & McFarland, 2015; Wright, 2015). Stereotyping and the undervaluing of women's abilities and characteristics in gender imbalanced environments resulted in adverse outcomes such as high turnover, low job satisfaction, and lack of confidence (Watkins & Smith, 2015; Wright, 2016).

Wright (2016) wrote women who work in male-dominated work environments were susceptible to gendered interactions that reinforce the male hierarchy. Policies and programs to recruit, retain, and promote women have had some success in increasing the number of women in the management pipeline. Researchers who studied the mobility of women in male-dominated industries contributed career advancement to (a) networks (Spurk et al., 2015), (b) mentorship (Clevenger & Singh, 2015), (c) sponsorship (Sabharwal, 2015), (d) management support (Sabharwal, 2015), (d) developmental work assignment (Olson et al., 2015), (e) organizational culture (Cha, 2013), and (f) political

skill (Watkins & Smith, 2014). Past research provides the foundation for empirical investigation into the career progression of women in male-dominated industries.

Although there are quantitative studies about women working in construction, sports, manufacturing, and construction, few quantitative studies focused on the automotive industry. Martin and Bernard (2013) recommended future research focus on the experiences of women employed in male-dominated professions. In this study, I investigated how DM and CP are related to the advancement of women in the United States automotive industry.

Women in the Automotive Industry

The United States automotive industry has not experienced the same gender shift in their talent pipeline as other sectors (inFORUM, 2012; Sultana, Shafii, & Hussain, 2013), and women's representation as top earners and leaders lags significantly (inFORUM, 2012). Sultana, Shafii, and Hussain (2013) conducted a review of the literature related to the advancement of women in the automotive industry. Sultana et al. concluded career exposure and female leadership representation increased female interest in automotive careers. Sultana et al also stated there is a positive correlation to the number of women in senior and executive level positions and the number of women in middle management. Deloitte (2015a) wrote automobile companies with higher than industry average female representation at the senior-level tend to have a higher number of women in their employ. Additionally, female board members created an opportunity for a gender legacy trickle-down effect, resulting in an increased presence of women at the executive and manager level (Clevenger & Singh, 2013).

Women have become more ambitious and are seeking more significant roles with greater responsibility but remain underrepresented in leadership positions (Berry & Franks, 2010). Lack of experience, inadequate career opportunities, gender stereotypes, tokenism, and limited access to social networks are some of the reasons associated with women's inability to advance their careers (Berry & Franks, 2010). Evidence suggested that a gender-balanced workplace, the increased commercial power of women, and better corporate performance of gender diverse organizations are justifications for more women in senior-level and board positions within automotive companies (Virick & Greer, 2012).

European countries and China currently have legislation encouraging more women's participation at the board level. Consequently, the representation of women on the board of automotive firms has increased. Horak and Cui (2017) stated the business case for gender-balanced boards is gender diversity contributed positively to organizational performance and competitiveness (Horak & Cui, 2017). Although legal mandates have increased the representation of women at senior manager and board level in European countries and China, Horak and Cui (2017) posited the likelihood of the United States adopting legislation mandating more women on corporate boards is unlikely based on its history of gender relations and the workplace (Horak & Cui, 2017).

Although research on the advancement of women in the automotive industry is scarce, recent studies highlighted the role of gender on business outcomes in European and Chinese auto sectors. For example, Horak and Cui (2017) examined the efficacy of gender-balanced boards on the bottom-line. The researchers concluded that Chinese auto firms with gender-diverse boards performed at a higher level than auto firms with gender-

homogeneous boards (Horak & Cui, 2017). Moore (2015) took an ethnographic approach to examine the perception of gender, diversity, and cross-cultural management at a German automotive. The researcher reported the "recontextualization of gender using German categories in a British context" negatively affected the recruitment of women into the workplace (Moore, 2015). In both studies, researchers highlighted the role of gender, culture, and policy had in advancing women into positions of authority. Organizational leaders employed DM initiatives and CP to address the gender imbalance in the management and senior leadership pipeline. Unfortunately, an extensive literature review search did not yield any studies related to the advancement of women in the United States automotive industry.

There is an abundance of research on women in male-dominated industries (Di'Netto et al., 2014; French & Strachan, 2015; Hancock & Hums, 2015)); however, research about nonmanufacturing jobs for women in the United States automotive industry is uncommon (Hancock & Humes, 2015, Martin, 2015; Prescott & Bogg, 2011; Woodhall & Leach, 2010, Worrall, 2012). Virick and Greer (2012) studied women who work in professional positions in the auto industry and suggested that a gender-balanced workplace, the commercial buying power of women, and the corporate performance of gender diverse organizations are justifications for a gender-balanced workforce at the senior-level (Virick & Greer, 2012). While progress toward increased gender representation is clear, the lack of equitable representation of women at the senior-level suggests career mobility barriers remain (Martin & Phillips, 2017; von Hippel, Sekaquaptewa, & McFarland, 2015).

Summary

More women are working outside the home (BLS, 2018). The declining United States economy was the impetus of the shifting demographic patterns in the workplace (Fernández, 2013). Fernandez (2013) wrote traditional family roles have changed, and women have earned more post-secondary degrees to make them more competitive in the workplace. However, despite educational attainment and equal representation at the entry level the representation of women diminishes significantly in positions of increasing responsibility and authority (McKinsey & Company, 2016). The disparities have had a negative impact on the corporate pipeline into senior leadership and C-Suite positions for women.

Barbulescu and Bidwell (2013) suggested career selection results from gender socialization in the formative years. The long-term effect of gender socialization is the gender pay gap and underrepresentation of women in the leadership pipeline (Jepsen & Rodwell, 2012). Hence, progressive organizations have structured programs intended to create (a) diversity in the talent pipeline and (b) pay equity (Fielden & Jepson, 2016). Likewise, other reasons for the career choices of women include self-selection, occupational segregation, and the glass ceiling phenomenon.

Despite an increase in the number of women in corporate America, barriers continue to limit the advancement of women into upper management and senior leadership (O'Neil & Hopkins, 2015; Sabharwal, 2015). Because of the glass ceiling, women do not consistently have equal access to individuals and resources to advance their careers (Somerville et al., 2014). Organizational justice theory helps explain

assumptions and assertions about workplace fairness and perceptions (Nicklin et al., 2014). Researchers suggested there is a theoretical and empirical relationship between organizational outcomes and the glass ceiling phenomenon (Cook & Glass, 2014; French & Strachan, 2013; Hoobler et al., 2011; McKinsey & Company, 2012, 2013; Michailidis et al., 2012). The glass ceiling lens is useful to understand barriers to the career advancement of women (Michailidis et al., 2012). Women often blame the glass ceiling, which has its roots in discrimination or unfair treatment at work. Researchers described how organizational justice is used to describe concepts of fairness at work and the influence of organizational justice on employee actions (Flint et al., 2013; Triana et al., 2012). There are four domains of organizational justice: distributive justice, procedural justice, interpersonal justice, and informational justice. Organizational justice theory can offer insight into female employees' reaction to DM and CP meant to mitigate gender discrimination factors and aid women in overcoming barriers in the workplace.

Career advancement is not a passive event (Laud & Johnson, 2012). Laud and Johnson (2012) reported women must understand the organizational system and use that knowledge to create a career path for themselves. The double-glazed glass ceiling is associated with gender, race, educational background, professional experience, personality, and behaviors. Agentic leadership traits versus communal leadership traits argument can be overcome when work environments are policy-driven, and employees actively participate in DM programs and CP (Fielden & Jepson, 2016). Despite the additional resources, women experience greater challenges in male-dominated industries

than female-dominated industries (Choi & Yoon, 2014), which suggests there is more to understand.

Chapter 2 gave evidence for the need of a study about the relationship between DM and CP for career advancement. There is conflicting evidence about the efficacy of DM as a means for career advancement and gender integration in positions of authority (Ellemers, 2014; Kaiser et al., 2008; Sharp et al., 2012; Van den Brink & Stobbe, 2013; Williams et al., 2014). Researchers suggested there is a definite relationship between DM and advancement (Kaiser et al., 2008; Sharp et al., 2012; Williams et al., 2014). Conversely, other researchers noted there is not a definitive relationship between DM and the career advancement of women (Kaiser et al., 2008; Sharp et al., 2012; Williams et al., 2014). Instead, researchers have found that DM programs perpetuated stereotypes about women and minorities (Williams et al., 2014). Moreover, people sometimes viewed these programs as public relations campaigns to project a positive corporate image (Williams et al., 2014). This study was an effort to address the gap in the literature by examining the relationship between DM and CP for the advancement of women in the automotive industry. Chapter 3 details the research methodology including data collection, data analysis, and ethical concerns.

Chapter 3: Research Method

The purpose of this quantitative correlational study was to investigate how DM and CP are related to the advancement of women in the United States automotive industry to improve the representation of women in management and senior-level positions. The results suggested solutions for the underrepresentation of women in management and senior-level positions. Chapter 3 includes explanations of the critical elements that allow for replication of this study, including the (a) role of the researcher; (b) population; (c) sampling procedures; (d) procedures for recruitment, participation, and data collection; (e) instrumentation and operationalization of constructs; (f) data analysis plan; (g) threats to internal and external validity and statistical conclusions; and (h) ethical procedures. Chapter 3 concludes with a summary.

Research Design and Rationale

Researchers often examine the relationships among variables in the social sciences (Purdam, 2016). A correlational design allows researchers to examine relationships between variables in a population or between similar variables in different populations in non-experimental settings without treatment or outside influence by the researcher (Curtis et al., 2016). Curtis et al. (2016) noted that researchers use correlational designs to (a) determine frequencies and relationships among variables and (b) to infer outcomes based on the data. A correlational design was appropriate for this study because the aim was to identify what, if any, predictive relationships existed between the independent and dependent variables. A correlational design allowed for investigation of the predictive relationships of DM (i.e., independent/predictor variable)

and CP (i.e., independent/predictor variable), and their relationships to the career advancement (i.e., dependent/outcome variable) of women in the United States automotive industry. I used this design to increase understanding of the degree to which interventional human resources policies and procedures affect the career trajectory of women. I used a correlational design to measure the viability of human resources management interventions intended to lessen gender imbalance in management and senior leadership positions. I provide a description of the possible relationships among the variables investigated and make inferences about the results (see Welkowitz, Cohen, & Lea, 2012).

Researchers administer surveys to make observations or take snapshots of multiple variables in natural environments without interference in correlational studies (Ansolabehere & Schaffner, 2014). For this study, I sent two emails to potential participants. The first email served as an invitation for individuals to learn more about my study. Employees interested in participating in my study were asked to send their personal email addresses to a designated Gmail account. The second email was sent to employee's personal addresses via SurveyMonkey®, which is a web-based survey tool. This email stated the survey was voluntary and participation was anonymous. A universal record locator (URL) link to the survey was embedded in the email. The benefit of using SurveyMonkey® was that it (a) was environmentally responsible and cost efficient, (b) allowed the import of data directly into the Statistical Package for the Social Sciences (SPSS), (c) facilitated ease of analysis, (d) saved time, and (e) allowed for a broad geographical reach (Gill, Leslie, Grech, & Latour, 2013; McPeake, Bateson, & O'Neill,

2014). I disseminated three surveys via SurveyMonkey® to collect the data and used SPSS to manage and analyze the data. I selected the Perceived Barriers to Career Advancement Scales (Lyness & Thomas, 2000a) and the Perceived Facilitators to Career Advancement Scales (Lyness & Thomas, 2000b) to measure the independent variables, DM and CP. The scales were designed to investigate employees' attitudes and perceptions of career advancement. Career Advancement, the dependent variable, was measured using the Job Descriptive Index (JDI) 2009 version. The JDI was initially developed by Smith, Kendall, and Hulin (1969) to measure job-related satisfaction examines five aspects of job satisfaction. The resulting information allowed me to make inferences about women's career advancements when they are actively engaged in DM initiatives and CP.

There was a lack of quantitative research on how DM and CP are related to the advancement of women in the United States automotive industry. There is an abundance of qualitative research relating to female advancement in male-dominated industries (Navarro-Astor, Roman-Onsalo & Infante-Perea, 2017; Wright, 2016); however, lacking was empirical research focused on how DM and CP are related to the advancement of women in the United States automotive industry (Hancock & Hums, 2015; Kretschmer & Kretschmer, 2013; A. Martin, 2015; Worrall, 2012; Worrall, Harris, Stewart, Thomas, & McDermott, 2010). I structured the research questions to investigate the relationship between the independent and dependent variables.

Design Rationale

The design was quantitative and correlational. Researchers use a quantitative correlational design to gather data from a wide range of participants (Venkatesh, Brown, & Bala, 2013). More important, a quantitative design allows a researcher to analyze and interpret multiple aspects of a phenomenon, and the resulting data can be presented numerically (Venkatesh et al., 2013). Further, using a correlational design allows researchers to measure relationships among independent and dependent variables (Venkatesh et al., 2013). Examining the variables through a post-positivistic lens offers insights about the variation and correlation among factors contributing to the career mobility of women. Last, quantitative correlational design was appropriate for this study because the research questions were developed to measure the relationship between the independent and dependent variables. The design was consistent with the work of other researchers who designed their studies to advance empirical knowledge in managerial studies focused on diversity, glass ceiling barriers, and gender equality (Di'Netto et al., 2014; Fujimoto et al., 2013; Michailidis et al., 2012; Williams et al., 2014).

Before deciding to use a correlational design, I considered using a qualitative design. Contrary to quantitative designs, researchers use text and observations as data in qualitative research (Guercini, 2014). A qualitative design allows researchers to gather a depth and breadth of information about subjective experiences. More specifically, I considered using a phenomenological design. VanderStoep and Johnson (2008) purported phenomenology assumes that truth exists beneath a phenomenon. Specifically, a hermeneutic phenomenological design would allow me to explore and understand

subjective experiences of the glass ceiling phenomenon via data gathered during in-depth interviews and via observations of a socially-constructed reality (Sloan & Bowe, 2014). I determined that a hermeneutic phenomenological design was not a good fit because the intent is not to describe and comprehend the lived experiences of a phenomenon from a subjective perspective.

Methodology

Population

The population for this study was female employees who worked at one United States automotive manufacturing organization. The firm's human resources department reported there were 638 full-time female employees in professional, managerial, and senior-level positions in facilities across the continental United States. The inclusion criteria ensured participants worked in roles that funneled into the succession pipeline. Inclusion criteria were (a) women; (b) full-time, salaried employees; (c) tenured for at least 2 years, and (d) in professional, managerial, and senior-level positions. Regular, full-time employees work a full schedule, which is typically 40 hours each week (Bartoll, Cortes, & Artazcoz, 2014). A salaried employee is an employee paid a predetermined amount each pay period on an annual basis (DOL, 2008). Salaried employees receive a full salary for work in a week regardless of the number of days or hours worked. The organization categorized jobs by grades. Jobs in Grades 6-9 are professional positions. These positions are critical to the succession pipeline, and the employees in these positions are analysts, senior analysts, specialist consultants, and senior consultants. Grades 10-11 are expert managerial positions. Individuals in these positions have direct

reports or possess a specific expertise. Grades 12-16 are senior level positions such as directors, senior directors, vice-presidents, senior vice-presidents, executive vice-presidents, and senior executive vice-presidents.

In this study, I changed the grade categories to help maintain the anonymity of the participants and the participating organization. Professional positions were categorized as Group 1. Group 1 consisted of the positions in Grades 6-9. These positions are critical to the succession pipeline. These positions are analysts, senior analysts, specialist consultants, and senior consultants. Managerial and senior-level positions were categorized as Group 2. Group 2 consisted of positions in Grades 10-16. These positions have decision-making authority. These positions are managers, directors, senior directors, vice-presidents, senior vice-presidents, executive vice-presidents, and senior executive vice-presidents. Senior leaders consider professionals and managers ranked as high performer/high potential in their succession planning discussions.

Sampling Strategy

The sampling strategy requires the identification of the population, the sample unit, sampling frame, and sample design. Sampling strategy, thus, is "one of four inter-related features of a study design that can influence the detection of significant differences, relationships, or interactions" (Bartlett, Kotrlik, & Higgins, 2001, p. 43). Using a cross-sectional survey allows scholars to reach a broader audience (Mutepfa & Tapera, 2018; Ponto, 2015). A principal benefit of survey research is that it allows generalization of the results to a population (Mutepfa & Tapers, 2018; Ponto, 2015). When used effectively, sampling allows for a small set of units to adequately represent

the significant elements of a larger subset (Frankfort-Nachmias & Nachmias, 2008; Leddy & Omrod, 2010 Mutepfa & Tapera, 2018; Ponto, 2015).

I used stratified sampling to select participants from a sample population that was heterogeneous. Stratified sampling is a type of probability sampling method. Uprichard (2013) stated probability sampling allows the researcher to remain unbiased during the sample selection process. Probability sampling provides dependable, credible, and quantifiable data (Uprichard, 2013). Researchers using a probability sampling method use some form of random sampling (Setia, 2016). Stratified sample, a type of random sampling method affords participants in a population the equal chance for consideration.

Setia (2016) reported the use of stratified sampling ensures specific groups within a sample have equal and independent selection probability. The sample population was broken into the group's subpopulations. Employees identified as professionals were in Group 1. Employees identified as managers, experts, and senior leaders were in Group 2. The sample list was generated using Excel. Participants were selected from each group. The stratified sampling technique provided more accuracy than simple random sampling and allowed me to make inferences within the margin of error from the sample to a broader population (Setia, 2016; Uprichard, 2013). Uprichard (2013) reported an expectation in stratified sampling is that the results can be generalized. I was able to generalize the results of this study to women in the automotive industry and women in other male-dominated industries.

Sampling Frame

The sampling frame is fundamental to the sampling design, and the sampling frame is composed of sampling units that are representative of the population under study. Frankfort-Nachmias and Nachmias (2008) stated that the accuracy of a sample design is incumbent upon identification of the (a) population, (b) stages of sampling, and (c) selection process. For this study, the sample included female employees at one United States-based automotive firm. I used the company's SAP, a European multinational software corporation database to construct the sampling frame. The HR SAP database contained everything needed to identify and contact eligible participants. The database included a list of all employees located in the manufacturing facility, corporate office, regional offices, and auxiliary locations. The sample frame was as inclusive as possible; it included rather than excluded business units. I used gender and grade to generate the sample list. Individuals' names were excluded. The employees were assigned random identification numbers to maintain anonymity.

The population criteria ensured participants experienced the organization's culture and met the minimum criteria for career advancement into management positions. Inclusion criteria included (a) college-educated women, (b) in salaried positions, and (c) employed in professional positions or higher. Specifically, participants were full-time employees with at least a bachelor's degree. Professional and management positions included those in Grade 6 or higher, and participants had to have two years of employment with the organization. Excluded were those who (a) were male, (b) had worked at the company for less than two years, (c) lacked a four-year college degree, (d)

worked part-time, and (e) were in positions below Grade 6. Furthermore, participants could not be (a) hourly, (c) Foreign Service employees, (d) contractors, or (e) interns. The women in this study were candidates for promotion into managerial and leadership positions.

Sample Size

The sample size is a portion of the population selected for a survey (Frankfort-Nachmias & Nachmias, 2008). Determining the sample size begins by defining the level of expected accuracy of the estimates (Frankfort-Nachmias & Nachmias, 2008). Identification of the variables and incorporation of the variables into the formula calculations is the first step. Cochran (1977) wrote determining sample size requires the specification of margins of error for the elements most critical to the study. I made sampling decisions based on the data calculation (Bartlett et al., 2001). The desired standard of precision was enough to permit the use of a smaller value of the *N* (Bartlett et al., 2001). I ensured the sample size was adequate, which increased reliability and the chance for statistically significant results (Frankfort-Nachmias & Nachmias, 2008). The standard of error is a sufficient statistical measurement that specifies how thoroughly the sample results reveal the *true values of a parameter* (Frankfort-Nachmias & Nachmias, 2008).

A power analysis using the G*Power 3.0 tool determined the sample size. Fellows and Liu (2015) stated a larger sample size reduces uncertainty in the study's statistical parameters. Based on the statistical parameters of (a) statistical power = 0.95, (b) effect size = 0.15 (medium), and (c) alpha level = 0.05 (two-tailed test), which signifies a 95%

confidence interval and measures the level of error allowed in the data and the tolerable risk of receiving incorrect data projected, the sample size was $N = 108$. The sample size determined the amount of data I had and, thus, partly determined the level of confidence I had in the sample estimates (Fellows & Liu, 2015).

I used a random sampling method to ensure eligible participants had an equal chance of selection. I used a list of participants generated by the organization's human resources information systems (HRIS) administrator to generate a random sample list. The HRIS administrator gathered the names of those who met the inclusion criteria from the employee database and generated a random sample list using Excel. I randomly selected at least half of the participants from each Group of participants on this list to receive the survey invitation. I selected a quantitative correlational survey design and the random sample method for its practicality and cost-effectiveness (Setia, 2016; Venkatesh et al., 2013).

Procedures for Recruitment, Participation, and Data Collection

Senior Leadership requested I not use employees' business email addresses to solicit participation. However, I had permission to send a generic email to female employees via their work address. This email provided basic information about the study and asked for the personal email of those interested in participating. I established a Gmail account that was used for this purpose only.

Selected participants received an email invitation to participate in the study via SurveyMonkey®. This email contained a universal record locator (URL) link to the informed consent information, which included the Walden Institutional Review Board

(IRB) approval # 05-16-19-029212 and the survey. The informed consent form emphasized the voluntary nature of the survey. Communication with the participants was only via email. The communication schedule occurred in four waves: (a) the initial invitation, (b) a first reminder, (c) a second reminder, and (d) a final reminder. Eligible participants received an email once a week for four weeks. What follows is the protocol used in the data collection phase.

- I acquired permission to conduct the study from the compliance officer;
- A solicitation email was sent to female colleagues throughout the company;
- A second email invitation was sent to interested employees' personal emails via SurveyMonkey®;
- I monitored survey results every 48 hours via the internet survey tool;
- A reminder was sent to participants every seventh day for eight weeks; and
- A final email of gratitude was sent to participants for their contribution. This email included contact information for those who wanted to receive the survey results at the close of the study.

Participation

Establishing the inclusion criteria ensured that participants met the criteria for advancement. Participants had to be (a) college-educated women, (b) in salaried positions, and (c) employed in professional positions or higher, (d) who had worked for the organization for at least two years. Employees who met these conditions would likely meet the eligibility requirements for leadership to consider of them for promotion into managerial and senior-level positions.

Participants were asked demographic questions, which could be used in future research. Demographic questions included hierarchical position, educational attainment, tenure, and industry experience. Self-identification was optional. It is possible that variances in career advancement and the number of barriers may be related to the participant's demographic composition and their perceptions about their identity (Akpinar-Sposito, 2013). I used this information for insight into the variables that may influence career advancement. While research suggested there is a gender gap at the managerial and leadership level (Akpinar-Sposito, 2013), these qualifiers could illuminate to what degree these factors (i.e., industry experience, grade, educational attainment, industry experience, and tenure) influence career advancement (Clevenger, & Singh, 2013; Smith, Crittenden, & Caputi, 2012). Data related to race, age, industry experience, and brand affiliation will be used in a future study.

SurveyMonkey® held the online survey tool. Web-based surveys are user-friendly, cost-effective, and faster than traditional methods of administering surveys (Mutepfa & Tapera, 2018). Web-based surveys also allow researchers to use survey templates and capture data in real-time (Mutepfa & Tapera, 2018). Participants completed the informed consent form located in SurveyMonkey® and agreed to participate before they could enter the survey. A link to these documents was located on the initial page of the online survey. The informed consent form described the voluntary nature of the study and the exit processes.

Data Collection

A correlational, quantitative research design using SurveyMonkey® for data collection allowed for investigation of the predictive relationship between DM and CP for the career advancement of women in the United States automotive industry. The self-administered online survey included the (a) informed consent and demographic questionnaire (see Appendices A & B); (b) the Perceived Barriers to Careers Advancement scales (Lyness & Thomas, 2000a); (c) the Facilitators to Career Advancement scales (Lyness & Thomas, 2000b); and (d) The Job Descriptive Index scale (Bowling Green University, 2009). The cross-sectional survey was time-bound and captured data at a moment in time (Ponto, 2015). The participants were able to save and restart their survey at any time while the survey was open for responses. Participants were not compensated and could exit the survey at any time. Participants could provide contact information via the survey if they wanted to receive access to a summary of the research results.

Informed Consent

Walden University's Institutional Review Board (IRB) ethics governance process requires that the research study complies with Walden University's standards. The IRB examines the research application, research proposal, and consent form before granting permission to begin the research project. Ethical researchers consider participants' rights and interests (Faden et al., 2014). The IRB review process provides transparency and researcher accountability (Faden et al., 2014).

Researchers have an ethical obligation to inform participants of their rights. Participants provided consent via SurveyMonkey®. The informed consent is a detailed account of the researcher's identity, the sponsoring university, the participant selection process, the purpose of the study, participation benefits, participant engagement level, research study risks, confidentially assurances, withdrawal statement, and researcher contact information. The IRB guides the researcher to engender new information through research while ensuring the researcher understands their moral and ethical obligations (Kawar, Pugh, & Scruth, 2016).

Research Questions and Hypotheses

The research questions were designed to address the purpose of the study. I selected multiple regression analysis to examine the correlation amongst the DM perceived facilitators scales (Appendix B), CP perceived barriers scales (Appendix C), and career advancement JDI scale (Appendix D) for women in the United States automotive industry. The questions below addressed the general and specific problems identified in the problem statement. There were 10 questions. The general question was followed by nine specific questions that addressed DM and CP relationships to career advancement. The DM variables were (a) informal networks, (b) mentoring, and (c) cultural fit. The career planning variables are (a) career management, (b) developmental assignments, (c) difficulty getting developmental assignments, (d) career management processes, (e) relationship development, and (f) geographic mobility.

General Research Question: What is the relationship between the linear combination of DM and CP to the advancement of women working in the androcentric system within the United States automotive industry?

H_0. The linear combination of DM and CP is not related to the level of the career advancement of women working in the androcentric system within the automotive industry.

H_a. The linear combination of DM and CP is related to the level of career advancement of women working in the androcentric system within the automotive industry

Specific Research Question 1: What is the relationship between informal networks and the career advancement of women in the automotive industry?

$H1_0$. There is no relationship between informal networks and the career advancement of women in the automotive industry.

$H1_a$. There is a significant relationship between informal networks and the career advancement of women in the automotive industry.

Specific Research Question 2: What is the relationship between mentoring and the career advancement of women in the automotive industry?

$H2_0$. There is no relationship between mentoring and the career advancement of women in the automotive industry.

$H2_a$. There is a significant relationship between mentoring and the career advancement of women in the automotive industry.

Specific Research Question 3: What is the relationship between cultural fit and the career advancement of women in the automotive industry?

*H*3$_{0.}$ There is no relationship between cultural fit and the career advancement of women in the automotive industry.

*H*3$_{a.}$ There is a significant relationship between cultural fit and the career advancement of women in the automotive industry.

Specific Research Question 4: What is the relationship between problems developing relationships and the career advancement of women in the automotive industry?

*H*4$_{0.}$ There is no relationship between problems developing relationships and the career advancement of women in the automotive industry.

*H*4$_{a.}$ There is a significant relationship between problems developing relationships and the career advancement of women in the automotive industry.

Specific Research Question 5: What is the relationship between problems managing one's own career and the career advancement of women in the automotive industry?

*H*5$_{0.}$ There is no relationship between problems managing one's own career and the career advancement of women in the automotive industry.

*H*5$_{a.}$ There is a significant relationship between problems managing one's own career and the career advancement of women in the automotive industry.

Specific Research Question 6: What is the relationship between problems obtaining developmental assignments and the career advancement of women in the automotive industry?

*H*6$_{0.}$ There is no relationship between problems obtaining developmental assignments and the career advancement of women in the automotive industry.

*H*6$_{a.}$ There is a significant relationship between problems obtaining developmental assignments and the career advancement of women in the automotive industry.

Specific Research Question 7: What is the relationship between problem getting developmental assignments and the career advancement of women in the automotive industry?

*H*7$_{0.}$ There is no relationship between problem getting developmental assignments and the career advancement of women in the automotive industry.

*H*7$_{a.}$ There is a significant relationship between problem getting developmental assignments and the career advancement of women in the automotive industry.

Specific Research Question 8: What is the relationship between problems with organizational career management processes and the career advancement of women in the automotive industry?

*H*8$_{0.}$ There is no relationship between problems with organizational career management processes and the career advancement of women in the automotive industry.

*H*8$_{a.}$ There is a significant relationship between problems with organizational career management processes and the career advancement of women in the automotive industry.

Specific Research Question 9: What is the relationship between problems obtaining opportunities for geographic mobility and the career advancement of women in the automotive industry?

$H9_0$. There is no relationship between problem difficulty getting geographic mobility and the career advancement of women in the automotive industry.

$H9_a$. There is a significant relationship between geographic mobility and the career advancement of women in the automotive industry.

Instrumentation and Operationalization of Constructs

I selected the Perceived Barriers to Career Advancement Scales (Lyness & Thomas, 2000a) and the Perceived Facilitators to Career Advancement Scales (Lyness & Thomas, 2000b) to measure the independent variables. The surveys were designed to investigate employees' attitudes and perceptions of career advancement. The authors gave permission to use this scale for educational research. The use of these scales for education research is permitted without expressed permission.

The Perceived Barriers to Career Advancement Scales (Lyness & Thomas, 2000a) allowed me to investigate how the dependent variables were related to the advancement of women in the United States automotive industry. Lyness and Thomas (2000a) developed this instrument to measure the 26 factors perceived as barriers to career advancement on a scale ranging from 1 = *no problem at all*, to 5 = *a very serious problem* (Lyness & Thomas, 2000a). The Perceived Barriers to Career Advancement Scales contain six scales: (a) lack of cultural fit, (b) excluded from formal informal networks, (c) lack of mentoring, (d) poor organizational career management processes, (e) difficulty

getting developmental assignments, and (f) difficulty obtaining opportunities for geographic mobility. The scales of the instrument appropriately measure DM and CP factors. I did not need permission to use this instrument for educational research (Lyness & Thomas, 2000a). The use of these scale for education research is permitted without expressed permission (Lyness & Thompson, 2000a).

The Perceived Facilitators to Career Advancement Scales examine perceived barriers and facilitators of career advancement, career histories, and self-reported career development experiences (Lyness & Thompson, 2000b). Lyness and Thompson (2000b) created the Perceived Facilitators to Career Advancement Scales to measure participant perceptions of opportunities for upward mobility using a five-point Likert-type scale with anchors ranging from 1 = *not a facilitator*, to 5 = *a very important facilitator*. The Perceived Facilitators to Career Advancement Scales instrument was appropriate for the study because the scales measured employees' perceptions of facilitators for career advancement.

Lyness and Thompson (2000b) posited that there is a correlation among perceptions of career advancement, CP initiatives, and diversity programs (i.e., mentoring, networking, and cultural fit). Table 1 contains the independent variables and the exact scale measurements that were adapted from the Perceived Facilitators to Career Advancement Scales and Perceived Barriers to Career Advancement Scales (See Appendixes B and C). The alignment of the variables and scale measurements tested the hypotheses. The use of these scale for education research is permitted without expressed permission (Lyness & Thompson, 2000b).

Table 1

Perceived Facilitators and Barriers to Career Advancement Scales

Variables	Scale Measurements
Diversity Management	Informal Networks, Mentoring, and Lack of Cultural Fit
Career Planning	Managing Own Career, Developing Assignments, Career Management Processes, and Geographic Mobility

Note: Diversity management and career planning will measure the perceived facilitators to career advancement. The demographic factors include the adjacent descriptors.

Diversity Management

Diversity management is a human resource practice to increase or maintain variances in human capital while ensuring the variance in human capital does not hinder organizational performance. Diversity management also consists of HR programs to perpetuate heterogeneity in the workplace and reap the benefits of labor force diversity (Spurk et al., 2105). The Perceived Facilitator to Career Advancement Scales were used to measure DM. Participants were to rate the extent to which each of the factors had facilitated career advancement within the organization on a 5-point Likert scale ranging from 1 = *not a facilitator,* to 5 = *a very important facilitator* (See Appendix B):

Informal Networks:

1. Social events and informal interactions with colleagues, either on or off the job
2. Access to informal networks

Mentoring:

3. Moral support and encouragement from your mentor or manager during stressful times
4. Help from your mentor in establishing key relationships

5. Advice from your mentor about how to solve difficult business problems
6. Having senior manager(s) who facilitate(s) your career progress
7. Having role models
8. Having a mentor or someone who provides good advice on career opportunities
9. Working for manager(s) who take an interest in your career
10. Information about organizational politics from your mentor or manager

Lack of Culture Fit:

11. Fitting in or adapting to the culture
12. Having a role model
13. Not being an outsider
14. Not feeling comfortable asserting your views because of possible consequences
15. Feeling that you can't make mistakes and learn from them without threatening your job or your future
16. Feeling like you are held to a higher standard than others
17. People tend to recommend and select people like themselves

Career Planning:

Career planning is a coordinated effort between an employee and manager. In career planning, individuals set career-related goals by assessing (a) current situations, goals, and competencies; and (b) the necessary knowledge and skill development for upward mobility (Spurk et al., 2015). The Perceived Barriers to Career Advancement Scales measure CP. Participants rated the extent to which each of the factors had been a problem

to career advancement within the organization using the 5-point Likert scale ranging from 1 = *no problem at all*, to 5 = *a very serious problem* (See Appendix C):

Developing Relationships:

1. Developing relationships with senior managers
2. Developing an informal network
3. Credibility with your peers
4. Being assertive

Managing Own Career:

5. Initiating own job changes
6. Initiating moves across functions and businesses
7. Having a clear idea of your own career goals
8. Taking personal risks

Developmental Assignments:

9. Being offered key job assignments
10. Breadth of assignments or experiences
11. Having job assignments with bottom line responsibility
12. Early, significant responsibility and accountability for important tasks

Difficulty Getting Developmental Assignments:

13. Not getting the right jobs early in your career (that you need for later advancement)
14. Lack of opportunities to move across functions or businesses

15. Difficulty getting access to critical developmental assignments (e.g., serving on highly visible task forces or committees)
16. Not being considered when promotions for bigger jobs arise
17. Difficulty getting access to opportunities
18. Difficulty getting access to job assignments with bottom line responsibility
19. Not being offered stretch assignments

Poor Organizational Career Management Processes:

20. Poor career development and planning processes
21. Not knowing what the criteria are for advancement
22. Being unsure about how to initiate a job change

Difficulty Obtaining Opportunities for Geographic Mobility:

23. Needing to gain international experience in order to advance
24. Not being considered for jobs that require relocation (domestic)
25. Difficulty getting international assignments

Career Advancement

Career Advancement, the dependent variable, was measured using the Job Descriptive Index scale (JDI) 2009 version. The JDI scale initially developed by Smith, Kendall, and Hulin (1969) to measure job-related satisfaction examines five aspects of job satisfaction. This instrument has 72 items and measures satisfaction with promotional chances, pay, coworkers, supervision, and work in general. Although the JDI scale consists of five measurements, participants only responded to the statements related to the opportunities for promotion measure (See Appendix D). Instructions for completing

this survey were as follows: Participants were asked to think of the opportunities for promotions that they had now. How well did each of the following words or phrases describe these? In the blank beside each phrase below, participants were asked to write the following: Y for "Yes" if it described their opportunities for promotion; N for "No" if it did not describe their opportunities for promotion; and "?" for if they could not decide.

In this study career advancement was synonymous with opportunities for promotions. This specific measure contains six scales: (a) good opportunity for promotions, (b) opportunities somewhat limited, (c) promotion on ability, (d) dead-end job, (e) good chance for promotion, (f) very limited, (g) infrequent promotions, (h) regular promotions, and (i) fairly good chance for promotion. I did not need permission to use this scale for educational research. Table 2 contains a list of the factors studied.

Table 2

Job Descriptive Index Scale

Factor	Scale Measurements
Career Advancement	Opportunities for promotion Opportunities somewhat limited Promotion on ability Dead-end job Good chance for promotion Very limited Infrequent promotions, Regular promotions Fairly good chance for promotions

Note: The Job Descriptive Index Scale measures opportunity for promotion.

Career advancement occurs when an individual possesses higher valued human capital, high performance, and perceived worth to an organization. It is an upward career progression accomplished through successive positions over a length of time (Harris,

Pattie, & McMahan, 2015). The JDI scale consists of a checklist of adjectives or phrases that are answered as followed: “Y” agree, “N” disagree, and “?” cannot decide. Participants rated the following phrases:

1. Opportunities for Promotion
2. Opportunities somewhat limited
3. Promotion on ability
4. Dead-end job
5. Good chance for promotion
6. Very Limited
7. Infrequent Promotions
8. Regular Promotions
9. Fairly Good Chance for Promotions

Demographics

Demographic variables add depth to the analytical process. Participants responded to questions related to (a) gender, (b) ethnicity, (c) age, (d) tenure, (e) education level, and (f) the number of years of industry experience. The table below represents the demographic data collected.

Table 3

Factors and Descriptions

Factors	Descriptions
Demographic Factors	Hierarchical Position Educational Level Industry Experience Tenure

Note: Demographic factors will be gathered to investigate whether these factors influence the relationship amongst the variables.

Data Analysis Plan

Participants responded to a set of questions regarding their demographic background and how DM and CP initiatives related to career advancement. SPSS was used to perform a multiple regression analysis, which was used to analyze the linear relationship of the independent and dependent variables to measure the strength, significance, and the direction of the correlation between the variables. Static Solutions (2013) stated to investigate the research questions, a multiple linear regression should be performed to assess if DM and CP are related to career advancement. A multiple linear regression measures the correlation among a set interval/ratio variable on an interval/ratio criterion variable (Statistic Solutions, 2013). In this instance, the independent variables included DM and CP, and the dependent variable was career advancement. The following regression equation (main effects model) was used: $y = b1*x1 + b2*x2$; where Y = estimated dependent variable, c = constant (which contains the error term), b = regression coefficients and x = the respective independent variables (Statistic Solutions, 2013).

The multiple linear regression, stepwise regression, was used. This standard method input all independent variables (predictors) concurrently into the model. Variables were evaluated by what they contributed to the outcome of the dependent variable which was dissimilar from the probability provided by the other predictors in the model (Statistic Solutions, 2013). The *F* test was used to measure whether the set of independent variables jointly predicted the dependent variable. *R*-squared, the multiple correlation coefficient of determination, was stated and used to forecast how much variance in the dependent variable was explained by the set of independent variables (Statistic Solutions, 2013). The *t* test was used to determine the significance of each independent variable, and beta coefficients were used to determine the degree of prediction for each independent variable. For significant predictors, for each unit increase in the predictor, the dependent variable will increase or decline by the number of unstandardized beta coefficients (Statistic Solutions, 2013).

The assumptions of multiple regression, (a) linearity, (b) homoscedasticity, and (c) multicollinearity, were measured. Linearity assumes a straight-line association between the independent variables and the dependent variable, and homoscedasticity assumes that scores are normally distributed around the regression line (Statistic Solutions, 2013). I measured linearity and homoscedasticity by using a scatter plot. The nonexistence of multicollinearity suggested that independent variables were not significantly associated and were measured using variance inflation factors. Variance inflation factor values above 10 suggest there is multicollinearity (Statistic Solutions, 2013).

Threats to Validity

In this correlational study, I measured DM and CP and their relationships to the career advancement of women. Threats to validity tend to undermine the intent and claims of a study; therefore, processes should be in place to mitigate threats to external and internal validity, which increases generalizability and measurement rigor (Campbell & Stanley, 2015). Purpura, Brown, and Schoonen (2015) wrote researchers represent validity as bias and random error. Valid testing of the hypotheses requires valid and reliable operationalization of the variables (Purpura et al., 2015). Variables other than the independent variables are threats to validity. In this study, age, race, and brand affiliation were threats to validity. Before I was able to make claims about the constructs measured, the results of the survey had to be scrutinized for validity. When there is a high degree of internal validity, the researcher can conclude the evidence for causality is solid (Campbell & Stanley, 2015).

Threats to External Validity

External validity is the authentication of the results of the survey beyond the study (Smith & Noble, 2014). The strength of a study is the ability to generalize the findings to other populations. A small sample size poses a threat to external validity (Smith & Noble, 2014). Smith and Noble (2014) wrote an adequate sample size is needed to make conclusions from data analysis.

Another threat to external validity is the potential for a low response rate due to the survey method (Smith & Noble, 2014). A low response rate is problematic because of the variance between the people participating and those who choose not to participate.

Another problem may occur if participants' email programs identify the invitation to participate as spam. A communication strategy was implemented to overcome this threat. A preliminary study announcement was sent directly to all eligible participants via my work email account two weeks before the SurveyMonkey® invite was sent. Eligible participants received weekly survey reminders over an eight-week period.

Threats to Internal Validity

Internal validity is probably the most troublesome validity threat (Dunbar-Jacob, 2012). Threats to online surveys occur when (a) one person completes multiple surveys and (b) participants share a survey link outside of the sample population (Aust, Diedenhofen, Ullrich, & Musch, 2013). Traditional means of limiting unintended access, such as capturing cookies or limiting responses to one per single IP address, are ineffective because (a) individuals can manually change IP addresses, (b) cookies are erasable, and (c) participants can use multiple computers (Aust et al., 2013). The solution is to embed the URL with a password or allow the participant to enter a supplied password.

Another threat to internal validity is participant anonymity. Participants may be hesitant to respond truthfully for fear of repercussion (Dunbar-Jacob, 2012). Dunbar-Jacob (2012) reported the perception of anonymity is critical to the study as it has a direct effect on the participant response rate. Based on previous research, anonymity increased participant response rates and reduced social desirability (Dunbar-Jacob, 2012). Anonymity was discussed in the invitation to participate and in the informed consent

form. A valid assumption is the higher the degree of internal validity the stronger the evidence is for causality.

Bias in research introduces subjectivism. Participant bias consists of selection and inclusion bias, and both biases impact internal validity (Smith & Noble, 2014). Smith and Noble (2014) purported selection bias relate to the inclusion criteria and the process of recruiting participants. Recruitment should only include participants who meet the inclusion criteria and the goals of the study (Smith & Noble, 2014). Inclusion bias is related to the selection of participants who are representative of the population. One of the inclusion criteria, for example, required participants to have at least two years of tenure in the organization. The criterion did not say that tenure must be consecutive or affiliated with a specific brand within the organization. Participant understanding of what qualifies as tenure may have resulted in inconsistency in a participant's response to the question. The term *tenure* could have biased the selection against people who were on leave or global assignments. Another example of inclusion bias is an employee who worked in the United States on a foreign assignment, which could have skewed the data. An additional question was added to exclude individuals who were not expected to be employed permanently in the United States.

Threats to Statistical Conclusion Validity

Statistical conclusion validity (SCV) refers to aspects of the study's data collection and analysis processes that may affect the conclusions drawn by the researcher (Neall & Tuckey, 2014). Factors like low statistical power, unreliable measures, and violated assumptions are threats to SCV. Any of these factors can result in a researcher

making incorrect conclusions about the correlations (Neall & Tuckey, 2014). Statistical conclusion validity is the extent to which the conclusions drawn from the data are correct or reasonable (Neall & Tuckey, 2014).

Garcia-Perez (2012) wrote SCV differs from internal and external validity in that SCV allows the researcher to make assumptions about the extent to which conclusions drawn from the data are accurate or rational. Garcia-Perez stated there are three components to SCV. At question is (a) whether the study reveals a nonexistent effect; (b) whether there is enough statistical power to identify an effect, should it exist; and (c) how the degree of the effect can be confidently predicted. Statistical conclusion validity allows for inferences about the supposed covariation, provided there is a specified alpha level and there are variances (Garcia-Perez, 2012).

I made inferences about the relationships between the independent and dependent variables by using a quantitative correlational design. I employed safeguards to ensure the proper measurement of the relationships, and conclusions are drawn by (a) choosing significant statistical power, (b) avoiding the violation of assumptions of statistical testing, (c) using internal reliability tests, and (d) ensuring effect size accuracy. These precautions helped me avoid making incorrect conclusions; incorrect conclusions are the most common analysis error (Rovai, Baker, & Ponton, 2013).

Ethical Procedures

Ethical procedures are the primary consideration before any study can move forward (Wallace & Sheldon, 2014). Unethical research practices necessitated the reexamination of ethical standards for the protection and ethical treatment of participants.

Walden University's IRB must approve the IRB application before a study can begin. Ethical concerns include participant (a) right to privacy, (b) anonymity, and (c) fair treatment. Participants must understand they can withdraw from the study at any time. No research is risk-free. Standards are needed to ensure research processes meet the four ethical standards, which are (a) research and merit integrity, (b) justice, (c) beneficence, and (d) respect (Wallace & Sheldon, 2014).

Institutional Permission

I sought permission to undertake the study from the Walden University Institutional Review Board (IRB). I submitted the IRB application along with the (a) consent form, (b) survey demographic questionnaire, (c) Perceived Barrier to Career Advancement scales, (d) Perceived Facilitators to Career Advancement scales, (e) JDI scale, and (f) the NIH certificate to the IRB. I began collecting data when I received the IRB approval on July 27, 2019. The Walden IRB approval for this study was # 05-16-19-0292122.

Informed Consent

Potential participants were female employees of a United States-based automotive company. A minimum of 108 participants was required for this study. Participants received (a) a cover letter, (b) a letter of informed consent, and (c) instructions to ensure compliance, minimize risk, and provide clarity. These measures (a) ensured participants remained anonymous, (b) minimized risk, and (c) limited damages.

Ethical Concerns

Researchers have an obligation to conduct research ethically (Wallace & Sheldon, 2014). The sample pool was all women in the organization studied. Over 600 women were eligible to participate in this survey. Randomly selected participants received an electronic notification of the survey one week before the survey was launched. The randomly selected participants received an invite to participate in the survey via SurveyMonkey®. The email contained (a) an overview of the study, (b) the study's purpose statement, (c) implications of the study, (d) the projected time it would take to complete the survey, (e) the potential risks associated with participating, and (f) the survey questionnaires (see Appendixes A, B, C, & D). SurveyMonkey® was the survey administration mechanism. I was the only person authorized as a survey administrator. The results of data collection were password-protected and secured using Boxcryptor. Boxcryptor encrypts sensitive files and folders in cloud storages. Files will be saved for no less than five years. The implication of the previously described ethical standards were the minimum requirements to ensure the integrity of this study and the data collection process.

Data Collection and Instrumentation

This quantitative correlational study examined how DM and CP are related to the advancement of women in the United States automotive industry. Demographic information was gathered as part of the online survey (see Appendix A). I administered three instruments to collect the data: (a) the Perceived Facilitators to Career Advancement Scales (b) the Perceived Barriers to Career Advancement Scales, and JDI

scale (see Appendix B, Appendix C, and Appendix D). The authors advised no permissions were needed to use the scales for academic research (Bowling Green State University, 2009; Lyness & Thomas, 2000a, 2000b). Participants took the self-administered surveys via SurveyMonkey®. As previously described, data collection results were password-protected, I partnered with a statistical expert to analyze the data using SPSS software. We were the only people who had access to the raw data. Ultimately, I was responsible for the integrity of the data collection process. Failure to report all data results in researcher misconduct. All data remains anonymous with no identifying markers linking the survey to the participants' identities.

Other Ethical Concerns

There were several ethical concerns to consider. The firm understudy granted permission to conduct the study where I am employed. Participants may have included senior leaders in the department where I worked. Additionally, I was involved in the implementation of diversity and inclusion programs for the advancement of underrepresented groups within the firm. Each of these concerns could adversely have affected participation and create bias if left unchecked.

Other ethical issues included conducting the study at the workplace where I am employed, conflict of interests, and power differentials. First, the organization's identity was protected. Second, I addressed ethical issues associated with conducting research by seeking permission from the executive vice president of human resources and the diversity and inclusion leader. Permission from both leaders ensured the survey would continue without fear of discontinuation of the study. Also, I only used the survey results

to assess the efficacy of initiatives designed to advance the career of women. Conflict of interest was avoided by complying with ethical standards and limitations implemented by human resource leaders. Third, I made intentions clear to avoid any misconceptions regarding the motives for conducting the study. Last, random selection and the inclusion of participants across multiple brands within the company minimized bias. Less than 1% of eligible participants worked in the department where I worked. The selection process ensured the selection process was fair and participation was anonymous.

Furthermore, participants could withdraw from the study at any time by simply discontinuing the survey. The previous measures ensured confidentiality and anonymity of participants. Participants acknowledged the receipt of documentation detailing their right to terminate their participation.

Chapter 4: Results

The purpose of this quantitative correlational study was to investigate how DM and CP are related to the advancement of women in the United States automotive industry to improve the representation of women in management and senior-level positions. There were 10 questions. The general question was followed by nine specific questions that address DM and CP relationships to career advancement. The DM variables were (a) informal networks, (b) mentoring, and (c) cultural fit. Career planning variables are (a) career management, (b) developmental assignments, (c) difficulty getting developmental assignments, (d) career management processes, (e) relationship development, and (f) geographic mobility.

General Research Question: What is the relationship between the linear combination of DM and CP to the advancement of women working in the androcentric system within the United States automotive industry?

$H1_0$. The linear combination of DM and CP is not related to the level of the career advancement of women working in the androcentric system within the automotive industry.

$H1_a$. The linear combination of DM and CP is related to the level of career advancement of women working in the androcentric system within the automotive industry

Specific Research Question 1: What is the relationship between informal networks and the career advancement of women in the automotive industry?

$H1_{0.}$ There is no relationship between informal networks and the career advancement of women in the automotive industry.

$H1_{a.}$ There is a significant relationship between informal networks and the career advancement of women in the automotive industry.

Specific Research Question 2: What is the relationship between mentoring and the career advancement of women in the automotive industry?

$H2_{0.}$ There is no relationship between mentoring and the career advancement of women in the automotive industry.

$H2_{a.}$ There is a significant relationship between mentoring and the career advancement of women in the automotive industry.

Specific Research Question 3: What is the relationship between cultural fit and the career advancement of women in the automotive industry?

$H3_{0.}$ There is no relationship between cultural fit and the career advancement of women in the automotive industry.

$H3_{a.}$ There is a significant relationship between cultural fit and the career advancement of women in the automotive industry.

Specific Research Question 4: What is the relationship between problems developing relationships and the career advancement of women in the automotive industry?

$H4_{0.}$ There is no relationship between problems developing relationships and the career advancement of women in the automotive industry.

*H*4$_a$. There is a significant relationship between problems developing relationships and the career advancement of women in the automotive industry.

Specific Research Question 5: What is the relationship between problems managing one's own career and the career advancement of women in the automotive industry?

*H*5$_0$. There is no relationship between problems managing one's own career and the career advancement of women in the automotive industry.

*H*5$_a$. There is a significant relationship between problems managing one's own career and the career advancement of women in the automotive industry.

Specific Research Question 6: What is the relationship between problems obtaining developmental assignments and the career advancement of women in the automotive industry?

*H*6$_0$. There is no relationship between problems obtaining developmental assignments and the career advancement of women in the automotive industry.

*H*6$_a$. There is a significant relationship between problems obtaining developmental assignments and the career advancement of women in the automotive industry.

Specific Research Question 7: What is the relationship between problem getting developmental assignments and the career advancement of women in the automotive industry?

*H*7$_0$. There is no relationship between problem getting developmental assignments and the career advancement of women in the automotive industry.

*H*7$_{a.}$ There is a significant relationship between problem getting developmental assignments and the career advancement of women in the automotive industry.

Specific Research Question 8: What is the relationship between problems with organizational career management processes and the career advancement of women in the automotive industry?

*H*8$_{0.}$ There is no relationship between problems with organizational career management processes and the career advancement of women in the automotive industry.

*H*8$_{a.}$ There is a significant relationship between problems with organizational career management processes and the career advancement of women in the automotive industry.

Specific Research Question 9: What is the relationship between problems obtaining opportunities for geographic mobility and the career advancement of women in the automotive industry?

*H*9$_{0.}$ There is no relationship between problem difficulty getting geographic mobility and the career advancement of women in the automotive industry.

*H*9$_{a.}$ There is a significant relationship between geographic mobility and the career advancement of women in the automotive industry.

Chapter 4 includes the results of the study, in addition to the data collection and analysis process. I used the research questions and hypotheses to direct the data analysis, which consisted of descriptive analysis, multiple regression, and Pearson and Spearman correlations. The results provided insight in the participants' perception of perceived barriers and facilitators of career advancement.

Data Collection

A total of 165 female employees (specifically, candidates for promotion into managerial and leadership positions) of one United States-based automotive firm participated in the study. Based on the statistical parameters of (a) statistical power = 0.95, (b) effect size = 0.15 (medium), and (c) alpha level = 0.05 (two-tailed test), which signifies a 95% confidence interval and measures the level of error allowed in the data and the tolerable risk of receiving incorrect data projected, the ideal sample size was N = 108.

Due to limitations set by the firm under study I was limited in how I could recruit participants. The survey was open for 62 days with 165 employees attempting the survey. Unfortunately, only 96 participants answered all the questions, which is required to test the hypotheses. Of the 96 participants, I classified the data of four respondents as outliers after analyzing the data for univariate outliers; therefore, the final sample size was N = 92. Since the sample size was less than 108, I used a Spearman rank correlation coefficient in addition to a Pearson correlation. The Spearman's correlation determined the strength and direction of the monotonic relationship between the variables. It worked by calculating a Pearson’s correlation coefficient on the ranked values of the data. Whereas, the Pearson correlation determined the direction and strength of the linear relationship between the variables (Thirumalai, Chandhini, & Vaishnavi, 2017).

The results of the study are displayed in tables. The frequency counts for variables table displays the frequency counts for selected variables. The psychometric characteristic for summated scale scores table displays the psychometric characteristics

for the 10 summated scale scores. To answer the general research question, The Prediction of Opportunities Based on Scale Scores table displays the multiple regression prediction model for opportunities for promotion based on the nine scale scores. To answer each specific research question, The Pearson and Spearman Correlations for Scale Scores with Opportunities for Promotion table displays the Pearson and Spearman correlations for each of the nine scale scores with opportunities for promotion. As for the additional findings, the Pearson and Spearman Correlations for Selected Demographics with Opportunities for Promotion table and the Pearson and Spearman Correlations for Selected Variables with Opportunities for Promotion table displays the Pearson and Spearman correlations for the selected items with the opportunities for promotion. Last, as an exploratory analysis, the Prediction of Opportunities Based on Selected Variables table and Stepwise Regression table displays the results of the stepwise multiple regression model predicting the opportunities for promotion scale based on 55 candidate variables is detailed later in this chapter.

Descriptive Statistics

Table 4 displays the frequency counts for selected variables. Years with the firm ranged from 2 to 4 years (31.5%) to 20 to 25 years (7.7%) with a mean of M = 8.53 years. Years worked in the automotive industry ranged from 2 to 4 years (17.4%) to 20 to 34 years (22.8%) with a mean of M = 11.91 years. All were full-time salaried employees, with a majority holding bachelor's degrees (60.9%) and the rest having graduate degrees (39.1%). Most were classified as Grades 6-9 (60.9%); the rest as Grades 10-16 (39.1%) (See Table 4)

Table 4

Frequency Counts for Selected Variables (N = 92)

Variable	Category	*n*	%
Years with employer [a]	2 to 4 years	29	31.5
	5 to 9 years	34	37.0
	10 to 19 years	22	23.9
	20 to 25 years	7	7.7
Years in automotive industry [b]	2 to 4 years	16	17.4
	5 to 9 years	31	33.7
	10 to 19 years	24	26.1
	20 to 34 years	21	22.8
Full-time salaried employee	Yes	92	100.0
Highest education	Bachelor's degree	56	60.9
	Graduate degree	36	39.1
Position	Grades 6-9 (individual contributor)	56	60.9
	Grades 10-16 (management)	36	39.1

[a] Years with employer: M = 8.53 years, SD = 5.90. [b] Years in automotive industry: M = 11.91 years, SD = 7.96.

Table 5 displays the psychometric characteristics for the ten summated scale scores for facilitators of career advancement and opportunities for promotion. The Cronbach alpha reliability coefficients ranged from α= .72 to α= .94, with a median alpha of α= .82. Thus, the analysis indicated that all scales had adequate levels of internal reliability (Frankfort-Nachmais & Nachmais, 2008)

Table 5

Psychometric Characteristics for Summated Scale Scores (N = 92)

Score	Number of items	*M*	*SD*	Low	High	α
Facilitation from Informal Networks	2	2.87	1.22	1.00	5.00	.84
Facilitation from Mentoring	8	3.34	1.18	1.00	5.00	.94
Facilitation from Cultural Fit	7	3.39	0.75	1.57	4.86	.74
Problems Developing Relationships	4	2.46	0.95	1.00	4.75	.81
Problems Managing Own Career	4	2.92	0.86	1.00	5.00	.72
Problems Obtaining Developmental Assignments	4	2.84	1.08	1.00	5.00	.88
Problem Difficulty Getting Developmental Assignments	7	3.38	1.12	1.00	5.00	.93
Problems with Organizational Career Management Processes	3	3.79	0.94	1.33	5.00	.75
Problems Obtaining Opportunities for Geographic Mobility	3	3.18	1.10	1.00	5.00	.80
Opportunities for Promotion	8	1.49	0.50	1.00	2.75	.83

General Research Question

The general research question was: What is the relationship between the linear combination of diversity management and career planning to the advancement of women working in the androcentric system within the United States automotive industry? The related null hypothesis was H_0: The linear combination of diversity management and career planning is not related to the level of the career advancement of women working in the androcentric system within the automotive industry. Table 6 displays the results of the multiple regression model that predicted opportunities for promotion based on all nine scale scores. The final model was statistically significant (p = .001) and accounted for

29.0% of the variance in the opportunities for promotion scale score. Specifically, higher scores for opportunities for promotion were related to lower scores for problem difficulty getting developmental assignments (β = -.41, p = .004) and problems managing one's own career (β = -.24, p = .04). This provided support to reject the null hypothesis for the general research question.

Table 6

Prediction of Opportunities for Promotion Based on Scale Scores. Multiple Regression (N = 92)

Variable	*B*	*SE*	B	*p*	VIF
Intercept	2.20	0.32		.001	
Facilitation from Informal Networks	0.01	0.04	.01	.90	1.28
Facilitation from Mentoring	0.01	0.05	.02	.90	1.77
Facilitation from Cultural Fit	0.08	0.08	.12	.30	1.50
Problems Developing Relationships	-0.04	0.07	-.08	.55	1.89
Problems Managing Own Career	-0.14	0.07	-.24	.04	1.50
Problems Obtaining Developmental Assignments	0.05	0.06	.12	.40	2.26
Problem Difficulty Getting Developmental Assignments	-0.18	0.06	-.41	.004	2.26
Problems with Organizational Career Management Processes	0.02	0.06	.04	.71	1.55
Problems Obtaining Opportunities for Geographic Mobility	-0.05	0.05	-.10	.38	1.54

Note. Final model: $F(9, 82) = 3.73$, p = .001. R^2 = .290. Durbin-Watson = 1.80.

Specific Research Question 1

Research Question 1 was: What is the relationship between informal networks and the career advancement of women in the automotive industry? The related null hypothesis was $H1_0$: There is no relationship between informal networks and the career advancement of women in the automotive industry. Table 7 displays the Pearson and

Spearman correlations for facilitation from informal networks with opportunities for promotion. The Spearman correlation was also included for additional statistical verification. The relationship was not significant for either the Pearson correlation (r = .05, p = .63) or the Spearman correlation (r_s = .08, p = .44), providing no support to reject the null hypothesis for Research Question 1.

Specific Research Question 2

Research Question 2 was: What is the relationship between mentoring and the career advancement of women in the automotive industry? The related null hypothesis was $H2_0$: There is no relationship between mentoring and the career advancement of women in the automotive industry. Table 7 displays the Pearson and Spearman correlations for facilitation from mentoring with opportunities for promotion. The relationship was significant for the Pearson correlation, where higher scores for facilitation from mentoring were related to higher scores for opportunities for promotion (r = .23, p = .03), but the relationship was not significant for the Spearman correlation (r_s = .19, p = .07). This provided partial support to reject the null hypothesis for Research Question 2.

Specific Research Question 3

Research Question 3 was: What is the relationship between cultural fit and the career advancement of women in the automotive industry? The related null hypothesis was $H3_0$: There is no relationship between informal networks and the career advancement of women in the automotive industry. Table 7 displays the Pearson and Spearman correlations for facilitation from informal networks with opportunities for promotion. The

relationship was not significant for either the Pearson correlation (r = .02, p = .84) or the Spearman correlation (r_s = .02, p = .87), providing no support to reject the null hypothesis for Research Question 3.

Specific Research Question 4

Research Question 4 was: What is the relationship between problems developing relationships and the career advancement of women in the automotive industry? The related null hypothesis was $H4_0$: There is no relationship between problems developing relationships and the career advancement of women in the automotive industry. Table 7 displays the Pearson and Spearman correlations for problems developing relationships with opportunities for promotion. The relationship was significant for the Pearson correlation (r = -.23, p = .03) and for the Spearman correlation (r_s = -.22, p = .04); specifically, higher scores for problems developing relationships were related to lower scores for opportunities for promotion, providing support to reject the null hypothesis for Research Question 4.

Specific Research Question 5

Research Question 5 was: What is the relationship between problems managing one's own career and the career advancement of women in the automotive industry? The related null hypothesis was $H5_0$: There is no relationship between problems managing one's own career and the career advancement of women in the automotive industry. Table 7 displays the Pearson and Spearman correlations for problems managing one's own career with opportunities for promotion. The relationship was significant for the Pearson correlation (r = -.38, p = .001) and for the Spearman correlation (r_s = -.35, p = .001);

specifically, higher scores for problems managing one's own career were related to lower scores for opportunities for promotion, providing support to reject the null hypothesis for Research Question 5.

Specific Research Question 6

Research Question 6 was: What is the relationship between problems obtaining developmental assignments and the career advancement of women in the automotive industry? The related null hypothesis was $H6_0$: There is no relationship between problems obtaining developmental assignments and the career advancement of women in the automotive industry. Table 7 displays the Pearson and Spearman correlations for problems obtaining developmental assignments with opportunities for promotion. The relationship was significant for the Pearson correlation (r = -.28, p = .007) and for the Spearman correlation (r_s = -.33, p = .001); specifically, higher scores for problems obtaining developmental assignments were related to lower scores for opportunities for promotion, providing support to reject the null hypothesis for Research Question 6.

Specific Research Question 7

Research Question 7 was: What is the relationship between problem getting developmental assignments and the career advancement of women in the automotive industry? The related null hypothesis was $H7_0$: There is no relationship between problem difficulty getting developmental assignments and the career advancement of women in the automotive industry. Table 7 displays the Pearson and Spearman correlations for problems difficulty getting developmental assignments with opportunities for promotion. The relationship was significant for the Pearson correlation (r = -.47, p = .001) and for

the Spearman correlation(r_s = -.52, p = .001); specifically, higher scores for problems difficulty getting developmental assignments were related to lower scores for opportunities for promotion, providing support to reject the null hypothesis for Research Question 7.

Specific Research Question 8

Research Question 8 was: What is the relationship between problems with organizational career management processes and the career advancement of women in the automotive industry? The related null hypothesis was $H8_0$: There is no relationship between problems with organizational career management processes and the career advancement of women in the automotive industry. Table 7 displays the Pearson and Spearman correlations for problems with organizational career management processes with opportunities for promotion. The relationship was significant for the Pearson correlation (r = -.21, p = .05) and for the Spearman correlation (r_s = -.26, p = .01); specifically, higher scores for problems with organizational career management processes were related to lower scores for opportunities for promotion, providing support to reject the null hypothesis for Research Question 8.

Specific Research Question 9

Research Question 9 was: What is the relationship between problems obtaining opportunities for geographic mobility and the career advancement of women in the automotive industry? The related null hypothesis was $H9_0$: There is no relationship between problems obtaining opportunities for geographic mobility and the career advancement of women in the automotive industry. Table 7 displays the Pearson and

Spearman correlations for problems obtaining opportunities for geographic mobility with opportunities for promotion. The relationship was significant for the Pearson correlation (r = -.22, p = .04) and for the Spearman correlation (r_s = -.28, p = .007); specifically, higher scores for problems obtaining opportunities for geographic mobility were related to lower scores for opportunities for promotion, providing support to reject the null hypothesis for Research Question 9.

Table 7
Pearson and Spearman Correlations for Scale Scores with Opportunities for Promotion (N =92)

Variable	Opportunities for Promotion Pearson		Spearman	
Facilitation from Informal Networks	.05		.08	
Facilitation from Mentoring	.23	*	.19	
Facilitation from Cultural Fit	.02		-.02	
Problems Developing Relationships	-.23	*	-.22	*
Problems Managing Own Career	-.38	****	-.35	****
Problems Obtaining Developmental Assignments	-.28	**	-.33	****
Problem Difficulty Getting Developmental Assignments	-.47	****	-.52	****
Problems with Organizational Career Management Processes	-.21	*	-.26	**
Problems Obtaining Opportunities for Geographic Mobility	-.22	*	-.28	**

*p < .05. **p < .01. ***p < .005. ****p < .001.

Additional Findings

Table 8 displays the Pearson and Spearman correlations for four selected demographic variables with opportunities for promotion. Of the four variables, only

length of time worked in the automotive industry had a significant relationship with opportunities for promotion. Specifically, more years worked in the automotive industry were related to lower scores for opportunities for promotion for the Pearson correlations (r = -.24, p = .02) and Spearman correlations (r_s = -.24, p = .02).

Table 8

Pearson and Spearman Correlations for Selected Demographics with Opportunities for Promotion N = 92)

	Opportunities for Promotion	
Variable	Pearson	Spearman
Years with employer	-.07	-.12
Years in automotive industry	-.24 *	-.24 *
Highest education	.11	.10
Hierarchical position [a]	-.08	-.03

[a] 1 = *Grades 6-9 (individual contributor)*, 2 = *Grades 10-16 (management)*
*p < .05. **p < .01. ***p < .005. ****p < .001.

Table 9 displays the Pearson and Spearman correlations for selected variables with opportunities for promotion. Twenty-one of 42 of the correlations were significantly related to opportunities for promotion. For the sake of parsimony, the five largest correlations will be reported in the narrative. The opportunities for promotion scale was negatively related to: (a) problems initiating moves across functions and businesses for the Pearson (r = -.41, p = .001) and Spearman correlations (r_s = -.44, p = .001); (b) problems being offered key job assignments for the Pearson (r = -.38, p = .001) and Spearman correlations (r_s = -.44, p = .001); (c) lack of opportunities to move across functions or businesses for the Pearson (r = -.39, p = .001) and Spearman correlations (r_s = -.46, p = .001); (d) not being considered when promotions for bigger jobs arise for the Pearson (r = -.49, p = .001) and Spearman correlations (r_s = -.54, p = .001); and (e) difficulty getting access to opportunities for the Pearson (r = -.53, p = .001) and Spearman correlations (r_s = -.53, p = .001) (see Table 9).

Table 9

Pearson and Spearman Correlations for Selected Variables with Opportunities for Promotion (N = 92)

	Opportunities for Promotion Variable			
	Pearson		Spearman	
Moral support and encouragement from your mentor or manager during stressful times	.22	*	.21	*
Having senior manager(s) who facilitate(s) your career progress	.23	*	.24	*
Having role models	.24	*	.22	*
Having a role model	.22	*	.22	*
Developing relationships with senior managers	-.31	***	-.32	***
Initiating own job changes	-.31	***	-.29	**
Initiating moves across functions and businesses	-.41	****	-.44	****
Having a clear idea of your own career goals	-.24	*	-.20	
Being offered key job assignments	-.38	****	-.44	****
Breadth of assignments or experiences	-.31	***	-.39	****
Not getting the right jobs early in your career (that you need for later advancement)	-.36	****	-.40	****
Lack of opportunities to move across functions or businesses	-.39	****	-.46	****
Difficulty getting access to critical developmental assignments (e.g., serving on highly visible task forces or committees)	-.32	***	-.33	***
Not being considered when promotions for bigger jobs arise	-.49	****	-.54	****
Difficulty getting access to opportunities	-.53	****	-.53	****
Difficulty getting access to job assignments with bottom line responsibility	-.31	***	-.34	***
Not being offered stretch assignments	-.36	****	-.40	****
Not knowing what the criteria are for advancement	-.14		-.22	*
Being unsure about how to initiate a job change	-.25	*	-.27	*
Needing to gain international experience in order to advance	-.21	*	-.19	
Not being considered for jobs that require relocation (domestic)	-.23	*	-.33	***

*$p < .05$. **$p < .01$. ***$p < .005$. ****$p < .001$.

Table 10 displays the results of the stepwise regression model that predicted opportunities for promotion based on 55 candidate variables. Some interpretive caution is needed because some of these variables were ordinal ratings. The final three variable model was statistically significant (p = .001) and accounted for 36.0% of the variance in opportunities for promotion. Specifically, opportunities for promotion were related to lower scores for difficulty getting access to opportunities (β = -.49, p = .001), hierarchal position (β = -.21, p = .04), and initiating moves across functions and businesses (β = -.21, p = .03) (see Table 10).

Table 10

Prediction of Opportunities for Promotion Based on Selected Variables. Stepwise Regression
(N = 92)

Variable	*B*	*SE*	β	*p*	VIF
Intercept	2.93	0.28		.001	
Difficulty getting access to opportunities	-0.18	0.04	-.49	.001	1.33
Hierarchal position [a]	-0.21	0.09	-.21	.02	1.07
Initiating moves across functions and businesses	-0.09	0.04	-.21	.03	1.26

Note. Final model: $F(3, 88) = 16.47$, p = .001. R^2 = .360. Durbin-Watson = 2.01. Candidate variables = 55.
[a] 1 = *Grades 6-9 (individual contributor),* 2 = *Grades 10-16 (management)*

Summary

In summary, this study used data from 92 female candidates for promotion into managerial and leadership positions in one United States-based automotive firm to investigate how diversity management and career planning are related to career advancement to improve the representation of women in management and senior-level positions. The general research hypothesis (DM and CP with opportunities for

promotion) was supported (Table 6). Research Hypothesis 1 (informal networks and opportunities for promotion) was not supported (Table 7). Research Hypothesis 2 (mentoring and opportunities for promotion) was partially supported (Table 7). Research Hypothesis 3 (cultural fit and opportunities for promotion) was not supported (Table 7). Research Hypothesis 4 (problems developing relationships and opportunities for promotion) was supported (Table 7). Research Hypothesis 5 (problems managing own career and opportunities for promotion) was supported (Table 7). Research Hypothesis 6 (problems obtaining developmental assignments and opportunities for promotion) was supported (Table 7). Research Hypothesis 7 (problem difficulty getting developmental assignments and opportunities for promotion) was supported (Table 7). Research Hypothesis 8 (problems with organizational career management processes and opportunities for promotion) was supported (Table 7). Research Hypothesis 9 (problems obtaining opportunities for geographic mobility and opportunities for promotion) was supported (Table 7). In the final chapter, these findings will be compared to the literature, conclusions, and implications will be drawn, and a series of recommendations will be suggested.

Chapter 5: Discussion, Conclusions, and Recommendations

The scarcity of women in managerial and leadership roles in the United States automotive industry further increases the likelihood women will continue to face barriers to advancement (Deloitte, 2015). Despite women overcoming some employment glass ceiling barriers, gender disparity persists for women working in positions of authority (Appelbaum et al., 2013; Clevenger & Singh, 2013; Harvard Business Review, 2013; Smith & Monaghan, 2013). Female decision-makers often encounter situations where they have been set up for failure, pushing them over the glass cliff.

Deloitte (2015b) attributed the lack of women in leadership positions to limited access to social networks, few key leaders as role models, flexible work practices, and lack of sponsorship. The findings from this study confirmed Sabharwal's (2015) assertion that women are less likely to succumb to glass ceiling barriers and the glass cliff when they perceive and experience fairness in the workplace. I designed the general question in this study to investigate Sabharwal's assertion that there is a relationship between DM and CP to the career advancement of women. The null hypothesis was rejected. Each of the scales measured job satisfaction descriptors, perceived barriers to advancement, and facilitators to career advancement.

The purpose of this quantitative correlational study was to investigate how DM and CP related to the advancement of women in the United States automotive industry to improve the representation of women in management and senior-level positions. The variable of interest was gender because research indicates women encounter barriers to

career advancement and entering leadership in male-dominated industries (Catalyst, 2015; Deloitte, 2015).

Interpretation of Findings

The automotive sector's gender diversity profile suggests a bias toward men. The scarcity of women in managerial and leadership roles in the United States automotive industry further increases the likelihood that women will continue to face barriers to advancement (Deloitte, 2015). In this study, the general problem was the androcentric system within the United States automotive industry creates an environment that undermines initiatives designed to mitigate barriers that hinder the upward mobility of women into managerial and leadership positions (O'Neil & Hopkins, 2015; Sabharwal, 2013). The specific problem was that it is unknown how the relationship of DM (independent/predictor variable) and CP (independent/predictor variable) relate to the career advancement (dependent/criterion variable) of women in the United States automotive industry. If more women enter the automotive industry, there might eventually be more women in senior leadership positions and the management pipeline (Appelbaum et al., 2013; Badal & Harter, 2014; Kim & Starks, 2016; Reinert et al., 2016). Devillard et al. (2014) wrote that closing the gender gap required senior leadership engagement and commitment to creating a more diverse workforce, which can occur through DM and CP programs (Devillard et al., 2014).

Toossi (2015) suggested organizations implement programs and initiatives to expand the gender profile in senior leadership positions. Numerous researchers have found evidence to suggest DM and CP positively influence the pipeline of women into

decision-making positions (Alliance for Board Diversity, 2016; Catalyst, 2017a, Catalyst, 2018, McKinsey & Company, 2016). A male-dominated firm may implement DM initiatives such as executive mentoring and sponsorship programs to expand its pipeline of women. Researchers stated women who engaged in DM initiatives adapted to an organization's culture by participating in mentoring and networking. Furthermore, women who actively participated in DM initiatives were likely to be promoted (Ellemers, 2014; Olson, Parsons, Martins, & Ivanaj, 2015). Likewise, career planning contributed to the advancement of women into management and senior leadership (Cook & Glass, 2014; French & Strachan, 2013). Career planning consisted of (a) career management, (b) development assignments, and (c) geographic mobility. The variances in the literature regarding the impact of DM and CP program outcomes suggested the need for more research to investigate how DM and CP relate to the advancement of women (Williams, Kilanski, & Muller, 14).

I designed the research questions to examine how DM and CP related to the advancement of women in the automotive industry. There were 10 research questions, one general question and nine sub-questions. I designed the general question to examine the linear combination of the DM and CP scales and how they relate to career advancement. The nine sub-questions were designed to investigate individual DM and CP variables and their relationship to career advancement. The final scale model supported previous literature. There was a positive combined linear relationship between DM and CP, with the advancement of career advancement (Appelbaum et al., 2013; Clevenger & Singh, 2013; Harvard Business Review, 2013; Smith & Monaghan, 2013). HR leaders

may want to consider the results of this study before committing to policies, programs, and financial resources to DM and CP initiatives to advance women into managerial and senior leadership roles.

Some of the literature in Chapter 2 was supported in this study. The positive impact of networks and mentoring were not supported. Women aspiring to work in management are often encouraged to build their networks. Researchers purported that establishing networks is a way for women to create awareness of their interests and to learn about career opportunities (Ellemers, 2014; Olson, Parsons, Martins, & Ivanaj, 2015). Jauhar and Lau (2018) indicated that women who participated in informal channels, also known as the old boys' network, had a broader network than women who did not. This network is critical when managers need to make quick decisions that are a result of organizational changes. Managers tend to have a bias towards individuals they know (Jauhar & Lau, 2018). Jauhar and Lau (2018) stated the informal network was a conduit to prime assignments, developmental projects, and promotions. However, contrary to Jauhar and Lau (2018), the findings of this study showed that women did not find informal networking or mentoring beneficial to their career advancement. The findings of this study rejected the null hypothesis ($H1_0$) that stated there is no relationship between informal networking and the career advancement of women in the automotive industry. Likewise, the finding of the study partially rejected the null hypothesis ($H2_0$) regarding the relationship between mentoring and career advancement. For these reasons, further investigation regarding the relationship between mentoring and career advancement is warranted.

Similar to the findings regarding informal networks, the hypothesis related to cultural fit and career advancement was not supported. Organizational culture, as stated by Martin and Bernard (2013), is primarily formed by men, which contributes to gender disparity. Watkins and Smith (2014) purported that the lack of women in decision-making roles contributed to a workplace culture that supported male biases. This gender imbalance contributed to subjective gender standardization in human resources policies and programs that value maleness. For example, developmental and promotional opportunities often excluded women because of masculine stereotypes and pro-male biases (Watkins & Smith, 2014). Previous researchers suggested that women adopt masculine traits and behaviors to assimilate (Watkins & Smith, 2014). The findings of this study rejected the null hypothesis ($H3_0$) that stated there is no relationship between cultural fit and the career advancement of women in the automotive industry. This data also rejected some of the assertions purported in Chapter 2.

Limitations of the Study

Several limitations were detailed in Chapter 1. Yet, the limitations described were not comprehensive. Generalizability of the results was a principal limitation. I intended to generalize the findings of this study to other U.S. automotive companies However, due to the limited sample size, I would be hesitant to make assumptions or inferences about other populations. Simon and Goes (2013) stated that a larger sample size enables a researcher to generalize to a larger population. The ideal sample size for this study was 108; however, the final sample size in this study was 92. The firm's leadership set limitations on how participants were solicited, which limited access to employees located

outside of the corporate headquarters. Participants were solicited via email, referral, and LinkedIn to exhaust all possibilities for recruitment. Fewer restrictions on the recruitment process may have increased the number of participants. Since I did not have the ideal number of participants, I used Spearman's correlation in conjunction with Pearson's correlation to further determine the strength and the direction of the relationships between independent and dependent variables (Thirumalai, Chandhini, & Vaishnavi, 2017).

I used selection criteria to limit selection bias. Although the selection criteria remained unchanged, the change in the recruitment method may have introduced bias. The recruitment restrictions required that I use another medium to recruit participants. Due to compliance regulations, I was only allowed to communicate information regarding the study to employees that I knew personally via the corporate email. Moreover, I was only allowed to send the survey link to the employee's private email account. These guidelines may have introduced selection bias. Ultimately, I used LinkedIn as another means to solicit participation.

The survey was initially limited to participants employed at a U.S. automotive manufacturer’s sales company location. However, the need for more responses required that I expand the sample population to female employees at the manufacturing facility. Employees employed at the manufacturing plant and satellite offices have access to fewer DM programs than the employees located at the corporate headquarters. Participants' responses may have varied based on the types of DM programs and CP initiatives at each geographic location and division.

Recommendations

Women's increased participation in the labor forces has not led to more women into a managerial and senior-level position. Women have attained more skills and qualifications, and the number of women in entry-level positions is equal to men. However, despite these achievements, Devillard, Sancier-Sultan, and Werner (2014) posited women faced a more significant number of invisible and artificial barriers to career advancement than their male counterparts. Furthermore, the gender gap is more significant as women advanced into C-suite-level management positions (Devillard et al., 2014).

The automotive industry is experiencing pressure to increase its gender diversity profiles and succession pipelines (Credit Suisse, 2012). This study may benefit companies seeking to develop programs and initiatives to shift an androcentric pipeline to one that reflects the gender diversity at the entry-level. The finding of this study may be used by HR professionals and organizational development professionals seeking to develop DM programs and CP initiatives to diversify the talent pipeline at all levels and better prepare women for career advancement. Thus, I recommend that future research should compare the efficacy of DM and CP for women working in U.S. automotive firms. Currently, General Motors Corp., Aston Martin of the Americas, and Lincoln Motor Company are the only automotive companies led by women. This study investigates the relationship between diversity management and career planning programs as solutions to gender related issues in the workplace.

The results of this study concluded that women in the earlier stage of their career believe there was more opportunity for advancement. Chisholm-Burns, Spivey, Hagemann, and Josephson (2017) indicated that the opportunity for women to reach director-level or higher is brief. Researchers stated the women in senior management careers were more likely to enter management during the earlier part of their careers (McKinsey & Company, 2019). Women need to seek advancement opportunities within a few years of taking an individual contributor position since promotional opportunities start to deteriorate the longer they are in these roles. Based on the findings of this study, I recommend additional research on the voluntary job shifts, mobility resources, and opportunity structures for women into management and leadership positions (O'Neil, Hopkins, & Bilimoria, 2015; Spurk, Kauffeld, Barthauer, & Heinemann, 2015).

I also recommend that future research examine individual factors affecting the career advancement of women in the automotive industry. There is limited research comparing how individual factors such as age and tenure affect women's career aspirations, successes, and challenges. Afande (2015) claimed that research on women's careers was generalized but did not consistently include age as a factor. Future researchers should examine the difference, if any, age and tenure have in the career advancement of women. Differences and causal perceptions may vary by race, age groups, and industry (Afande, 2015).

Implications

As discussed in Chapter 2, the results of this study have the potential impact on positive social change at many levels. This study provides awareness of the efficacy of

DM and career planning as a solution to glass ceiling barriers. The findings of this study confirm what researchers already know about women's perceptions about how resources and opportunities help advance them into management and senior leadership. Additionally, the findings contribute to the academic and scientific literature regarding the relationship between DM programs and CP initiatives for the advancement of women in the automotive industry.

The social change implications are notable to the advancement of women. The study contributes collective baseline quantitative data on the career advancement of women in the U.S. automotive industry. Positive social change may occur should HR leaders and diversity and inclusion practitioners choose to re-evaluate the efficacy of their existing initiatives using this study as the framework. Similarly, this study can be used as a blueprint for how companies could better offer their female individual contributors employed in entry-level positions equal access to resources and opportunities deemed to affect their career trajectory into managerial and leadership positions.

At the individual level, the implications of this study are vast. The findings of this study represents what some women have deemed significant to their career growth potential. Women at various stages of their career may use these results of this study to re-evaluate their career advancement strategy. Additionally, participants reported two initiatives that have little impact on career advancement. Two null hypotheses were supported. Informal networking and cultural fit did not relate to career advancement. These results are contrary to previous research that states informal networking enhances social ties and provides access to resources such as access to information and decision-

makers (Dennissen, Benschop, & van den Brink, 2019). Women may be relieved to know that they can find a balance between how they spend their professional and personal time. Previous researchers suggested women feel compelled to choose informal work events over family time (Adams, Flynn, & Wolfman, 2015; Clevenger & Singh, 2013; Germain et al., 2012; O'Neil et al., 2011). However, based on the results of this study, women did not perceive there to be a significant link between informal networking and advancement.

The positive social implications at the organization level are vast. Human Resource leaders may use this research to re-evaluate their talent development and succession planning strategies. Leaders may want to consider what programs women find valuable and dedicate their resources to creating or enhancing those programs and initiatives. Also, leaders may want to pay attention to how participants responded based on their age, experience, and tenure. This information may help inform which DM and CP programs may be most beneficial to organizations based on the demographic composition of their workforce. Moreover, HR professionals should consider the evidence that suggested that age has a significant role in women's perceptions about advancement. This information is pertinent when developing various platforms for professional development.

Lastly, the findings of this study may contribute to social impact by providing young women practical insight into the benefits and efficacy of networking, sponsorships, global assignments, developmental opportunities, informal networks, and mentoring. Educational institutions could offer courses that teach women majoring in male-dominated professions how to navigate the workplace and advance into

management. Organizations could create a policy that allows their employee's equal access to initiatives that will provide them the soft and hard skills needed to advance. Such programs could help close the gender gap in managerial and at the senior level.

Theoretical Implications

As mentioned in Chapter 1, Greenberg's (1990) organizational justice theory provided the theoretical framework for the study. A derivative of equity theory, organizational justice theory is a multidimensional construct allowing for the measurement of an employee's perceptions of workplace fairness (Fujimoto, Härtel, & Azmat, 2013). Fujimoto, Härtel, and Azmat (2013) described fairness in the workplace using three subjective acuities: (a) distributive justice, (b) procedural justice, and (c) interactional justice. Organizations perceived as having great organizational justice tend to have engaged employees who are content with their ability to advance. Moreover, the employees in organizations with greater organizational justice believe the resources are distributed reasonably and equitably (Brown, et al., 2011; Germain et al., 2012; Hancock & Hums, 2015; Johnson, 2012; Shaw, Park, & Kim, 2013).

Although there is an abundance of research on the advancement of women in the automotive industry using qualitative designs, there is limited quantitative research on the impact of DM and CP, and their impact on the advancement. This study aimed to go beyond women's experiences in the industry by investigating the efficacy of purported solutions to glass ceiling barriers. The results of this study revealed that the linear combination of diversity management and career planning was related to the level of the career advancement of women working in the androcentric system within the automotive

industry. Researchers purported that DM programs and initiatives are solutions designed to create fairness in the workplace (Benschop et al., 2015). In this study, female employees perceived that when combined, DM and CP related positively to their opportunities for promotion. Specifically, higher scores for opportunities for promotion were related to lower scores for problem difficulty getting developmental assignments ($\beta = -.41$, $p = .004$) and problems managing one's own career ($\beta = -.24$, $p = .04$). These data provided support to reject the null hypothesis for the general research question, which was H_0: The linear combination of diversity management and career planning is not related to the level of the career advancement of women working in the androcentric system within the automotive industry.

In this study I investigated the individual relationship between career advancement and (a) informal networking, (b) networking, (c) sponsorship, (d) developing relationships, (e) developmental assignments, (f) cultural fit, (g) developmental assignments, (h) career management, and (i) global mobility. There was not a significant individual relationship between informal networks, mentoring, and cultural fit. The findings were contrary to the literature that states women must build informal networks, seek a mentor, and assimilate to the male-dominated culture (Zdroik & Babiak, 2017). For example, women shared their belief that during activities such as playing golf is where leaders conducted most of the business. The participants in this study did not perceive that cultural fit, mentoring, or informal networks such as the “old boys” network individually contributed to opportunity parity, which suggests there is fairness in advancement and developmental opportunities by gender (Jauhar & Lau,

2018). Corporations may want to do more to encourage women to actively engage in DM and CP initiatives that participants in this study reported to impact promotion opportunities into management and senior leadership positively. For example, a peer partner program that pairs current female employees with newly hired female employees for the first 90 days to introduce them to DM and CP initiatives and provide a support system.

Conclusions

The purpose of this quantitative correlational study was to investigate how DM and CP are related to the advancement of women in the United States automotive industry to improve the representation of women in management and senior-level positions. The variable of interest was gender because research indicates women encounter barriers to career advancement and entering leadership in male-dominated industries (Catalyst, 2015; Deloitte, 2015). The research design was correlational, which allowed for the examination of what predictive relationships, if any, existed among the independent and dependent variables (Curtis, Comisky, & Dempsey, 2016). The theoretical framework was organizational justice. The study involved using multiple regression to test the following instruments: (a) Perceived Facilitators to Career Advancement Scales, (b) Perceived Barriers to Career Advancement Scales, and JDI Scale to answer one general question and nine sub-questions, and responses from 92 respondents were analyzed.

The general research question investigated the combined linear relationship between diversity management and career planning to the advancement of women

working in the androcentric system within the United States automotive industry. The final model looked at the facilitators and barriers to advancement and was statistically significant (p = .001) and accounted for 29.0% of the variance in the opportunities for promotion scale score. Specifically, higher scores for opportunities for promotion were related to lower scores for problem difficulty getting developmental assignments (β = -.41, p = .004) and problems managing one's own career (β = -.24, p = .04). This provided support to reject the null hypothesis for the general research question.

The Spearman rank correlation coefficient in addition to a Pearson correlation were used to test the sub-questions investigated the individual relationship of (a) informal networks, (b) mentoring, (c) cultural fit, (d) relationships, (e) career management, (d) developmental assignments, (f) career management processes, and (g) opportunities for geographic mobility to the career advancement of women. The Spearman's correlation -- determined the strength and direction of the monotonic relationship between the variables. It worked by calculating a Pearson's correlation coefficient on the ranked values of the data. Whereas, the Pearson correlation determined the direction and strength of the linear relationship between the variables. All but three independent variables were found to have a significant relationship to the career advancement of women in the automotive industry. Contrary to previous research, two hypotheses ($H1_0$ and $H3_0$) were not rejected. Informal networks and cultural fit had no relationship to the career. Hypothesis 2 ($H2_0$) related to mentoring and was partially supported. The results of this study might influence the types of DM and CP initiatives HR leaders chose to offer and financially support as an employee benefit.

The data from this study suggested that women perceived that DM and CP impacted the advancement of women in the automotive industry. However, informal networks, mentor, and cultural fit did not have a significant impact on career advancement as previous research suggested (Adams, Flynn, & Wolfman, 2015; Clevenger & Singh, 2013; Germain et al., 2012; O'Neil et al., 2011). Based on the results, I recommend further investigation into why women in the automotive industry may find informal networks, mentoring, and cultural fit to having no relationship to career advancement in comparison to other U.S. automotive firms and male-dominated industries. Another opportunity for future research is to conduct a comparison analysis. There was evidence that younger women in entry level positions when compared to older women in management believed there was a relationship between DM and CP that impacted their career advancement. Corporations might use the findings from this type of study to develop targeted programs that meet the specific needs of their workforce. Lastly, the data showed that women with fewer years in the automotive industry related to higher scores for opportunities for promotion. Since the data does not explicitly inform why women with less industry experience perceive there is greater opportunities for promotion, I hypothesize that more years in the industry allows for more opportunities to encounter perceived barriers to opportunities for promotion. Another possible reason for the inverse relationship would be that as the person progresses in their career, there are fewer positions available for either men or women. As an example, in most organizations, there are many more jobs available for individual contributors than there are for managers. This data presents an opportunity for further investigation into the length of

time women have worked in the auto industry and its relationship to opportunity for promotion.

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Appendix A: Survey-Demographic Questions

INSTRUCTIONS

Participants will provide demographic information that will be used to enhance the result findings and aid in determining predictive relationships.

IMPORTANT TO REMEMBER:
All responses to the survey questions below are provided on a voluntary basis and, the information given is anonymous and safeguarded as such.

1. How long have you worked in the automotive industry?

2. How long have you worked for the current employer?

3. Are you a full-time salaried employee?

4. What is the highest level of education you have completed, or the highest degree attained?
   a. Some college but no degree
   b. associate degree
   c. bachelor's degree
   d. post graduate degree

5. What is your hierarchal position?
   a. Grades 1-5
   b. Grades 6-9
   c. Grades 10-16

Appendix B: Perceived Facilitators to Career Advancement Scales

Instructions: Please rate the extent to which each of the factors has facilitated career advancement within the organization on a scale ranging from 1 (not a facilitator) to 5 (a very important facilitator).

Items

Informal Networks

1. Social events and informal interactions with colleagues, either on or off the job
2. Access to informal networks

Mentoring

3. Moral support and encouragement from your mentor or manager during stressful times
4. Help from your mentor in establishing key relationships
5. Advice from your mentor about how to solve difficult business problems
6. Having senior manager(s) who facilitate(s) your career progress
7. Having role models
8. Having a mentor or someone who provides good advice on career opportunities
9. Working for manager(s) who take an interest in your career
10. Information about organizational politics from your mentor or manager

Lack of Culture Fit

11. Fitting in or adapting to the culture
12. Having a role model
13. Not being an outsider
14. Not feeling comfortable asserting your views because of possible consequences
15. Feeling that you can't make mistakes and learn from them without threatening your job or your future
16. Feeling like you are held to a higher standard than others
17. People tend to recommend and select people like themselves

Appendix C: Perceived Barriers to Career Advancement Scales

Instructions: Please rate the extent to which each of the factors has been a problem to career advancement within the organization on a scale ranging from 1 (no problem at all) to 5 (a very serious problem).

Items

Developing Relationships

1. Developing relationships with senior managers
3. Developing an informal network
4. Credibility with your peers
5. Being assertive

Managing Own Career

6. Initiating own job changes
7. Initiating moves across functions and businesses
8. Having a clear idea of your own career goals
9. Taking personal risks

Developmental Assignments

10. Being offered key job assignments
11. Breadth of assignments or experiences
12. Having job assignments with bottom line responsibility
13. Early, significant responsibility and accountability for important tasks

Difficulty Getting Developmental Assignments

14. Not getting the right jobs early in your career (that you need for later advancement)
15. Lack of opportunities to move across functions or businesses
16. Difficulty getting access to critical developmental assignments (e.g., serving on highly visible task forces or committees)
17. Not being considered when promotions for bigger jobs arise
18. Difficulty getting access to opportunities
19. Difficulty getting access to job assignments with bottom line responsibility
20. Not being offered stretch assignments

Poor Organizational Career Management Processes

21. Poor career development and planning processes
22. Not knowing what the criteria are for advancement
23. Being unsure about how to initiate a job change

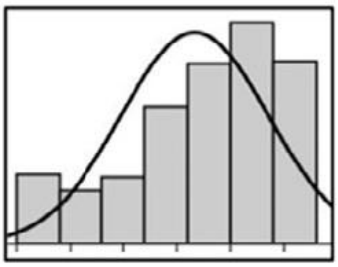
Difficulty Obtaining Opportunities for Geographic Mobility

24. Needing to gain international experience in order to advance

25. Not being considered for jobs that require relocation (domestic)
26. Difficulty getting international assignments

Appendix D: Job Descriptive Index Scale

THE JOB DESCRIPTIVE INDEX



2009 Revision

including

The Job in General Scale

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Opportunities for Promotion

Think of the opportunities for promotions that you have now. How well does each of the following words or phrases describe these? In the blank beside each phrase below, write

Y for "Yes" if it describes your opportunities for promotion.

N For "No" if it does not describe your opportunities for promotion.

? For "?" if you cannot decide.

1. Good for opportunities for promotion
2. Opportunities somewhat limited
3. Dead-end job
4. Good chance for promotion
5. Very limited
6. Infrequent promotions
7. Regular promotions
8. Fairy good chance for promotion