Male Allyship from the Perspectives of Women in Technology (Tech.)

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Submitted in partial fulfillment of the
requirements for the degree of Doctor of Education in
Teachers College, Columbia University

2023

Abstract

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This study explores male allyship, a growing trend in the Technology (Tech.) sector, from the perspective of women who work or have worked in the industry. This qualitative case study consisted of a sample of ten women and ten self-identified male allies from the industry along with three men and four women who participated exclusively in a focus group discussion. All 27 participants had a standard criterion to qualify as volunteers for the study and were introduced to the same research questions in the interview protocol: (1) How do women identify male allies? (2) How do women learn from male allyship? and (3) What attributes do male allies possess to be successful in supporting women from the women's perspective? Findings show that women identified male allies unknowingly and in professional working environments, where male allyship became associated with helping women achieve transformative outcomes in their careers.

Bandura's theory of reciprocal determinism was used as a framework to demonstrate how women are central to driving the learning from male allyship through self-directedness and by operating with agency in their organizational environment. Women described men taking an active stance on behalf of women and being allies in their existing professional responsibilities as the most successful attributes of being an ally.

The study concludes with a recommendation to incorporate the study findings into an academic curriculum for men and women interested in practicing allyship in a cohort based academic setting. It also recommends organizations embed allyship in all business activities to

help men become better allies to women. This study provides timely guidance for individuals and organizations seeking to engage male allies in gender equity initiatives.

Table of Contents

APPENDICES

List of Tables

List of Figures

Acknowledgments

I would like to acknowledge and express my heartfelt gratitude to the persons who encouraged and helped me in the process of undertaking and completing this dissertation. First and foremost, to my participants, who dedicated time and energy by participating in interviews and focus groups and continued to rally and support me as I got through writing my findings. I am humbled by their vulnerability and dedication to this body of research.

To Dr. Marsick, without whom I would not be typing this Acknowledgements page. I am awed and inspired by you. Thank you for believing in me through the years. I am so thrilled that I get to take away a little bit of your legendary spark in this research. Your encouragement in me as a researcher has helped me grow through these last few years. Dr. Nancy Goldman, my partner in crime and friend, thank you for always being there for me and helping me cut through hours of edits. My undying love and thanks to Dr. Gina Buontempo for being my TC rock and closest advisor through many ups and downs. Many hugs to Dr. Marie Volpe, who set me straight with that miracle of a document called her famous "one pager."

To my bosses and clients who did everything in their professional network to create opportunities for this research at work. I am forever grateful to you, Danielle Weiskopf, Karim Herdsman, Shweta Patira, Chris Pruett, Adam Wolkov, and Byron Ma.

Grateful for my family, without whom nothing is possible, and my husband, Derek McMillan, who is the model male ally and will probably shy away from this acknowledgement once he reads it.

P. K.

Dedication

This dissertation is dedicated to my mother, Tina Kishore, for always being an honest woman.

Chapter 1: Introduction

Chapter I describes the grim reality of the lack of women leaders in the Technology (hereafter referred to as Tech.) industry and the shortage of female role models in helping bridge the gender diversity problem. In a 2019 study conducted for the S&P Global's #ChangePays campaign that explored the benefits of increasing the participation of women in the workforce, IT departments in 550 companies globally reported that women accounted for less than 25% of their staff. Looking more closely, 90 public technology companies rated by S&P Global Ratings show a wide distribution of female employees averaging about 30% of the company, with growth averaging an annual 1-2% in 2016 and 2018. For technical positions, that distribution was further narrowed to 5-10%, implying that most women in technology companies tend to occupy more administrative and support roles. The Tech. industry, dominated by males and therefore driven by a male-centric culture, presents a unique opportunity to study how men can play a role in creating an equitable workplace.

Companies are now looking to men to achieve gender parity in technology fields with a set of recommended actions of support popularly called 'allyship.' While there is no definitive definition of what comprises "male allyship," for the purposes of this study a definition of male allyship behavior was formulated from the existing research. Male allyship ranges from actively fighting unconscious bias to speaking up as a voice of support and mentoring women in their career journeys. The chapter presents the: Research Problem, Research Purpose and Questions, Approach, Assumptions, Rationale and Significance, The Researcher, and Definitions.

Background and Context

The Shortage of Women in Tech.

In the last 20 years, the Tech. sector, viewed as the great equalizer because of its constantly dynamic momentum in bringing the world together and transcending social characteristics, geographic location, and physical or sensory abilities, has contradicted its reputation by having the lowest overall participation of women in leadership/corporate officer roles and a dominant male-centric culture. Research by Catalyst (1999) showed that the IT or Tech. sector has the lowest overall participation of women (8.1%) at the corporate officer level compared to the financial services (27.1%) and publishing/printing (24.1%) industries. These data referenced from the 1999 Catalyst census survey of women corporate officers and top earners showed that in various Fortune 500 ranked organizations, 88.1% of corporate officer positions continue to be held by men, a number that has increased to a dismal 10% per the results of the Harvey Nash/KPMG CIO survey in the last few years (Nash/KPMG, 2019).

The Harvey Nash/KPMG CIO Survey (2019) captured the views of more than 3,600 technology leaders around the world. The survey results were published as a report and subsequently discussed in the research article, *Gender diversity is failing in tech: How can we turn it around?* which calls out several systemic factors that contribute to perpetuating the problem, notably that most companies and the industry continue to operate using 'male-centric' practices with unconscious biases.

Large Tech. companies have surveyed their own employees and have recently begun to explore the role of being better sponsors, allies, and mentors to women. Research conducted by Microsoft in 2017 indicates that women felt that the lack of accessible role models prevented them from furthering their interests in a technical career. In the study, women summarized their feelings in the following quote: “You can’t be what you can’t see” (Whittlesey, 2019).

The Shortage of Women as Role Models, Mentors, and Faculty

The problem persists with the number of women pursuing careers in Tech. and scientific fields. Themes from the research show how the lack of same-gender mentoring or the lack of mentoring opportunities at large has prevented women from pursuing careers in Tech. In a longitudinal study by Bettinger and Long (2005), female students remained much less likely to major in quantitative, technical, and science-related fields. To address this problem, some suggest increasing mentoring opportunities for female students by hiring more women faculty members. This study examined whether the presence of same-gender faculty members affects student interest in a subject using a comprehensive, longitudinal dataset of nearly 54,000 students. The findings showed that although there might not be a direct bearing on the subject’s interest level based on the gender of the faculty, a female faculty member in an initial course affects the likelihood that a female student will take additional credit hours or major in a particular subject that may be characterized as male-dominated.

A 2005 study prepared for the National Center for Women & Information Technology (NWIT) interviewed successful women at high levels in Tech. and revealed a series of cultural stereotypes made by organizations in promoting women to leadership positions. These cultural stereotypes exclude women from the informal networks that enhance skills and deny them the useful informal insights into the politics and power inside their organizations. The study asserts creating role models for women as the way forward to changing the culture and suggests that engineers and computer scientists need to learn ‘gender acclimatization,’ a term used to define helping men and women become more comfortable with mentors of both genders (Ramsey & McCordick, 2005).

Can Males be Mentors to Women in Tech.?

Kram's (1983) mentor role theory described mentors as those perceived to provide career development and facilitate upward mobility for protégés. They support and nurture protégés to identify a professional identity. Kram shares in her research that mentorship perceptions are influenced by the gender of the mentor, which shapes the mentoring relationship. In her research, she describes cross-gender mentoring being unsuccessful, as it is restricted by sexual tension and expectations. This notion has a particular adverse impact on women in organizations, who suffer from a shortage of female mentors. The study, *Perceptions of mentor roles in cross-gender mentoring relationships* (Ragins & McFarlin, 1990) used Kram's theories (1983) to examine protégés' perceptions of mentor roles in cross- and same-gender mentoring. The purpose of the study was to give attention to the issues of cross-gender mentoring and specifically explore the impact of gender composition in mentorship relationships.

The Ragins and McFarlin study (1990) minimized methodological and measurement problems by developing a reliable mentor instrument and by controlling several demographic, organizational, and mentorship variables that may influence mentor role perceptions. With these safeguards, only a few differences emerged between cross- and same-gender mentoring relationships, and the study found that both male and female mentors provided equally engaging career development roles for protégés. While women continue to face more barriers than men in advancement, this study highlights that male mentors can help women overcome these barriers and encourages cross-gendered mentorship as an accessible solution in male-dominated industries.

While mentoring has been identified as a key career resource for men and women in organizations, the mentoring literature remains unclear regarding the role of gender in mentoring relationship processes and outcomes. An empirical study conducted by Sosik and Godshalk (2000) focuses on examining how the gender composition of the mentoring dyad influences the career development, psychosocial, and role modeling functions mentors provide to protégés. A total of 200 respondents of professional, part-time adult students in the MBA program of a large public Northeastern university were surveyed on a questionnaire in which they provided data on their existing mentoring relationships. The questionnaire presented questions on how the respondents defined mentoring and what skills were needed in their mentor to define the relationship.

The results showed that 71% were in same-gender dyads while 29% were in cross-gender dyads, revealing some interesting themes. Study results provided further evidence of the efficacy of cross-gender dyads in mentoring relationships. Specifically, male mentor/female protégée dyads reported higher amounts of career development discussion than any other combination of the mentoring. Results of the present study raise an interesting implication for practitioners. Prior research suggests that mentors shy away from cross-gender relationships with protégés due to potential problems, such as sexual tension and lack of perceived similarity. The study, however, indicated that female mentor/male protégé dyads were associated with higher ratings of role modeling and psychosocial support functions than homogeneous male dyads. Therefore, organizations wishing to enhance the career development of women may consider developing and delivering training modules addressing issues critical to the success of cross-gender mentoring relationships (e.g., gender differences, sexual harassment, transformational leadership).

The Growing Trend of Male Allyship

The gender inequity problem in the Tech. sector stems from the lack of women in the industry, and therefore, today's Tech. climate is forcing companies to consider active steps in recruiting males to help transform the culture. An article published in TechCrunch (2016), *How male allies can support women in technology*, discusses how companies are now looking to men to drive gender parity in technology fields, with a set of recommended actions of support called 'allyship.' As mentioned before, male ally behavior can range from actively fighting unconscious bias to speaking up as a voice of support and mentoring women in their career journeys.

In the past decade, organizational scholars have begun to explore the role of allies in mitigating workplace discrimination toward women and members of minority groups. In a relatively recent study, *Helping or hurting? Understanding women's perceptions of male allies* (Cheng et al., 2019), perceptions of allyship were collected from 100 women by researchers at Rice University in Texas. Participants were asked to describe experiences in which a man has effectively and ineffectively acted as an ally to them in the workplace. When characterizing effective ally experiences, some women reflected on tangible and career-related outcomes, whereas others characterized effective experiences as those that elicited positive affective responses. In general, effective allyship often included behaviors that advanced a woman's career, stopped a precipitating behavior, or simply made the participant feel supported.

In the *2018 IEEE Global Engineering Education Conference (EDUCON)* (González et al., 2018), many communities of women in technology actively presented the vision of minimizing the existing gender gap using men sponsors or mentors in top positions inside Tech companies to generate an environment of trust for women, far away from stereotypes or unconscious bias. In their article, *How men can become better allies to women*, Johnson and Smith (2018) challenged organizers of women’s initiatives who wish to engage male allies to consider recent research on gender-parity efforts, which are most effective when men believe they have a dignified and important role to play and that transformation in the workplace is something they can share in. The motivation for this role was often tied to personal examples and a sense of fairness and justice. Moreover, when allies feel accepted by the disadvantaged group they endeavor to support, their internal motivation to participate is bolstered. If men feel like unicorns, met by raised eyebrows when they muster the wherewithal to attend a “manbassador” track in a women’s conference, gender alliance efforts falter.

Problem Statement

Shortage of Female Role Models and Leaders

Tech companies continue to explore the role of female mentors and role models, through various diversity initiatives in closing the gender gap that exists at the leadership level. Companies are increasing opportunities for women to be visible by creating scholarships for women to enroll in technical schools, speak at seminars, and participate in roundtable seminars. Despite the best efforts of professional organizations, STEM higher education has been criticized for not providing a robust student body of female engineering talent and, therefore, a pipeline of women role models in technical careers. Women benefit from strong female role models, which are a scarcity in the Tech. industry, and it remains to be explored how women in Tech. learn from their male allies stepping in to bridge that gap.

The Role of Male Allies

The present-day focus on the concept of men as allies has become a popular undertaking in gender diversity initiatives, becoming part of our everyday corporate and societal lexicon. Women’s conferences and employee resource groups (ERGs) are now increasingly turning to invite male professionals to gender equity efforts. The evidence shows that when men are deliberately engaged in gender inclusion programs, 96% of organizations see progress, compared to only 30% of organizations where men are not engaged (Johnson & Smith, 2018). But today, too many organizations still miss the mark on gender equity efforts by focusing gender initiatives solely on changing women, ranging from the way they network to the way they lead. An area that is left to be studied is how women engage with male allies for support (Dobbin & Kalev, 2016).

In summary, with the evident shortage of women role models and mentors, the Tech. industry is evangelizing a new bold movement of 'male allyship'; however, little is known about the ways in which women experience male allyship and what attributes make male allies successful for women.

Research Purpose and Questions

The purpose of this study was to explore with ten women employed in Tech. companies and the industry their perspectives on how male allies have influenced them. The interviews with these women sought to better understand how they chose their male ally and their overall experience with allyship. The researcher interviewed ten self-identified male allies to better understand how males operated as allies to women and what they perceived as valuable to the male allyship experience. The study extended itself to a focus group composed of seven participants, four women in Tech. and three self-identified male allies, who had a group discussion. To carry out this purpose and shed light on the problem, the following questions were addressed:

1. How do women in Tech. identify a male ally?
2. How do women learn from their male allies?

3. What attributes do male allies possess to be successful in supporting women from the women's perspective?

Approach

This qualitative study used purposive and snowballing sampling methods to reach out to participants in the Tech. industry and provided the option to participate in an interview or a focus group. The researcher employed the use of social media and her heavy professional network in Tech. to recruit participants for this study. The following were the selection criteria of the study applicable to men and women broadly:

1. Must be or have been employed at a Tech. company (for example, Microsoft, LinkedIn, Facebook, Uber, Google, etc.) and have a perspective of male allyship they are willing to share.
2. All participants (Tech. women participants and male allies) must be willing and able to participate virtually for 1 hour in independent interviews or for a 1-hour focus group.
3. Preference for women with technical and leadership experience of 7+ years with a college degree and/or technical educational degree.

The researcher looked for ten diverse women participants and ten male allies in Tech. from different racial and ethnic backgrounds. The researcher employed a qualitative approach by interviewing ten women in Tech. and ten male allies for the study. The researcher also added four women and three men to participate in a focus group discussion on the research topic. All participants had the option to self-select into a participation forum they felt comfortable with and inclined to join. Participants from focus groups did not participate in interviews, and both groups were exclusive to their opted choices. Although the recruitment process did not require women and their male allies to join the study together, in some cases male allies socialized the study with women they were allies to, and it encouraged a few women to volunteer in the study (3 out of 14 women). This trend was only seen in female participation for interviews and the focus group.

The researcher looked for themes and insights through a qualitative discussion around how male allies have impacted women in Tech. and what characteristics make them preferable as male allies. The interview questions for women and men mirrored each other to identify underlying themes about the allyship experiences between both groups. The researcher also hosted a focus group of four Women in Tech. and three self-identified male allies in an independent sixty minute session. A demographic inventory was provided post-completion of interviews and the focus group.

Anticipated Outcomes

This study provided a better understanding of what a male allyship experience entails from the perspective of women and how men can strive to become better allies to them. Using an adult learning lens, the researcher aimed to understand: (1) how women identify their male allies and leverage their allyship; (2) how women learn from male allyship; and (3) male ally attributes that aid or hinder the allyship experience. Additionally, the study can help improve the male ally experience for women by sharing the learnings from this study with men interested in being allies to women. Existing male allies benefit from learning about the outcomes of this study in their ongoing pursuit of continuing to be effective as allies to women. Organizations stand to benefit from this study by embedding male ally best practices in all business activities and creating formal programs to educate men on being allies. All in all, the research encourages male allyship as a robust diversity initiative in building equitable workplaces and increasing the number of women in Tech.

Assumptions of the Study

This research study was based on the following assumptions:

1. Women in Tech. experienced a positive impact from having a male ally or male allyship experience.
2. “Male allyship” was different from the support women in Tech. experience from other women.
3. Male allies in the study have actively engaged in allyship behaviors that include but are not limited to mentorship, coaching, advice, and/or advocacy for women empowerment.
4. Male allies are truly committed to the growth and empowerment of women and not reflecting a casual view of what the industry deems as popular work vernacular or their own self-promotion.

Rationale and Significance

Tech. companies today view “an ally is any person that actively promotes and aspires to advance the culture of inclusion through intentional, positive and conscious efforts that benefit people as a whole”—a definition retrieved from the Forbes article *Allyship: The Key to Unlocking the Power of Diversity* (Atcheson, 2018). The nascent literature has, to this point, failed to consider the perspective of women as targets of ally behavior. Men who initiate advocacy on behalf of women have yet to understand how women truly feel and benefit from these initiatives. This study has the potential to get to the heart of the male ally experience as told by women in their own words and how women perceive allyship behavior.

The Researcher

The researcher brings to this study six years of undergraduate and graduate level coursework in Social Organizational Psychology from Teachers College, Columbia University, and over thirteen years of professional experience as a Human Resources Business Partner (HRBP) in the Tech. industry. An immigrant from India, she views herself as one amongst several voices that are passionate about supporting the movement to empower women globally. The researcher aims at continuing to contribute to the research that challenges the status quo of Tech. workplaces that are heavily male-dominated.

The researcher drew inspiration from her own life and described the roadblocks in pursuing radical career paths that were dominated by men. She experienced the absence of female mentorship in pursuit of these opportunities and learned to adapt with a handful of women to lean on for inspiration. The researcher credits the male allies in her personal life who helped pave the way for this research; in her own words, she described these individuals as “an always supportive dad,” “an uncle mentor who described the sky as the limit for women,” “a very stubborn grandfather who always encouraged asking questions and keeping your head up—especially if you were woman,” and “a relentlessly loving husband who submitted to the research as the guinea pig boyfriend who wanted to learn everything about being a male ally and became the ultimate test subject.” Having these men in her life created a high expectation of what the researcher expected to see in male allies professionally.

It wasn’t till the onset of her Tech. career that she was pleasantly surprised to see the non-alignment of female expectations with the male allyship experience and, hence, was inspired to conduct this study to help male allies align on how women experience male allyship.

Definitions

Advocacy: An activity by an individual or group that aims to influence decisions within organizational constructs.

Allyship: Allyship is the practice of emphasizing social justice and inclusion by members of an ingroup to advance the interests of an oppressed or marginalized outgroup.

Coaching: Coaching is a form of development in which an experienced person, called a coach, supports a learner or client in achieving a specific personal or professional goal by providing training and guidance. The learner is sometimes called a coachee (Wikipedia, August 2021).

Diversity and Inclusion: Diversity is the "what"; inclusion is the "how." Diversity focuses on the makeup of your workforce—demographics such as gender, race/ethnicity, age, sexual orientation, veteran status, just to name a few—and inclusion is a measure of culture that enables diversity to thrive.

Male Allyship: Companies are now looking to men to achieve gender parity in technology fields with a set of recommended actions of support called 'allyship.' Male allyship behavior can range from actively fighting unconscious bias, speaking up as a voice of support, and mentoring women in their career journeys.

***Male Privilege*:** Male privilege is the system of advantages or rights that are available to men solely because of their sex.

Mentorship: Mentorship is a relationship in which a more experienced or more knowledgeable person helps to guide a less experienced or less knowledgeable person.

Tech. Industry: This sector contains businesses/companies revolving around the manufacturing of electronics, creation of software, computers, or products and services relating to information technology. The term *technology sector* is frequently shortened to *Tech. sector* and is used interchangeably with the term *Tech. industry*.

Workplace Equity: Equity refers to everyone being treated fairly in the workplace.

Workplace Equality: Equality is about ensuring everybody has an equal opportunity and is not treated differently or discriminated against because of their characteristics.

Chapter 2: Literature Review

The purpose of this study was to explore with women employed in Tech. companies and the industry their perspectives on how male allies have influenced them. As explained in Chapter 1, companies today look to men to achieve gender parity in technology fields with a set of recommended actions of support called “allyship.” While there is no definitive definition of what comprises “male allyship,” for the purposes of the study we describe male allyship behavior as that which ranges from actively fighting unconscious bias, to speaking up as a voice of support, and mentoring women in their career journeys.

The literature review considered the multitude of academic studies that referenced allyship without directly using the term “ally.” In its simplest terms and through various examples in the literature, the word “ally” could be described as a person who is a friend or someone with whom a congenial relationship can be had, with no contention. In the current reality, the word “ally” has evolved more into a sophisticated verb representing a commitment toward inclusion and an expression of diversity in the workplace. Examples of this definition include a Caucasian person who might be an ally for people of color, a heterosexual person who might be an ally for people in the lesbian, gay, bisexual, transgender, and queer (LGBTQ) community, or a man who might be an ally for women. The literature review also uncovered that while many scholars may have discussed the topic of supporting minority communities, their research was done without using the terms “ally” or “allyship” as clear concepts, leaving the research incomplete.

Attempting to present the majority of the research of what is allyship and how it can help practitioners in the workplace, Salter and Migliaccio (2019) wrote a comprehensive chapter titled, “Allyship as a Diversity and Inclusion Tool in the Workplace” in the academic journal *Diversity within Diversity Management*. In this chapter, they described allies as typically nonminorities who use their majority status to enact positive change. The authors came up with three categories of what makes an ally unique. Firstly, knowledge and awareness are the foundation of being an ally. Second, communication and confrontation are an essential pairing of characteristics wherein allies often confront prejudice and discrimination in others. Finally, action and advocacy imply that allies engage in advocacy behavior that can range from being an active voice or a salient participant in supporting minorities.

In an article titled, “7 Ways to Practice Active Allyship,” Luthra (2022) describes allyship as a lifelong process of building and nurturing supportive relationships with underrepresented, marginalized, or discriminated individuals or groups, with the aim of advancing inclusion. She calls out allyship as a journey of progress, not perfection. It is an active, iterative process that requires frequent and consistent behaviors. She also summarizes that in today’s culturally and racially polarized workplaces, allyship is the key to creating inclusive workplaces. Employees of organizations that foster strong allyship and inclusion cultures are 50% less likely to leave, 56% more likely to improve their performance, 75% less likely to take a sick day, and up to 167% more likely to recommend their organizations as great places to work (Luthra, 2022).

In acknowledgement of these statistics, the literature review examined and dove into the current research in two major areas that were most relevant to this study: (1) the learning challenges for women to pursue a career in Technology, hereafter referred to as Tech.; and

(2) the growing role and impact of male allyship in the empowerment of women in male-dominated industries. The literature review also attempted to show the learning relationships between allies and others in the allyship experience, revealing interesting insights into the patterns and motivations for allyship. As an example, in the study titled, "Beyond Allyship: Motivations for Advantaged Group Members to Engage in Action for Disadvantaged Groups," Radke et al. (2020) argue that not all advantaged group members who participate in action for the disadvantaged group fit the ally definition. By referring to the action taken by the advantaged group for the disadvantaged group, the research showed that advantaged group members can be motivated: (a) on the condition that the status of the advantaged group is maintained; (b) to meet their own personal needs; and/or (c) because this behavior aligns with their moral beliefs.

The literature reviewed across industries contributed to a better understanding of 'male allyship' as a concept. The literature reviewed included general articles and studies of advocacy and mentorship to provide understanding around the depth and breadth of allyship experiences and how men learn to be allies. The researcher made extensive use of online databases, such as Google Scholar, JSTOR, and EBSCO, which were accessed through Teachers College's Gottesman Library. In order to procure articles on Topic I: The Challenges for Women to Pursue a Career in Tech., and Topic II: The Growing Role of Male Allyship in the Empowerment of Women, the researcher relied heavily on a variety of academic research journals: *Journal of Management Inquiry, Human Resource Development Quarterly, International Journal of Gender, Science and Technology, Social Science Research, Sex Roles, Management Learning, Journal of Vocational Behavior, Journal of Organizational Behavior, The Career Development Quarterly, Entrepreneurship and Regional Development, Journal of Applied Social Psychology, Personnel Assessment and Decisions,* and the *Human Resource Development Quarterly*.

References extracted from the academic research journals served as invaluable resources for locating additional articles related to both topics. Keywords used to identify articles included "women in technology," "allyship in the tech industry," "diversity and inclusion," "leaky pipeline," "mentorship in technology," "cross-gender mentoring," " identity," "oppressed," "white privilege," "majority group," "disadvantaged groups," and "workplace equity."

Rationale for Topics

A selected review of the literature included the current state of the Tech. sector and the impact of a male-dominated industry on the low representation of women in the industry. The literature reviewed is expansive, covering studies and articles across industries that helped contribute to the concept of male allyship and how males can learn to be effective allies to women.

Topic I reviews the literature that describes the need for a gender diverse workforce in the Tech. industry and the systematic learning challenges that have prevented women from advancing in their careers. The early studies point to understanding why there is a shortage of women in this industry and what contributes to the "leaky pipeline." The "leaky pipeline" refers to the pipeline of female technical talent experiencing attrition from Tech. from the early stage of pursuing technical degrees to advancing in Tech. organizations. These studies have paved the way for more current literature that explores how allyship for women can play a role in their technical career advancement and learning to strive toward being competitive Tech. professionals. **Topic I** covers the following areas: (1) various perspectives on the need for inclusion of women in Tech.; (2) the systemic learning challenges that make Tech. the "leaky pipeline" for women; and (3) bridging the learning gap between the "leaky pipeline" and the opportunity for male allyship for women.

Topic II kicks off by listing the current literature that evaluates the current industry practices that strive toward an equitable workforce. This follows a close examination of the leveraging of men as allies for women and what have been the outcomes of this encouraged allyship model. The review includes representative studies of non-Tech. industries that have had fruitful outcomes of male allyship and what attributes of male allyship support equitable workplaces. **Topic II** covers the following areas: (1) various perspectives on what contributes to allyship; (2) what male allyship looks like across different organizations; and (3) leveraging men as allies for women in Tech.

This chapter concludes with a discussion of the evolution of how learning takes place in allyship and the applicable learning theories that present insights into a discernable pattern of what makes up effective allyship. Given that allyship can occur on a spectrum, it can best be described as a developmental journey, and the research shows that self-identification is not enough to truly be an ally to minority communities. The process involves cognition on the part of the persons in the interaction and produces behaviors that can presumably create learning. There is no singular way to be an ally, and this provides the foundation of understanding how males learn to be allies to women.

Topic I: The Challenges for Women to Pursue a Career in Tech.

Various Perspectives on the Need for Inclusion of Women in Tech.

Two decades ago, many academic and industry professionals had given little thought to the gender or racial composition of their classrooms or offices. The dot.com era was substituted by a thriving Tech. industry that was quickly recognized as an industry that not only lacked diversity but presented a workforce development problem that had a direct bearing on innovation in the industry (Lagesen et al., 2022). In 2021, Deloitte Global presented a study, *Women in the*

Tech Industry: Gaining Ground, but Facing New Headwinds (Hupfer et al., 2021), which predicted that large global technology firms, on average, would reach nearly 33% overall female representation in their workforces in 2022, up slightly more than 2 percentage points from 2019. Their analysis of 20 large technology companies and their annual workforce diversity reports showed that diverse teams perform better and are more innovative. As the tech industry seeks to shape a prosperous future, it is aiming to be more representative of diverse talent to support that future.

Catalyst, a global nonprofit working with some of the world's most powerful CEOs and leading companies, helps organizations accelerate progress for women (https://www.catalyst.org/). In 2004, Catalyst published the findings of an independent research study aimed at highlighting a demonstrable correlation between gender diversity and organizational financial performance. The findings from a survey of 353 Fortune 500 companies from 1996 to 2000 revealed that companies with the highest representation of women on their top management teams experienced better financial performance than other companies in the sample. There were 39 selected Information and Technology (IT) companies in the sample, of which 17 of them fell in the bottom percentile of representing women in corporate officer positions and simultaneously showed low overall financial performance. The study concluded with a compelling case that gender diversity is, in fact, a characteristic of financially performing companies, along with other possible factors, such as innovation, operational efficiency, and customer satisfaction. Overall, developing women leaders and leveraging their talent do provide organizations with an added competitive edge and support an equitable inclusive culture.

In the study "Diversity Begets Diversity?" (Cook, & Glass, 2015), the CEOs and the Board of Directors (BOD) of Fortune 500 companies were studied over a ten-year period, and a positive correlation was found for organizations that were successful and had a diverse board. The findings from the study revealed that influential leadership in combination with numerical representation of women on the BOD has the maximum positive impact on women's chances of appointment. Additionally, when evaluating how female CEOs lead once appointed, it was found that the strength of female numbers on the board was an essential factor for success. The research supported that in the absence of board diversity, women leaders are less likely to be appointed CEO, which has a negative impact on future appointments of women in leadership roles and seemingly impacts organizational performance negatively.

The Systemic Learning Challenges that Make Tech. the "Leaky Pipeline" for Women

While the case for including women and female diversity in the Tech. sector remains strong, the metaphor of the 'leaky pipeline' explained by Castaño and Webster (2011) refers to the phenomenon in which women progressively disappear from scientific careers. The 'leaky pipeline' presents a focus on the progressive points along the talent pipeline in Tech. where women drop out from the industry. Engineering and engineering education have become a symbol for masculine culture not only because of the pervasiveness of male values and interactional styles but also because of the male-dominated structure that supports it. The following studies highlight how women continue to operate in this culture while experiencing attrition in their own groups. The research explores what is theorized about how women learn, modeling behavior through mentorship, advice, or operating in the absence of their female counterparts.

In "Career Development of Women in Academia: Transversing the Leaky Pipeline," Gasser and Shaffer (2014) leveraged the existing research on women in academia to identify themes on why women are unable to have career success in academia and reasons for their attrition from the industry. Looking at the data under three categories—(1) career development, (2) pipeline influences, and (3) pipeline outcomes—the authors found that women in academia experience a unique set of personal and career challenges. Women leave academic careers behind due to feeling 'stuck' in positions with little hope for meaningful promotions, restricted access to resources, and feeling overall dissatisfaction with their rewards and recognition.

The authors placed emphasis on role models and mentorship in the discussion of the leaky pipeline model. In their research, they found that women's experiences with role models in early life deeply impacted how they aspired and placed importance on career success. Gendered expectations of behavior further restricted women's career aspirations and overall success. The model hypothesizes that the low representation of female mentors compared to male mentors adds career strain on women academics, prevents learning, and contributes to their attrition from the industry. The study draws an inference parallel to Castaño and Webster's (2011) study on the "leaky pipeline" in Tech., and the same conclusions can be attributed as to why women leave the industry.

A study called "Women Learning to Become Managers" (Bryans & Mavin, 2003), aimed at understanding women's experiences as managers, revealed that women continue to operate in 'male-centric' work cultures where they struggle with how to 'fit' into management versus how to be their authentic selves. The research process explored the stories of six women managers, demonstrated how women learn to become managers, and highlighted the tensions and contradictions of fitting in into management. Using the 'women's voice perspective,' interviews revealed how women continued to feel marginalized, taking on the characteristics of 'otherness' from their male colleagues (Bryans & Mavin, 2014). The article identifies feelings of marginalization stemming from: (1) a small group of women leaders to act as role models; (2) a pervasive male-dominated social context; and (3) organizational learning initiatives that put women in traditional 'apprentice' roles with little adjustment for gendered perspectives.

The research process was driven by the question, "How do women learn to become managers?" and aimed at highlighting the experiences of professional women without comparing them to men. The participants shared learning from their self-analysis as a group and a recognition of male traits in their management styles. These women connected on the need for social alliances and networks during the course of the research study and were strongly compelled to continue their process of self-reflection.

The Link Between the "Leaky Pipeline" and How Women Learn from Forms of Allyship

The lack of women in the Tech. industry provides a unique problem for women to pursue technical careers in the absence of role models in a pervasive male-dominated culture. From the time women expressed aspirations to pursue technical jobs, they faced challenges in securing the right role models, educational investments, and workplace policies that supported their career. As a result of these factors, women often abandoned their ambitions for technical careers through various stages of the process and continued to be part of the phenomenon described as the 'leaky pipeline.'

A survey conducted by Orser et al. (2012) analyzed qualitative data from a sample of 115 women members of Canadian Women in Technology (CanWIT) to understand the perceived career challenges and coping challenges for women in Tech. Survey data recorded personal, firm-, and industry-level barriers to career advancement experienced by the participants. The most frequently mentioned career challenge cited in the study consisted of personal barriers (72 statements). Respondents expressed that their gender influenced their self-efficacy (sense of credibility, perceived lack of credentials, confidence, know-how), performance expectations (e.g., different performance benchmarks), a lack of social capital, networking opportunities, and a sense of belonging.

Respondents were most likely to resolve challenges they experienced through personal, or ‘do-it-yourself,’ solutions, which entailed finding resources outside of their reporting structures and looking for alternative leaders within the industry to support their aspirations. A few of them gave examples of firm- or industry-related support structures within their organizations. Mentoring was identified as a frequently used response strategy through which women addressed career challenges; however, the majority of firms in the advanced technology sector (aerospace, defense, life sciences, engineering, and information and communications technology) lacked sufficient numbers of suitable women mentors.

A study (Quimby & De Santis, 2006) that looked to bring attention to the importance of role models in the career decision-making process found that exposure to role models in a variety of professions may assist female students in making career choices that are right for them, especially in non-traditional occupations. The study leveraged career counselors who assessed their female clients with their career aspirations using Holland’s (1997) 6 RIASEC (Realistic, Investigative, Artistic, Social, Enterprising, Conventional) career inventory. They proceeded to study RAISEC types in order to help women make decisions about their careers and the impact of role models.

The findings of the study expressed that a career role model is especially important for women who continue to be underrepresented in ‘Realistic and Investigative’ non-traditional, technical careers. It was also found that the greater the similarity between the individual and the career role model, the greater the propensity of the female client to opt for a non-traditional technical career. The purpose of the study was to generate new knowledge about the influence of role models on women’s career choices. The study also points to the under-representation of women in technical careers and the ongoing need to explore accessibility to a diverse network for leadership success and retention.

A case study by Bierema (1996) showed how executive women learned cognitively, experientially, and collaboratively to operate in a male-centric corporate culture. The findings of the study revealed that women learn cognitively by the “re-organization of experiences in order to make sense of the stimuli from the environment” (p. 153). Women participants demonstrated taking the lead on their own learning by reading, networking, teaching and public speaking. They self-directed their learning pursuits to gain an edge over others and be promoted. Their motivation for self-direction was described as the belief that academic credentials were not sufficient alone to be upwardly mobile in organizations. Critical reflection, another important component of cognitive learning, was found among participants who shared a common theme of reflecting on their overall experiences.

Learning occurred through listening, observing, and doing and was particularly important to women in this study. They learned to watch and operate within the organizational culture, which allowed them to place value in their professional competence and their ability to navigate the day to day. The participants reported learning through observation and reflection as they watched, listened, and ruminated on what they saw and heard. They were ‘learning the culture by living it,’ as captured in several of their responses, alluding to experiences that became lessons in how to overcome challenges. Collaborative learning was characterized by learning from corporate relationships, such as those with bosses, peers, subordinates, mentors, internal/external contacts, and other networks. Women participants leveraged collaborative learning to access mentoring, peer support, and networking relationships to function seamlessly in their respective organizational culture. This study also underscored the value of mentors and networks in the learning process and that women are constantly learning to adapt to their male-dominated organizational culture by formulating new strategies.

Sloan (2002) conducted a somewhat related case study on how male and female executives learn global strategy. The study's findings were analyzed according to a three-stage model of reflective learning—preparation, experience, and re-evaluation—which was common with both men and women. The findings confirmed non-linearity in the learning process regarding strategic leadership. It was determined that regardless of age, culture, or industrial sector, all nine of the executives described prior successful experience as integral to learning strategy among other five successful attributes. Executives who had prior successful life experiences (non-business related) continued to use it as an 'anchor' to measure subsequent experiences against. The executives indicated that this learning through a transfer of experience began with an early life success experience. The study cited how all executives relied on dialogue, debate, and storytelling as central to their learning process.

Executives vacillated between experiential and reflective processes as they accounted for their individual learning as well as learning from others. Even though executives in the study had access to formal mentorships and role models, they unanimously held a high self-image supported by values of strong independence and self-reliance, leading to their strategic leadership. They reported a dominance of incidental learning from their 'negative experiences,' which led to meaningful learning for them through their self-reflection. The study strongly recommends informal learning programs for executive development along with the right business environment conducive to incidental learning, setting the foundation for informal ally relationships for executives to advance as strategic leaders.

Nelson et al.'s 2008 study, "Identity in Action: Predictors of Feminist Self-identification and Collective Action," sought to clarify the existing literature on the predictors of feminist self-identification and its relationship to women activism. Identifying as a feminist was seen as an essential predictor for women to drive social change and advocacy for women's causes as a collective. The literature provides context as to how women learn from each other and are motivated in groups of women, thus providing a picture of why there is an absence of women that think as a collective in the Tech industry, creating a "leaky pipeline" of women talent. In the study, conservative, liberal, and radical beliefs were assessed as types of feminist beliefs. A structural equation model was used to test the relationships between a participant's life experiences and their influence on feminist self-identification. Previous research has discussed that women who self-identify as feminists have a positive view of feminism and other feminists. Social identity theory suggests that for a variety of social groups, self-identification is strongly related with activism on behalf of that group. The study uses this theory to explain how feminist self-identification activates women to operate collectively as a female group.

In the findings of the study, both feminist self-identification and collective action have moderate to strong relationships to one another. The study cites that (1) life events (taking women's studies, having a mother perceived as a feminist, and experiencing sexism) and (2) predicted beliefs (conservative, liberal, and radical beliefs; and evaluation of feminists) create feminist self-identity, leading to collective action.

Summary of the Challenges for Women to Pursue a Career in Tech.

The research studies summarized identified key issues of women's career experiences being challenged by factors pertaining to gender inequity in Tech. organizations. Across the board, inaccessibility to mentors and role models persists as an underlying theme that prevents the ascension of women in Tech. to leadership and diminishes their overall representation in the industry. Patterns across the research reveal that professional women thrive in business environments that promote other women and create visible examples of women in key leadership positions. The research shows examples of this phenomenon with the appointment of women in CEO positions and members of the executive board, mobility to upper management, and access to well-connected mentor networks.

Data analysis across these studies provides correlative trends that indicate that women have been marginalized under the dominant existence of a male-centric organizational culture. Several of the aforementioned studies provide narrative and represent the voice of the women participants directly in the analysis of the trends and feedback. Evident in the implications of several studies is the notion that women do not assume their position of leadership as a guaranteed successful outcome of hard work. The common trend represented in the research is that career success is viewed as a combination of hard work along with a strongly encouraged adoption of masculine practices to thrive in the industry. These examples presented themselves as women altering themselves in order to seamlessly 'fit into management' and navigate the challenging path of operating and communicating as a leader.

The research studies also assert how women learn to operate uniquely from men in complex organizations. Women, similar to their male executive colleagues, are subject to the same 3-stage model of informal learning (Sloan, 2002). However, they may not have access to the same 'anchor' experiences and environments to test their leadership and ideas. Women do not have similar access to mentors and a highly available network to help cultivate work relationships that challenge gender stereotypes and to gather cross-gender support. Mentor theory (Kram, 1983) indicates that women are still learning the ways to navigate the mentoring relationship with men while building trust with them, which suggests allyship as a direct link to creating inclusion of women in Tech.

Women who were not exposed to feminist identities in their early life don't learn the same way as women who self-identify as feminists and operate from more radical beliefs. It can be assumed that women who identified as radical feminists felt more empowered to tackle male-dominated environments and represent the female perspective. Women learn experientially, cognitively, and collaboratively about organizational culture, indicating a difference from men in how they make career decisions. The current research provides an opportunity to go further with trying to understand how women incorporate leadership through their life experiences. It provides a foundation to explore how learning transfers in navigating organizational cultures that continue to be male-dominated and restrictive for women. The literature discussed introduces the idea of how women learn to form alliances and seek advocacy for their learning, growth, and overall representation in organizations.

Topic II: The Growing Role of Male Allyship in the Empowerment of Women

Various Perspectives on What Contributes to Allyship

The concept of allyship in practice is when a dominant group supports the members of a disadvantaged group, extending support even when a member of that group is not physically present. Allyship in corporate organizations shows that male allies have distinct opportunities to be influential advocates to create change in gender inclusion efforts. Researchers Madsen et al. (2020) present how the concept of allyship has evolved to include a variety of terms, including *advocates*, *champions*, *change agents*, *mentors*, *sponsors*, or *organizational catalysts*.

In "Allies Against Sexism: The Role of Men in Confronting Sexism" (Drury & Kaiser, 2014), research is reviewed demonstrating that, relative to women who confront sexism, men who confront sexism by acting as allies are evaluated more positively. "By publicly opposing sexism, men may be especially able to decrease the perceived acceptability of sexist behavior, while also encouraging others to take action against such acts" (p. 644). Thus, it costs men less social capital than women to confront sexism, and men will likely receive less backlash than women who challenge the same behaviors.

In Czopp and Monteith's (2003) study, "Confronting Prejudice (Literally): Reactions to Confrontations of Racial and Gender Bias," participants in two studies reported how they would feel, think, and behave after being confronted about either gender-biased or equivalent racial-biased responses. Participants included 159 students from Pennsylvania State University enrolled in the Introductory Psychology course who completed the study in return for research credit toward a course requirement. The pool of participants comprised a mix of men and women from different cultural backgrounds. The participants were asked to report when they provided a prejudiced response and the consequences of being confronted by it by another person. Specifically, they were to imagine themselves in three hypothetical scenarios in which they provided a response that could be construed as biased and were subsequently confronted by another person about that biased response.

After reading a given scenario, participants indicated how they would react across three different response domains. First, they completed a 13-item affect scale rating the extent to which each item (e.g., disappointed with myself, annoyed at others, amused) applied to how they would feel in the situation. Each item was rated using a 7-point scale (1 = does not apply at all, 7= applies very much). Second, participants were instructed to write down the first two thoughts that would come to mind in this situation. Finally, participants reported how they would behave in the situation by describing what they would actually do in response to the confrontation.

Content analyses were later performed on participants' open-ended written responses to identify various categories of thought and behavioral reactions. The first step in the content analysis was to generate exhaustive lists of all unique thought and behavior reactions. Then, using a 'funneling' procedure, similarities between reactions were identified such that specific thoughts and behaviors sharing a more general and common theme were combined to form a new response category. Across two studies, the examination of how people responded to being confronted about their prejudiced responses assessed the potential effectiveness of confrontation as an instrument of prejudice reduction.

Results showed that target confrontations elicited less guilt but greater discomfort than non-target confrontations and were associated with feelings of irritation and antagonism among more prejudiced participants. Participants were significantly more concerned about upsetting and offending others about a racially biased response than a gender biased response. Czopp and Monteith (2003) found that men received fewer negative responses when they pointed out gender bias and prejudice, which suggests that as male allies confront sexism, they will likely be perceived as expressing a more legitimate and appropriate response. As men increasingly challenge sexist behaviors, research continues to document the impact their actions have on changing male-centric cultural organizations for the better, shattering the status quo, and creating space for feminine ideas.

In one study, "It's Not Your Fault: The Social Costs of Claiming Discrimination on Behalf of Someone Else" (Eliezer & Major, 2012), two experiments were conducted in which male and female participants read a vignette describing an incident in which a woman (Study 1 and 2) or a man (Study 2) was rejected for a professional opportunity by an opposite gender boss who gave a sexist explanation for the rejection. Participants indicated the extent to which a series of traits described the bystander on a scale from 0 (Not at all) to 6 (Very much). These traits included: a complainer, a trouble maker, emotional, argumentative, hypersensitive, and irritating. The results showed that female bystanders who claimed discrimination were evaluated more negatively than male bystanders who did so because they posed more of a threat to the status system. Men and women who confronted sexism were seen as complainers to a greater extent than their male and female counterparts who did not confront sexism. However, men who confronted sexism were less likely to be perceived as complainers than women who confronted the discrimination at hand. This result suggests that men's confrontations are perceived more positively than the exact same confrontation delivered by women (Eliezer & Major, 2012). It also emphasizes the positive effect that men can demonstrate by challenging the assumptions of the system on behalf of women, who often do not stand to be heard in these forums.

The study lays out implications around whether individuals who belong to a high status group may be in a better position to claim discrimination without facing high social costs. In the current study, men who claimed that another person experienced discrimination were not derogated as much as women who did the same. Unfortunately, members of high status groups may be unlikely to claim discrimination on behalf of another because they may be reluctant to take the risk of claiming discrimination and they may worry about intervening inappropriately. Thus, the study highlights that it may be important to inform people how to work together in cases where discrimination may have been witnessed and especially how men can continue to support women in the same report of discriminatory behavior.

The call for men, particularly male CEOs, to engage in bringing about organizational change has been met with both skepticism and approval. It places responsibility and accountability for change with those who have positional power and takes away the burden of inequity being recognized as a “women’s issue.” While men have not traditionally been seen as supporters of women’s advancement, changes in the business landscape today have contributed directly to the heightened need for gender equality and male allies in the workplace. Recently, the term “champion” has emerged in popular usage to describe a subset of leadership behaviors that focus particularly on the role of executives in relation to change agendas. It refers to those who have enhanced credibility and positional power to confer approval and behave in ways that actively promote the cause, in this case, gender equity. The study, “Champions of Gender Equality: Female and Male Executives as Leaders of Gender Change” (de Vries, 2015), examined the capacity of executives to “champion” changes in stereotypical gender roles. In the accounts described in the study, the sex/gender of the leader influenced the intervention strategy for change, which raised important questions and dilemmas regarding the capacity of women and men to exercise power to effect change within their organization. Among the relevant findings was the importance of “male champions” that explained that men have power to challenge the status quo as a result of male establishment in most organizational environments.

What Male Allyship Looks Like Across Industries

Women alone cannot solve the issue of gender parity in the workplace; however, recent studies show that positioning gender diversity among leadership priorities has unfortunately presented this as a “women’s issue.” Although many men understand and embrace the “business case” for women in management and leadership, they lack effective strategies they can use in workplace settings to advance women (Desvaux et al., 2017). While men have not traditionally been seen as supporters of women’s advancement, changes in the business world—and the current social and political climate—have brought more attention to gender equality and the need for male allies in the workplace (Cheng et al., 2018).

Czopp and Monteith (2003) discovered that when men confronted perpetrators of sexism, the perpetrators felt the negative feedback was more legitimate and therefore felt more guilt for their actions than if they had been confronted by a woman. The study, mainly looking at confrontation as a tool to end sexism and racism, concluded that there was a higher tolerance for sexist comments than for racial ones. To continue to promote male allyship for women, in a report published by Catalyst (2020), an overwhelming majority of men (86%) stated they are personally committed to interrupting sexist behaviors when they see them in the workplace, yet only 31% feel confident in their ability to do so.

The report shares the study that explores organizational conditions affecting men's intentions and ability to interrupt sexism in different contexts. Its findings highlight that the importance of creating a workplace climate in which sexism, as a potential pathway to sexual harassment, is not tolerated. Research shows that sexism imposes costs on organizations by negatively affecting employees' health, self-efficacy, and job performance (Harnois & Bastos, 2018). Creating a workplace where sexist behavior is not tolerated benefits not only employees but the organization as a whole.

A study to explore the existence of gender allyship within the sports industry was undertaken to develop a substantive theory for how the process of gender allyship occurs (Heffernan, 2018). This study was guided by a combined methodology of grounded theory and critical discourse analysis (CDA); 17 men and women working in different types of sports organizations served as the primary source of data. An interview guide was used to capture allies' insights into hiring processes and how organizational cultures that value gender equity are realized. It was discussed that the process of gender allyship began with awareness, which is defined as men's and women's understanding of women's low representation in leadership positions and their power to influence the hiring of women. It was followed by how gender allies assess individual situations and determine their ability to act as a gender ally. In summary, the study shows that ally strategies are the intentional strategies that allies use to increase women's representations in the sports industry.

In a similar study to help strengthen the position of Utah women in the workplace (Scribner & Madsen, 2018), the Utah Women and Leadership Project (UWLP) hosted a series of "think tank" gatherings to collect best practices for various stakeholders interested in supporting and empowering Utah girls and women. This is based on a 2018 gathering of 25 professional men at various stages in their careers, all of whom committed to supporting and advancing women professionally. The study laid out the fundamental need for male engagement in reducing workplace gender imbalances and provided focus on what men can do in professional settings to create awareness, rethink systems, build capacity (in both women and men), foster developmental relationships, and advocate for necessary cultural change.

Leveraging Men as Allies for Women in Tech.

In a controversial *New York Times* article titled "Push for Gender Equality in Tech? Some Men Say It's Gone Too Far" (Bowles, 2017), the gender diversity gap in the technology sector of the world is referred to as a "witch hunt" where men are subjugated to the cabal of Silicon Valley feminists. The article expertly lays out how men in Tech workplaces still struggle to truly understand the "diversity dogma" and their role to address it. In the Tech sector specifically, the undertaking of creating a diverse workplace continues to feel as separate and distinct experiences for men versus women.

The body of research on male allies against sexism reveals an ironic paradox. Compared to women, it is difficult for men to detect sexism; however, when they do detect and confront sexism, men experience more positive reactions from others, and their actions are taken more seriously as appropriate condemnations of sexism (Drury & Kaiser, 2014). In the last decade, much funding and research has focused on increasing diversity in the technology workplace; however, for the most part, these efforts have overlooked the role that men have to play in creating inclusive work environments. In DuBow and Ashcraft's 2016 study, "Male Allies: Motivations and Barriers for Participating in Diversity Initiatives in the Technology Workplace," corporate employees who identified as men were asked to examine how they think, talk about, and enact diversity reform in the technology workplace. The study found that advocacy from men is contingent on their own personal experiences and an ethical commitment to equity. In addition, it was found that the biggest barrier in being an ally was uncertainty as to how best to be an ally and establish legitimacy as a male advocate (DuBow & Ashcraft, 2016).

Summary of the Growing Role of Male Allyship in the Empowerment of Women

In summary, men have a critical role to play in diversity and inclusion efforts, especially in initiatives to eliminate gender bias. Yet, too often, men are an untapped resource in such gender initiatives because of their own lack of awareness around the challenges of women in the workplace and their ability to establish themselves as a legitimate ally. Catalyst published "Engaging Men in Gender Initiatives: What Change Agents Need to Know" (Prime & Moss-Racusin, 2009) as a way to present evidence-based advice about the most effective ways to partner with men in ending gender inequalities at work. The gender diversity movement in Tech. is perhaps the worst among all industries, and its notoriety for harassment has led to a more recent rise of male activism and male advocacy groups to protect itself from false accusations. The climate in Tech. presents a unique opportunity to bring male and female Tech. talent together on the subject of equitable workplaces and male allyship.

Relevant Learning Theories

Though the literature presents a compelling argument for adult learning in the allyship journey, the relationship on how allies learn and what are the types of learning experienced in allyship are barely mentioned in these studies. Adult education scholars Merriam et al. (2007) asserted that we should seek to "broaden our understanding of learning and knowing," which includes expanding and building upon our worldviews in an effort to create new perspectives. Allyship literature is mostly attributed to learning facts and gaining knowledge, which are important for ally development, but the literature does not ascertain how allyship can be learned behavior. Some academic articles have touched on the importance of motivation of becoming an ally and attempted to understand what it means to be a non-minority (i.e., what it means to be a majority member of society). In a study, "Beyond Allyship: Motivations for Advantaged Group Members to Engage in Action for Disadvantaged Groups," Radke et al. (2020) surmised that four motivations (outgroup-focused, ingroup-focused, personal, and morality) can explain why advantaged group members might be motivated to act for disadvantaged groups. Other academic articles have focused on describing allyship as a developmental learning experience created by a critical incident or a triggering event for allies. In the article, "Allyship as Activism: Advancing Social Change in Global Sport Through Transformational Allyship," Jolly et al. (2021) call out transformation of allyship from reactive advocacy to proactive activism because of the triggering coronavirus global pandemic and its impact on the world, including allyship.

The researcher leverages Social Learning Theory, Informal Learning, and Self-Directed Learning to better describe how women learn from their male allies in the organizational context. The learning theories present a compelling picture of suggested learning on the part of women in Tech.; however, the research needs further work to truly dive into all learning aspects of male allyship. Although the research acknowledges the role of multiple factors that drive toward the learning experience, it fails to draw conclusions on how the rate of learning can be improved for women and how a lack of learning is perceived in the male allyship experience.

Self-Directed Learning

The relationship between adult learning and self-directed learning is a relevant topic while exploring how women learn in the male allyship experience. Brockett and Hiemstra (1991) claimed that "self-direction in learning" can be used as an umbrella definition recognizing those external factors facilitating adults taking primary responsibility for their learning and those internal factors or personality characteristics that incline one toward accepting such responsibility. Several terms have been conceived when describing self-directed learning; these include *autonomous*, *independent*, *self-direction/directedness*, *self-initiated*, *self-plan learning*, and *self-teaching*, some of which were referenced to describe the learning experiences of women with male allyship. Although self-directed learning has been viewed as a process where individuals assume primary responsibility, there can also be a social component to this self-directedness, as individuals tie their own interests to the activities and interactions of others—similar to how women act upon the advice provided by male allies (Brockett & Hiemstra, 1991).

The process of how adults engage in self-directed learning was described in the study, "Gender Differences in Self-directed Learning Practices among Community Members" (Grover & Miller, 2014), which was designed to explore the self-directed learning practices of members of community organizations and to identify possible differences between how men and women go about selecting learning strategies. Findings from over 150 surveyed community organization members identified that women select different self-directed learning tools than men, and that these differences might reveal important sociological gender trends about self-directedness and the desire to learn. The perception of self and identity influenced how men and women had different perspectives of themselves, which impacted their learning. Study findings reinforced the idea that there are gender differences in engaging in self-directed learning; women reported a higher level of self-directed learning, while men relied on more formal learning in seeking their learning experiences.

In the study, “The Self-directed Learning of Women with Breast Cancer” (Rager, 2003), an important theme on how women self-direct in crisis is examined and the self-directed learning experiences of women with breast cancer are studied. The common elements in the experiences of 13 women who had been diagnosed with breast cancer were identified through analysis of semi-structured interviews. The findings indicated that the participants’ self-directed learning efforts were beneficial in a number of ways: (1) the desire to overcome fear associated with the diagnosis; (2) the desire to understand what was happening to them so they could best help themselves; and (3) the need to learn so that they could make informed choices regarding their treatment or to confirm their doctors’ treatment choices. The study provided valuable information on self-directed learning and supported previous findings from literature in both adult education and health care.

Research captured in the article, “Self-directed Learning, Job Demands and Job Resources as Predictors of Job Satisfaction among South African Women” (de Bruin & Yiannakis, 2012), shows that despite women facing various demands and barriers in their job experiences and satisfaction, increasing numbers of women are entering the labor force. Exploring the role of self-directed learning in predicting job satisfaction, this study aimed to investigate the impact of job demands, job resources, and self-directed learning on the job satisfaction of South African women. The results of hierarchical multiple regression analyses showed that women exhibited self-directed learning and seemed to have several characteristics that facilitate adjustment to career challenges. This research provides a base for implying that women are self-directed in their organizational pursuits and can adjust to most challenges. It has implications for organizations that strive to enhance job satisfaction in their employees, especially for women who operate better as self-directed learners and potentially with the assistance of male allies.

Social Learning Theory

Social learning theory can be best described to explain human behavior in terms of continuous reciprocal interactions between cognition and environmental influences. Social cognitive theory adopts an agentic perspective to human development, adaptation, and change. To be an agent is to intentionally influence one's functioning and life circumstances. The theory distinguishes among three modes of agency: (1) personal agency exercised individually; (2) proxy agency, in which people secure desired outcomes by influencing others to act on their behalf; and (3) collective agency, in which people act in concert to shape their future. Among the mechanisms of human agency, none is more central or pervasive than beliefs of personal self-efficacy (Bandura, 1997). Whatever other factors serve as guides and motivators, they are rooted in the core belief that one has the power to produce desired effects by one's actions; otherwise, one has little incentive to act or to persevere in the face of difficulties.

The study, *From Awareness to Action: Examining Predictors of Lesbian, Gay, Bisexual, and Transgender (LGBT) Activism for Heterosexual People* (Jones & Brewster, 2017), offered a first-of-its-kind comprehensive examination of factors that may predict heterosexual allies' engagement in LGBT activism. Using social–cognitive theory to synthesize prior research that had disparately examined personal factors (e.g., ally identity, empathetic perspective taking, social justice self-efficacy, outcome expectations, and gender) and environmental factors (e.g., supports and barriers in one's social justice endeavors, positive marginality, and education), the study sheds light on how these variables predict activist behaviors using Bandura's model of reciprocal determinism (Jones & Brewster, 2017).

In recent history, heterosexual allies have played an integral role in promoting change for lesbian, gay, bisexual, and transgender (LGBT) populations in the United States; however, questions have been raised as to what drives heterosexual allies to promote change via activism. To delineate factors important in engagement in activism, 207 self-identified heterosexual allies completed an online survey measuring components associated with LGBT activism using Bandura's (1986) model of triadic reciprocal determinism: personal factors (ally identity, social justice self-efficacy and outcome expectations, empathetic perspective taking, and gender) and environmental factors (social justice related supports and barriers, positive marginality, and education level) to predict behaviors (LGBT activism). A hierarchical multiple regression analysis revealed a model accounting for 62% of the variance in LGBT activism, with dimensions of ally identification, social justice self-efficacy, outcome expectations, and education level emerging as significant predictors of engagement in activism behaviors (Jones & Brewster, 2017).

In a narrative review titled, "Educationally-Based, Culturally-Sensitive, Theory-Driven Mentorship Intervention with At-risk Native American Youth in South Dakota" (Aschenbrener & Johnson, 2017), social learning theory presented a solid framework for creating programs to support Native American youth. Social learning theory supported the idea that at-risk youth's environmental conditions or social problems play a role in the youth's learning and cognitive development, and thus should be taken into account in creating the program and planning the assessment. This narrative review concluded that mentorship programs are beneficial and can help mentees as long as program developers work with the understanding of environmental factors that can enhance these strengths for these Native American youth. The literature cites, for example, when supporting at-risk Native American youth, the program developer should focus on youths' strengths, such as their abilities to learn when instructional techniques such as experiential learning or positive role models are made available. When mentors understand the youths' strengths, they can focus on the youths' sense of self-efficacy as then they can better utilize their educational strengths and meet their learning needs (Aschenbrener & Johnson, 2017).

Bandura (1998, 2002) maintained that self-efficacy is a characteristic of human agency; no matter how high one's perceived efficacy may be, external and personal factors ultimately affect displayed behaviors. The stories of the tenured Black women faculty who participated in the study, "Self-Will, Power, and Determination: A Qualitative Study of Black Women Faculty and the Role of Self-Efficacy" (McNeely Cobham & Patton, 2015), revealed racialized and gendered discrimination that could have easily disrupted their academic and career pursuits. Participants exercised self-efficacy to carve out spaces for themselves by demanding that their ideas, research agendas, work ethic, and self-definitions be valued. This was accomplished by resisting negative language and behavior directed toward them, strategically using pain and hurt as a momentum for success, accepting overwhelming and/or several different roles in their capacity as faculty with the understanding that hard work would lead to better opportunities, and forming partnerships with other Black colleagues and colleagues who were not Black but who shared similar values.

Bandura’s Social Learning Theory (1977) and concept of self-efficacy presents an interesting view on how allyship behavior is learned and reinforced by the personal and environmental experiences of allies. It also extends a framework to determine the perspective that women develop toward male allyship based upon their own experiences, observations, and level of self-efficacy in identifying, attributing, and learning from their male allies.

Informal Learning

A theory of workplace informal learning must take individual, group, and organizational variables into consideration, as expressed by Marsick (2009) in her article, “Toward a Unifying Framework to Support Informal Learning Theory, Research and Practice.” In her guest editorial, she touches on the factors that need to be revisited to create a consistent approach to truly understand informal learning across smaller-sample studies in different settings and provide validation of key variables and relationships that could guide more effective practice. Boekaerts and Minnaert (1999) asserted that “informal learning can be deliberately encouraged by an organization, or it can take place despite an environment not highly conducive to learning.” It is “usually intentional but not highly structured” (p. 535). Looking to explore how organizations foster informal learning, researchers Bancheva and Ivanova (2015) authored a study, “Informal Learning in the Workplace: Gender Differences.” They explained how women and men access informal learning in workplaces differently. Data from ten private companies, 120 managers (60 women and 60 men) through qualitative interviewing, presented that there is an interplay of individual and organizational factors influencing learning in the workplace. There are also differences in perceptions about workplace learning between women and men. Women most often seek opportunities to engage in social networking as well as learning from their own mistakes, while men are more likely to reflect on their own knowledge and experience.

Organizational culture shapes members' perceptions, behaviors, thoughts, and feelings about their environment, and informal learning contributes to the acquired knowledge needed to be successful at work. Analysis of the data confirms that women are more likely than men to perceive that their organizations don't provide environments that encourage people to ask the question "Why?" and stimulate their informal learning. The results also show that, despite the stated opinions of men toward gender equality in their teams, women are left with a sense of inequality, regardless of their rank and culture. Clearly the social and organizational context is a powerful mediator of individual learning.

Learning often occurs in groups that have a life together outside of the classroom, one that may be continuous over a period (Lave & Wenger, 1998). Reflecting on the research published in their article, "Unsettling Allyship, Unlearning and Learning Towards Decolonising Solidarity," and examining their work toward being 'allies,' Kluttz et al. (2020) reflected on their experiences of learning and unlearning as white settler-colonialists researching allyship in the Standing Rock struggle against an oil pipeline in the United States. They recalled firsthand accounts of the powerful learning that occurred by taking up invitations to social action and the experience of being in the movement. They described that whether it was using their bodies in indigenous led movements or they were working to change the way they occupied space and approached personal relationships, nothing took place in isolation. It was instead an active process felt through the informal learning that occurred through collective experiences of taking social action (Kluttz et al., 2020). In their own words, "Solidarity is messy: it is not fixed or settled or easy, but requires continuous rethinking, and acknowledgement and self-reflection on positionality, power, privilege, guilt and legacies of oppression" (p. 52).

Marsick's Theory of Informal Learning provides an opportunity to tie in how informal learning can aid allyship in workplaces. Informal learning directed by the learner can take on multiple roles, such as through self-directed learning, e-learning, coaching, and supervision (mentoring), and encompasses the behavior of intentionally gaining knowledge and skills needed to complete a task or solve a problem (Marsick & Watkins, 2001).

Conceptual Framework Narrative

The review and critique of the literature, combined with the researcher's own experience, contributed to the development of a conceptual framework that provided an organizing structure to guide the collection and analysis of the data. The conceptual framework served as a repository for reporting the study's findings, guiding the data analysis and interpretation, and informing various iterations of a coding schema (Bloomberg & Volpe, 2008). The various bulleted descriptors served to elaborate each of the respective categories. The conceptual framework categories were derived from the study's three research questions, the literature, and the researcher's pilot outlined in Chapter 1.

The first research question attempted to understand how a male ally was selected by a woman. This included the factors that contributed to identification and in which environment the identification took place. The category looked for clarification on if the identification process was conscious or made unconsciously, did the connection to allyship occur in a home or familial environment as against a professional setting, or was the identification of male allies completely random.

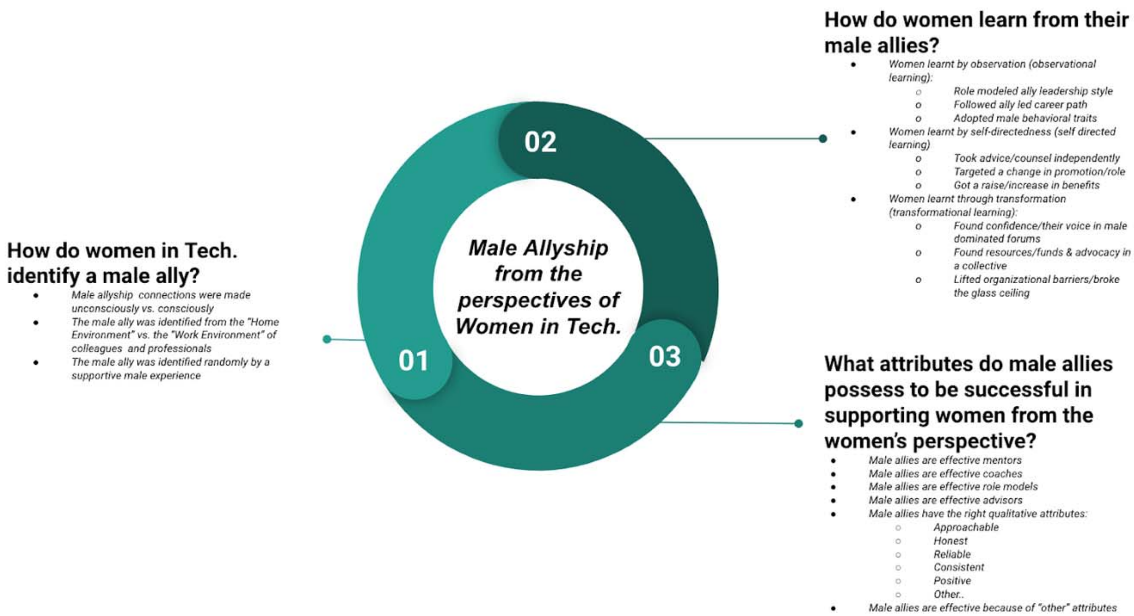
The second research question explored how women learned from male allies and in what forms allyship existed for women in Tech. Examples of allyship from the literature and relevant learning theories broadly suggested observing, role modeling, and self-directed and transformational learning as ways for women to learn from the allyship experience. With different learning styles, the researcher assumed it demonstrated different types of key learning experiences that ranged from emulating a leadership style demonstrating observational learning, earning a promotion by being a self-directed learner, or had a transformational learning experience from advocacy that challenged organizational policy.

Finally, the third research question attempted to tie it all together by evaluating what successful attributes in male allies provided for a successful allyship experience for women. Successful attributes ranged from examples of mentorship, coaching, advice, and the right combination of qualitative attributes, such as being approachable, honest, consistent, and receptive to feedback as allies who were committed to supporting women in their career paths. The descriptors were revised and refined throughout the course of the data collection and analysis.

The conceptual framework that supported this study can be found in Appendix E and is provided below in graphic form.

Figure 1

Conceptual Framework



Chapter 3: Methodology

Introduction and Overview

The purpose of this study is to explore male allyship from the perspectives of women in Tech. The researcher was interested in interviewing women to better understand how they chose their male ally, what they learned in that experience, and what they attribute to successful male allyship behavior. The sample for the study included ten women and ten self-identified male allies who volunteered to participate in one-on-one interviews with the researcher. The study also included three self-identified male allies and four women who participated in a focus group discussion on sharing their perspectives on male allyship. To carry out this purpose and shed light on the problem, the following questions were addressed:

1. How do women in Tech. identify a male ally?
2. How do women learn from their male allies?
3. What attributes do male allies possess to be successful in supporting women?

This chapter presents the methodology that was used to explore: (a) the rationale for a qualitative research approach, (b) a description of the research sample, (c) an overview of information needed, (d) an overview of the research design, (e) the methods of data collection, (f) data analysis and synthesis, (g) ethical considerations, (h) issues of trustworthiness, (i) limitations of the study, and (j) a chapter summary.

Rationale for Qualitative Research Design

The unexplored nature of male allyship and its gaining popularity in the Tech sector as a means to contribute to creating equitable workplaces make this study best suited for a qualitative research design. Qualitative research is grounded in an essentially constructivist philosophical position in the sense that it is concerned with how the complexities of the sociocultural world are experienced, interpreted, and understood in a particular context and at a particular point of time. The intent of qualitative research is to examine a social situation or interaction by allowing the researcher to enter the world of others and attempt to achieve a holistic rather than a reductionist understanding (Bloomberg, & Volpe, 2018).

It was the researcher's intention to understand male allyship from the perspective of women, a phenomenon that is still gaining traction in Tech. and evolving. Quantitative methods were unlikely to elicit the rich data necessary to address the research purpose of getting to key themes and practices. In the researcher's view, the fundamental assumptions and key features that distinguish what it means to proceed from a qualitative stance fit well with this study. These features include: (a) understanding the process by which events and actions take place, (b) developing contextual understanding, (c) facilitating inter-activity between researcher and participants, (d) adopting an interpretive stance, and (e) maintaining design flexibility (Bloomberg, & Volpe, 2018).

The researcher's experience as an HR professional in Tech., combined with a careful review of the literature on male allyship, made her conclude that little is known about the experience of male allyship for women. Therefore, a qualitative study was particularly suited to this study and allowed for the open exploration of the research questions through a case study approach. Case study research can be best described as a qualitative approach where the researcher explores a bound system (a case) or multiple bounded systems (cases) through detailed, in-depth data collection involving multiple sources of information (for example, observations, interviews, documents, audiovisual materials, and reports), and reports a case description and case-based themes. Types of case studies are distinguished by the size of the bounded case, such as if the case is bounded by one individual or group, or an entire program or activity. This study involved multiple individuals that experienced a replication of questions to collect data, which were coded to present a holistic analysis of the entire case of male allyship.

Description of the Research Sample

The sample for the study consisted of ten women in Tech. and ten self-identified male allies to participate in the interviews. The population sample for the focus group consisted of four women in Tech. and three males who identified as male allies. All focus group participants were exclusive of the interview sample. Criteria for all participants were the same as those for the interviewees, and participants could select into a preferred method on a first-come, first-served basis. Participants were selected based on the following participation criteria:

1. Must be or have been employed at a Tech. company (for example, Microsoft, LinkedIn, Facebook, Uber, Google, etc.) and have a perspective of male allyship they are willing to share.
2. All participants (Tech. women participants and male allies) must be willing and able to participate virtually for one hour in independent interviews or for a one-hour focus group.
3. Preference for women with technical and leadership experience of 7+ years with a college degree and/or technical educational degree.

This study used purposive samples as required of qualitative research, which was achieved through snowballing sampling methods. The researcher employed the use of social media and her heavy professional network in Tech. to recruit participants for her study. Once potential participants were identified, the researcher contacted prospective participants via phone, email, and video conferencing to explain the purpose of the study and the anticipated level of commitment required from participants. Participants were informed of any potential risks associated with this research and asked to sign an Informed Consent Form (Appendix B). Additionally, participants were notified that their involvement in the study was strictly voluntary, their contributions used for research purposes only, and that their identities would remain anonymous (Appendix C). The researcher disseminated a Demographic Inventory (Appendix D) to all participants, thereby allowing for the collection of demographic and contextual data that would ultimately be used for analysis. The researcher conducted all interviews and the focus group between May and July and subsequently coded data during December 2022.

Overview of Information Needed

The purpose of this study was to explore with ten mid to senior level women employed in Tech. companies their perspectives on how male allies have influenced them. The research questions used in this study were intended to understand how women experienced male allyship. The research intended to shed light on how allyship was extended by males and received by women to help inform research on what comprises male allyship. The researcher sought the following information: (a) contextual, (b) demographic, and (c) perceptual. Each of the categories is described in further detail below.

Demographic Data

The researcher shared a demographic inventory as the most effective way to collect demographic data from participants. Demographic information was participant profile information that described the participants in the study and their information that informed their underlying individual perceptions. Demographic information regarding the research settings included:

- Age
- Gender

- Cultural Ethnicity
- Sexual Orientation
- Education

The demographic inventory, as completed by the participants, showed the dominance of three racial identities that the participants identified with (Figure 2).

Figure 2

Racial Representation of Demographic Sample

Contextual Data

Contextual information refers to the context within which the participants resided or worked. It is information that describes the culture and environment of the setting. Contextual information regarding the research settings included:

- Current Job Level

- Current Job Title
- Name of Company/Organization

The data collected were used to determine what, if any, suggested possible patterns can be found about male allyship to women in the Tech. industry. Study participants provided this information as part of the prerequisite to participating, with a few cases completing the inventory post-participation.

Perceptual Data

Perceptual data were collected by interviewing participants and having them participate in a focus group. The data collected were compared and contrasted between women and male participants, tabulating insights on what makes male allyship distinct from their perspectives. The Interview Schedule (Appendix A) for both women and male allies, derived from the literature review and the conceptual framework, was piloted with four volunteers (two Tech. women and two male allies independently) from the researcher's personal network of relatives in the Tech. industry. The data collection methods that were used in this study are elaborated upon in the following sections of this chapter.

Overview of Research Design

This study explores male allyship as told by women in Tech. The study extends to interviewing ten women and ten self-identified male allies and an independent focus group consisting of four women and three male allies. The following summarizes the steps taken to complete this study.

Table 1

Steps in Research Design

Step 1	***Research Topic Identification:*** The researcher's experience as an HR Business Partner in Tech. informed the selection of the research topic. The topic was selected by the researcher to explore male allyship from the perspectives of women in Tech.
Step 2	***Literature Review:*** This pre-data collection stage included a selected examination of the work of researchers and scholars that highlights the need for a diverse workforce in the Tech. industry. More recent literature has touched on male allyship as a growing trend to address this need.
Step 3	***Preliminary Identification of Sample Participants:*** The researcher recruited participants for the study by a convenience and snowballing sampling strategy leveraging social media and her network to target participants in Tech. All interview participants were slated to interview with the researcher one on one. All focus group participants were slated to participate in a group discussion facilitated by the researcher in a group session. The researcher was going to provide participants with an overview of the research objectives, anticipated level of involvement, and methodologies used in the study. This allowed the researcher to allow the data collection to commence immediately following IRB approval.
Step 4	***Proposal Hearing:*** The researcher's proposal hearing was held in November 2021. Any revisions, suggested by the researcher's advisor and second reader, were addressed in the submission of a revised proposal.
Step 5	***IRB Approval:*** The researcher submitted the required documents to the Teachers College IRB for approval to proceed with the data collection. Approval was granted in March 2022.
Step 6	***Letter of Invitation and Consent Form:*** Following IRB approval, the researcher applied the convenience and snowballing sampling strategy to reach out to participants via social media and her network. Participants were scheduled for interviews per the convenience of their schedule. Participants were scheduled to a focus group from three options of availability that best suited the group. The following was shared with study participants: ● Letter of Invitation: described the purpose of the research, length of the interview and/or focus group, and interview details (virtual location, date, time). ● Informed Consent Form: explained the purpose of the study, participants' rights, confidentiality, and data collection methods.
Step 7	***Interviews:*** In-depth interviews were conducted with ten women in Tech. and ten self-identified male allies to understand how women experienced male allyship. The interviews were one hour in duration and conducted virtually.
Step 8	***Focus Group:*** A focus group was conducted with participants (four women in Tech. and three self-identified male allies) to understand how women experience male allyship and how men extend allyship. The focus group was one hour in duration and was conducted virtually.
Step 9	***Interview & Focus Group Transcription and Coding:*** Interviews, which were video recorded, were transcribed verbatim and coded by the researcher. The focus group, which was video recorded, was transcribed verbatim and coded by the researcher.
Step 10	***Data Analysis:*** Data collected from the interviews and focus group were analyzed in aggregate. All data were coded, analyzed, interpreted, and synthesized according to the Conceptual Framework.

Methods of Data Collection

Although a selected review of the literature precedes the data collection, the literature review itself is not a data collection method. In order to establish effectiveness in qualitative research, Creswell (2003) asserted that data methods should be triangulated. Therefore, the researcher employed multiple methods of data collection to achieve triangulation. It should also be noted that the literature review was ongoing throughout the study. Yin (2003) cited "converging lines of inquiry" (p. 98) among the advantages of using multiple sources of data to support one's study. The prime methods of data collection that were used in this study included interviews and a focus group.

Interviews

In-depth interviews with ten women in Tech. and ten male allies were the primary method of data collection used in this study. The researcher developed a preliminary set of interview questions, which were organized around the three research questions: (1) How do women in Tech. identify a male ally? (2) How do women learn from their male allies? (3) What attributes do male allies possess to be successful in supporting women from the women's perspective? (see Appendices A1, A2, & A3 for the interview guide). The researcher developed an interview protocol consisting of 15 open-ended questions, which were designed to elicit participants' perspectives on their experience with male allyship. As Marshall and Rossman (2006) recommended, the questions were designed to simultaneously provide participants with structure and latitude with which to respond.

As Bailey (1978) noted, pilot testing is important, as it enables the researcher to ensure that the "information being gathered is germane to the concepts being studied when the concept is multidimensional, lengthy and complex" (p. 70). Therefore, the interview schedule was piloted with two women and two men with backgrounds similar to desired study participants to ensure clarity of language and purpose. Marshall and Rossman (2006) noted that pilot interviews "help one understand oneself better as a researcher" (p. 57) and that this kind of reflexivity is essential to conducting successful interviews. The pilot testing provided the researcher with an opportunity to refine her questioning and probing techniques.

The interview is an integral component of qualitative research and enables the researcher to learn the ways in which participants "understand the world in which they live" (Rubin, 2005, p. 36). Qualitative interviews allow the researcher to capture the participants' perceptions and lived experiences, particularly when considering that interviews are extensions of ordinary conversation, with the distinction that the interviewer listens "for what has not been said, as well as what has been said so as to hear the meaning of what interviewees are telling them" (pp. 13-14).

All interviews followed a semi-structured format, thereby maintaining a proper balance between systemic approach and an informal conversational atmosphere. The interview schedule served as a flexible guide that enabled the researcher to explore and probe participants' responses to 15 open-ended questions.

Interviews with both sets of participants were held virtually via Google Hangouts and set up for a time that was mutually convenient for both the participant and the researcher. Interviews with participants were 60 minutes in length. All interviews, with participants' permission, were video recorded for the purpose of transcription.

Focus Group

Fontana and Frey (1998) claim that group interviews facilitate the process of "indefinite triangulation" by putting individual responses into a larger context. Therefore, a focus group served as the final method of data collection that was used in this study. A focus group provides alternative interpretations to the research findings (Vaughn et al., 1996), while simultaneously serving to triangulate the data. As Creswell (2003) noted, effectiveness in qualitative research requires triangulation across the data methods.

The population sample for the focus group consisted of four women in Tech. and three males who identified as male allies. All focus group participants were not part of the interview sample.

Data Analysis and Synthesis

Qualitative analysis involves systematic interpretation of data from a variety of methods to construct meaningful concepts and explanations of a particular phenomenon (Denzin & Lincoln, 1998; Merriam, 1998; Miles & Huberman, 1994; Strauss & Corbin, 1998). As Marshall and Rossman (2006) noted, this is an ongoing process that is not linear; it is iterative and requires a balance between efficiency and flexibility. Merriam (1998) encouraged researchers to make data collection and analysis a simultaneous activity in order to avoid the risk of repetitious, unfocused, and overwhelming data.

For this study, interview transcripts and focus group transcripts served as the documents from which data were coded and categorized. Once the data are coded, Marshall and Rossman (2006) encouraged qualitative researchers to read and reread to discover patterns, themes, and categories. Further, Maxwell (2005) states that "the experienced qualitative researcher begins data analysis immediately after finishing the first interview or observation and continues to analyze the data as long as he or she is working on the research" (p. 95).

Maxwell (2005) noted that coding serves as the primary categorizing strategy in qualitative research. The goal of coding is to "fracture" (Strauss, 1987, p. 29) categories, thereby leading to the development of theoretical concepts. Therefore, after compiling data, it is essential that researchers begin the process of distilling their data through a process that includes questioning the data, identifying and noting common patterns in the data, creating codes that describe data patterns, and assigning these coded pieces of information to the categories of the conceptual framework (Bloomberg & Volpe, 2008). Additionally, the conceptual framework presented at the end of Chapter 2 served as the organizing structure for the data collection and the foundation for various iterations of the coding scheme (Bloomberg & Volpe, 2008).

The researcher began analyzing her data by reading through 20 transcripts from participants who interviewed one on one. Data were organized by participant names, corresponding demographic data, and the responses to the research questions, leveraging the conceptual framework in a Microsoft Excel document. The researcher organized words and phrases that related to her research questions and compared responses across women in Tech. and self-identified male allies to delineate patterns. She triangulated the data from the interviews with the decoded responses from the focus group participants. The researcher coded her data electronically, starting with interview questions and narrowing it by research question. This process enabled her to distill the volume of data contained within each transcript.

To facilitate the process of comparing codes across interviewee responses, the researcher created a repository for each research question in an Excel coding sheet. The repository for each research question was populated with interviewee responses that provided answers to the respective research question. Volpe and Bloomberg (2008) observed that the "coding process fragments the interview into separate categories, forcing one to look at each detail, whereas the synthesis involves piecing these fragments together to reconstruct a holistic and integrated explanation" (p. 85). The process enabled the researcher to identify patterns that existed in the data, ultimately leading to the development of participant groupings.

Literature on Methods

A review of the literature revealed that qualitative methods are customarily used with research that is exploratory or descriptive in nature and that recognizes the relevance of context and setting (Marshall & Rossman, 2006). Among the five approaches to qualitative methods that Creswell (2013) identified, the researcher employed a collective case study analysis for the current study. Yin (2003) suggests that the strength of case studies lies in their ability to examine "how" or "why" questions. Yin noted that case study methodology is often selected when the researcher examines a process over which they have little control and one that happens within a real-life context.

The use of multiple methods to achieve triangulation was essential to obtaining an in depth understanding of the phenomenon being studied (Bloomberg & Volpe, 2008). Employing this strategy enabled the researcher to gain a broader and more secure understanding of the issues under investigation (Maxwell, 2005) and provided corroborative evidence of the collected data (Creswell, 1998; Denzin & Lincoln, 2000).

This study employed a variety of data collection methods, including interviews and a focus group. The researcher discusses the strengths and weaknesses of the data collection methods in the section that follows.

Interviews

The interview is a fundamental tool in qualitative research (Kvale, 1996; Merriam, 1998; Seidman, 1998). Kvale (1996) described the qualitative interview as an "attempt to understand the world from the subject's point of view, to unfold the meaning of people's experiences, to uncover their lived world” (p. 1). According to Marshall and Rossman (2006), interviews “yield data in quantity quickly” and offer “immediate follow-up and clarification” (p. 101).

Marshall and Rossman (2006), Denzin and Lincoln (2003), and Creswell (1994) asserted that collecting data through individual, in-depth interviews offers the potential to capture a person’s perspective of an event or an experience. Yin (2003) stated that well-informed respondents can provide important insights as well as shortcuts to the history of a situation. Despite the qualities that make interviews a preferred tool in qualitative research, there are inherent limitations in the methodology. Kvale and Brinkmann (2009) assert that interviews are asymmetrical power relationships where the researcher initiates and defines the interview situation by determining the topic, posing the questions, and deciding the probes and follow-up questions. Therefore, as Marshall and Rossman (2006) point out, the quality of the interview is largely contingent upon (1) the level of comfort and openness of the interviewee, and (2) the listening and questioning skills of the interviewer.

Focus Group

A focus group was the final methodology used to triangulate the data collection derived from the interviews. The premise of a focus group interview is that “an individual’s attitudes and beliefs do not form in a vacuum: People often need to listen to others’ opinions and understandings in order to form their own” (Marshall & Rossman, 1995, p. 84). Kvale and Brinkmann (2009) describe focus group interviews as non-directive with a goal of encouraging a variety of viewpoints.

Vaughn et al. (1996) outlined the essential characteristics of a focus group as (1) a relatively homogenous target population, (2) an assembly of target persons to address a selected topic, (3) a facilitator with prepared questions and probes, and (4) the elicitation of participants’ perceptions and feelings. Vaughn et al. clearly asserted that a focus group does not generate quantitative data.

Marshall and Rossman (2006) stated, “The advantages of focus-group interviews are that this method is socially oriented, studying participants in an atmosphere more natural than artificial experimental circumstances and more relaxed than a one-to-one interview” (p. 114). In addition, focus groups often elicit spontaneous expressive and emotional views more than individual interviews (Kvale & Brinkmann, 2009).

As with all methodologies, focus groups possess disadvantages that arise from the inherent power dynamics that are involved (Marshall & Rossman, 2006). Power dynamics might emerge between members of the group, threatening to interfere with individual expression. Groupthink is a common challenge encountered in focus groups, particularly since group members may be inclined to agree with one another (Fontana & Frey, 1998; Merriam, 1998).

As Marshall and Rossman (2006) explained, it is incumbent upon the researcher to ensure that the research questions are being answered by helping the group to avoid dead-end or irrelevant conversations. Therefore, the researcher must be able to guide the discussion without expressing her views (Bogdan & Biklen, 1992), while still exercising the control needed to ensure that all participants are provided with an opportunity to express their opinions (Vaughn et al., 1996). Additionally, to gather comprehensive and meaningful data, the researcher must possess the skills needed to ask probing questions that will elicit deeper reflection (Vaughn et al., 1996).

Ethical Considerations

Hesse-Biber and Leavy (2006) describe the process of doing qualitative research as evoking many different emotions in both the participants and the researcher. As a result, ethical considerations must be considered throughout all phases of the study, and the researcher must operate at the highest standards of ethical practice to maintain participants' privacy and a value-sensitive approach to the research.

The researcher accepted the responsibility to ensure that interviewees were protected from potential harm that may result from their participation in this study. After carefully considering the nature of her study and potential harm that may be incurred by participants, the researcher concluded that the overall risk to participants was extremely low. In order to decrease any potential or unintended risks to participants, the researcher adhered to all procedures outlined by the Teachers College Institutional Review Board. Participants were informed of the study's purpose and asked to sign an Informed Consent Form to participate. Participation in the study was on a purely voluntary basis.

Data generated from the demographic inventories, interviews, and focus groups were confidential and preserved in a private and secure space designated for these materials in the researcher's home. The data were published using pseudonyms for all participants to ensure the preservation of their anonymity. The data will be safeguarded for three years after the publishing of the dissertation, at which time they will be shredded and destroyed.

Issues of Trustworthiness

In quantitative research, the standards that are most frequently used for convincing research are validity and reliability. However, since the interpretation of qualitative research contains an element of speculation, most indicators of validity and reliability do not fit qualitative research. Therefore, in seeking to establish the trustworthiness of a qualitative study, Guba and Lincoln (1998) used the terms *credibility*, *dependability*, and *transferability*, arguing that the trustworthiness of qualitative research should be assessed differently from quantitative research.

Credibility

Marshall and Rossman (2006) describe credibility as the ways in which the researcher "demonstrates that the inquiry was conducted in such a manner as to ensure that the subject was appropriately identified and described" (p. 201). The criterion of credibility suggests whether the findings are accurate and credible from the standpoint of the researcher, the participants, and the reader.

Merriam (1998) describes triangulation as the use of multiple sources or methods to confirm emergent findings. The current study will draw from two methods of data collection: (1) a primary set of in-depth interviews with ten women in Tech., (2) a secondary set of in-depth interviews with ten male allies, and (3) a focus group of four women in Tech. and three male allies. The combination of the aforementioned methods was intended to produce a holistic understanding of male allyship from the perspectives of women in Tech. As the research findings emerged, the researcher actively elicited feedback from her advisor in order to ensure internal and methodological credibility. The researcher randomly connected with two women and one man in the study to tally her analysis with what they had reported. In all cases, the participants agreed with her analysis and offered suggestions into it.

A strategy that the researcher implemented to address the issue of credibility is clarifying researcher biases. According to Maxwell (2005), the goal in a qualitative study is not to eliminate the researcher's influence, but to understand it and use it productively. An initial description of the researcher's assumptions was included in Chapter 1 in order to address researcher biases. At the conclusion of the dissertation, the researcher will revisit the assumptions stated in Chapter 1 to determine the extent to which they held true.

Dependability

The criterion of dependability refers to the extent that research findings can be replicated by similar studies. Qualitative research usually does not cover enough of an expanse of subjects and experiences to provide a reasonable degree of reliability. As argued by Lincoln and Guba (1985), the more important question becomes one of whether the findings are consistent and dependable with the data collected. Therefore, the goal in qualitative research is not to eliminate inconsistencies, but to ensure that the researcher understands when they occur. It thus becomes incumbent upon the researcher to document her procedures and to demonstrate that coding schemes and categories have been used consistently. The recordings enabled external reviewers to understand the process used to collect data, devise coding schema, and establish categories.

Transferability

The criterion of transferability refers to whether and to what extent the phenomenon in this context can transfer to another particular context (Creswell & Miller, 2000). To increase the transferability of the findings to other contexts, Merriam (1998) suggests the inclusion of (1) rich, thick descriptions of the context, and (2) multi-site designs. The researcher provided rich, thick descriptions of her participants as part of the collection of demographic and contextual data. The characteristics of the research sample allow external reviewers to consider the applicability of findings to women in other and men in similar roles in organizations.

Confirmability

Bloomberg and Volpe (2008) described confirmability as the assumption that “the findings are the result of the research, rather than an outcome of the biases and subjectivity of the researcher" (p. 87). The ability to achieve confirmability is contingent upon the researcher's ability to remain reflective and maintain an audit trail (Bloomberg & Volpe, 2008; Lincoln & Guba, 1985). In this study, the transparency of the process was enabled, and all phases of the study are subject to inquiry by external auditing.

Limitations of the Study

As with all research, this study contains certain limitations. Some of the limitations are common critiques of qualitative research design and methodology, while others are inherent in this study's research design. Careful consideration was given to minimize the impact of the following limitations.

Researcher Bias

The researcher, presently operating as an HR Business Partner in Tech., holds assumptions, interests, and perceptions that relate to her current individual experience of supporting her clients as better allies and to help facilitate a better experience for women on the team. The researcher documented her biases and assumptions through conversations with her colleagues and advisor.

Participant Reactivity

Maxwell (2005) described participant reactivity as a limitation that emerges when interviewees have difficulty adjusting to the researcher taking on the role of interviewer. In some cases, the participants provided the perceived "correct" answers to the interview questions, as a result of knowing the researcher personally, thereby diminishing their actual experiences related to male allyship. To decrease the likelihood of participant reactivity, the researcher helped rephrase questions to help draw out participants' experiences with examples. This technique helped participants freely share their experiences, thereby allowing the researcher to collect the desired information for this study.

Transferability of Findings

This study was designed to represent a homogenous population of participants in order to increase the likelihood of transferability. The researcher attempted to provide thick, rich descriptions of participant responses so external reviewers may determine whether and to what extent the findings may apply to their own situations.

Retrospective Recall

The interview questions required participants to search their memory banks for specific examples of male allyship. The researcher recognized that the quality of the data was contingent upon a participant's ability to recall and explain these experiences from memory. To mitigate this limitation, the researcher asked respondents to summarize their experience the best they could and highlight any critical associative feelings tied to their story regardless of the facts of the story. This eased participant storytelling and led to a robust discussion of their experiences with male allyship.

Drawing Out Tacit Knowledge

The researcher was cognizant of the fact that participants may have experienced male allyship in subconscious ways, without realizing that these are examples of allyship. The researcher worked to assist participants in making their tacit knowledge explicit during the interviews, thereby ensuring that it was available for analysis.

Chapter Summary

A review of the literature was conducted to devise a conceptual framework for the design and analysis of the study. The areas of the literature review included the challenges for women to pursue a career in Tech. and the growing role of male allyship in the empowerment of women. Interviews conducted with ten women in Tech and ten male allies were followed by a focus group discussion with a separately recruited sample of three men and four women in similar roles. All participants met designated selection criteria for participation in the study.

The researcher employed qualitative methods of data collection, including a demographic inventory, interviews, and a focus group. The demographic inventory provided demographic and contextual data about the participants' personal background, including age, race, ethnicity, education, and sexual orientation. In-depth interviews with women in Tech. served as the primary method of data collection, enabling the researcher to gather perceptual data related to their perspectives of male allyship. In-depth interviews with male allies served as the secondary method of data collection, enabling the researcher to gather perceptual data related to how men extend allyship. A focus group with mixed participation from women in Tech. and male allies enabled participants to collectively share their experiences with male allyship. This, in turn, assisted the researcher in understanding male perspectives along with the female perspectives on a number of key areas to see if women experience allyship the way men provide it.

The perceptual data collected through interviews and a focus group revealed against emergent themes in the literature led to a process of analysis that allowed the researcher to identify key themes from the findings. Credibility, dependability, transferability, and confirmability were ensured primarily through triangulation, peer examination, and clarification of researcher biases.

Chapter 4: Research Findings

Introduction and Overview

The purpose of this study was to explore with ten women employed in Tech. companies and in the industry, their perspectives on male allyship. The researcher was interested in interviewing these women to better understand how they identified their male ally and their overall experience with allyship. The study extends to interviewing ten self-identified male allies to better understand how males operate as allies to women. It is rounded out through a focus group discussion with three men and four women in an additional sample using the same criteria for selection. To carry out this purpose and shed light on the problem, the following questions were addressed:

1. How do women in Tech. identify a male ally?
2. How do women learn from their male allies?
3. What attributes do male allies possess to be successful in supporting women from the women's perspective?

This chapter provides a discussion of the three major findings that emerged from participants' discussion of the research topics through one on one interviews and the focus group discussion. The participants, as quoted and referred to in this and subsequent chapters, were identified by a combination of their first and last initials of their full name to maintain confidentiality.

Table 2

Outline of Summary Findings for Women and Male Ally Participants

Participants	***Data Collection***	***Summary Findings***
10 Women in Tech.	1:1 Interviews	• Male allies were identified "unknowingly" in professional/industry environments. • Learned from being self-directed and independent in driving their own learning experiences from the advice rendered from male allies. Learned from modeling male behaviors and adapting it to their career aspirations. • Attributed successful male allyship to men who took an active stance on behalf of women and operated without recognition of being allies.
10 Self-Identified Male Allies	1:1 Interviews	• Male allies "declared" their role as allies to women in their current organizational roles. • Learned from seeing women experience a perspective shift and achieving transformative outcomes with their support. • Attributed successful male allyship to leaning into allyship by seeking education, being proactive and being courageous in their pursuit of supporting women with tangible actions.
7 (3 Male Allies & 4 Women in Tech.)	Focus Group	• Male allyship was identified in the positive impact it had on women in professional/industry environments. • Women learned independently from positive male ally experiences that encouraged them to have space to speak up and voice their aspirations freely. • Attributed successful male allyship to being radical in challenging status quo and supporting women outside of organizational constructs.

The major findings uncovered through the data collected in this study were:

1. All women in Tech. participants expressed that they found their male allies unknowingly and used words like "unintentionally," "accidentally," and phrases like "I was not conscious of it" to articulate their identification process. The identification process was made in professional work and industry environments where allyship was accessible in the form of effective managers, mentors, and sponsors operating as allies in the undertaking of their professional responsibilities. This finding was

inclusive of 7 out of 14 women who identified male allies as men who supported women unknowingly and did not assert themselves as allies. Male allies confirmed that women found them through their existing roles in organizations and by declaring their role as allies to them.

2. All women experienced self-directedness and perspective shifts that resulted in learning how to operate differently as a professional because of the male allyship experience. The majority of women (10 out of 14) and all male allies described a transformative outcome as part of the male allyship learning experience.
3. All women described that male allies needed to have an active stance and possess courage to be effective male allies. Male allies corroborated this finding with establishing that male allies that took action to support women were most successful as male allies.

Research Finding 1: How do Women in Tech. Identify a Male Ally?

Finding 1. *All women in Tech. participants expressed that they found their male allies unknowingly. They reported that being faced with personal problems in the workplace, such as challenges in being promoted, being recognized for their contributions, and transitioning/onboarding into a new role is where they recognized male allyship in their professional experience. All 14 women recalled that male allyship was not discernable outside of their professional experiences. Seven out of 14 women still questioned the validity of male allyship in support of women but described men who operated like allies without establishing themselves as allies.*

To obtain information on answering the first research question, participants were asked about the context in which they first engaged with their male ally or took steps to introduce themselves as an ally. Participant intent and level of awareness in the narration of the experience was tracked closely, along with the physical environment where the experience took place. The identification process for women participants was primarily experienced unknowingly as part of a systemic working culture where male allyship was an extension of the professional responsibilities men played in the organizations. Women explained a heightened sense of awareness when males declared their role as allies, but still described identification of male allies as an "unknowing" experience since they did not know what to expect from this experience.

When male allies were asked a similar question regarding how they first identified themselves as allies, all participants alluded to the professional working environment and providing allyship voluntarily in their professionally assigned role. Self-identified male allies fell into two groups: (1) male allies in the study who reported that male allyship was a natural occurrence of being effective in their professional roles—these roles ranged from being an assigned manager, mentor, and/or coach; (2) male allies in the study who reported that male allyship was in line with their personal values, and advocacy needs to be declarative to assert their positions as allies to women. Some male allies (5 out of 13) advocated allyship for women in their professional networks similarly to supporting them in their personal lives. In their personal lives men described that being a father, a husband, and/or sibling to women helped them target allyship behavior at work.

Table 3

Outline of Research Finding 1

Finding 1: All women in Tech. participants expressed that they found their male allies unknowingly and used words like "unintentionally," "accidentally," and phrases like "I was not conscious of it" to articulate their identification process. The identification process was made in professional work and industry environments where allyship was accessible in the form of effective managers, mentors, and sponsors operating as allies in the undertaking of their professional responsibilities. This finding was inclusive of 7 out of 14 women who identified male allies as men who supported women unknowingly and did not assert themselves as allies. Male allies confirmed that women found them through their existing roles in organizations and by declaring their role as allies to them. **A. The Unknowing Process of Male Allyship Identification by Women in Tech.** 1. **Managers/Leaders** i. Male allyship experienced from having a male manager ii. Lack of male allyship experienced from having a male manager iii. Male allyship extended as part of organizational hierarchies 2. **Mentorship** i. Male allyship experienced from women in Tech. having a male mentor ii. Self-identified male allies received reverse mentorship 3. **Sponsorship** i. Male allies are committed to breaking the status quo in organizations ii. Male allies create opportunities for women in Tech. B. **Male Allyship in a Professional vs Home Environment** 1. Male allyship begins at home 2. Male allies who are a minorities can relate to women's perspectives

The Unknowing Process of Male Allyship Identification by Women in Tech.

Women participants expressed that they found their male allies unknowingly and used words like "unintentionally," "accidentally," and phrases like "I was not conscious of it" to continue to articulate their identification of male allies. PS, a Director of Engineering at a prominent Tech. company, summed up her early experience with identifying male allyship in the following remarks:

> It almost feels like early on in my career, somewhere around sort of like 2007 when my career began, male allyship was not this like, cool, sexy term that it is today. And so people never really identified themselves as male allies. So if I look as far back as 2007, I find periods that are completely blank, there are no male allies, and the first three, four or

> five years that I could identify that or males that came up to me and said, Hey, I'd like to be an ally. So I don't remember anyone self-identified or me identifying them in that period.

Some women described the novelty of male allyship and the relevance it was gaining in the Tech. industry to better tag and understand experiences from the past. Women shared stories of how they were surprised when men operated uniquely from others they had typically experienced in the industry or in similar roles (7 out of 14 women). These behaviors ranged from helping women speak up in public forums, calling out gender bias openly, and creating space for women to be more visible in male-dominated forums.

GY, a senior staff software engineer, shared her surprise when her male skip level leader helped her navigate a grueling experience with what she didn't know then was targeted gender bias toward her. In her own words, she expressed how the identification of him as a male ally solidified her understanding of what male allyship was for a future experience, and from that experience she felt she understood how male allyship worked:

> He opened a new door for me. So after opening the new door, I found okay, though I can't change this world, I can look at it differently. And, and I can observe, like, there's so many male allies here. And they take it so seriously, like making sure that women can be successful in the tech industry.

The study called for self-identified male allies, and, therefore, all the 13 male participants described their experience from a conscious awareness of extending allyship to women. Interestingly, some men (6 out of 13) came to the study as participants to seek a better understanding of their past actions and if they aligned as allies to what women were seeking from allyship. LF, a leader in Security Engineering, confirmed that his self-identification as a male ally came by participating in this research and calling out that his participation as an ally was differentiated:

> And to me and one of the things that kind of loved in your document was this idea that being an ally is a verb, right? It's not just something you call yourself the goal, what

> are the actions behind it? So that's probably one of the most significant memories that actually sticks out to me. And I don't want to sugarcoat and pretend that I've been a good ally over my life. I don't know if I have, I doubt that I have just because of my own biases and perspectives.

Male participants shared their questions, doubts, and lack of understanding of what allyship entailed. All male allies in the study hungered for a deeper understanding of conceptually defining male allyship and questioned if they had been effective in their role of being allies.

Managers/Leaders

The majority of women (9 out of 14) had their first experience of male allyship by having an effective male manager and/or leader in an organization. LL, a product engineering leader, recounted how her male manager began to consciously identify as a male ally for women when the trend of male allyship began to gain traction in the Tech. industry. She recounted that it was when Sheryl Sandberg had just published her book, *Lean In*, and how her manager actively wanted to connect with her on the contents of the book. She described those experiences as helping her realize that true allyship is not solicited, but volunteered by men who express a genuine sense of curiosity about a woman's career experiences.

Self-identified male allies recounted the struggle to differentiate themselves as allies outside of being effective managers. In a story shared by MB, the head of engineering at a Fintech company, he altered team norms to support a female direct report in her transition to maternity leave. He ensured that she took the leave, safeguarded her job, and created enough space to help her with her transition so that she remained on the path to promotion upon her return. When asked about the allyship experience that MB had, he shared the following:

> Umm … actually the answer is that, I don't know. Like, was this enough it was one of many instances. And yeah, she, at that moment in time, she felt great but leaving as soon as she came back with a, I will say like, you know, a strong foundation, I think that

> probably said, hopefully I have set her up to be more successful. But beyond that, I don't know, what is the secondary continuing impact?

Male Allyship Experienced from Having a Male Manager. CT, an insurance underwriter in the fintech industry, reflected on her first experience of male allyship coming from her manager, who happened to be male. In her story, she recounted his extraordinary effectiveness as a manager and how that felt closest to any form of allyship she had ever experienced before:

> So the first male ally that I can concretely identify, according to this definition, is my first manager from like, 20 years ago, when I first started working.... And his mentality was really, if the people who work under me do well and get promoted, it reflects on me positively as a manager. And I want to really just give, give the people who report to me opportunities, like be an advocate and a sponsor.

KJ, a software engineering manager at a rising fintech startup, mentioned something similar in her experience, recognizing her first manager as her male ally. She recalled how he leaned in as an early sponsor for her career and, therefore, molded an early understanding of what comprises effective male allyship. In her identification story, he was pivotal in helping her transition to a new career in engineering given her non-engineering background. He sponsored her in different forums, giving her an opportunity to learn, and helped her transform from a design intern to a UX engineer in her career. She went on to confirm that the experience solidified expectations of what having an effective manager who served as a male ally should look like in her future career.

SS, a sales director at a prominent Tech. company, summarized her hiring experience as unique and one that helped her formulate her experience of male allyship through her hiring manager. She was the only participant who described this scenario, where she highlighted the experience of allyship that had begun even before she accepted the role at the company. In her story, the male allyship was evident by the questions he asked her about her early career experiences and clearly looked for a pattern with those stories and her future aspirations. This was singularly unique in the interviews she had given to work for male leaders previously, and she felt from the onset he was vested in her growth and development. In her own words she said, "And to me, that was a really strong signal of how this person was invested in my professional aspirations and, and it was a no brainer for me to accept the job when I did get the offer."

Lack of Male Allyship Experienced from Having a Male Manager. Participants also reported on stories where managers fell short of being effective allies to women. The stories shared by women below express men who wanted to be effective male allies in their roles but relied on women for support to help them better operate as allies. This was most distinct with men who had never had female direct reports, and their interactions with the women in the study helped cull out what was lacking in the male allyship experience from effective managers. PS, a Director of Engineering at a prominent social media Tech company, reflected on her first experience of reporting to someone who struggled with his role:

> And he didn't call it male allyship, but he said something to the effect of: Hey, look, I have two daughters. But I'll be super candid with you. I've never really managed a female employee before…. So I don't know what I don't know about managing female employees. And there might be things that I say or do unconsciously that might not vibe well with you as a female employee that I might not even consider as insensitive, given my past experiences. And so if I ever do something of that sort, please point it out to me….

In her story, PS had a negative reaction to this identification process and felt that she was seen as "weak." She lacked trust in opening up to her manager about her struggles and in turn shut him out completely, while bonding with other women to empower herself in the Tech. industry as a people leader. She also remarked that this led to a disorienting perspective that women need additional support and, therefore, must operate as men to be seen as effective.

KJ, a Director of Engineering at a prominent subscription Tech company, remarked about the experience of male allies being "clueless" in the pursuit of allyship in their managerial journey. In her story, “I joined in their very early days and joined as the head of engineering. And the founder and CEO of that company was sort of stating himself to be a male ally.” She shared a story of how she had to educate her manager to better help him navigate his intent to be a male ally as her manager:

> So I was new to the company, new to being exposed to that kind of environment, super stoked to get to sit at the table with some very important, very wealthy, very, like highly influential people in Silicon Valley. And as everyone was gathering, my boss realized, no one had figured out catering options for having these people in our office. And he flippantly without really thinking about it turned to me and said, like, just can you go get coffee and bagels? And I actually pulled him aside at that moment and informed him that that was unacceptable.

MB, the head of engineering at a tech startup, fell into allyship when he began to manage women engineers for the first time. In his story, he shared an experience of being shocked when one of his female direct reportees failed to share the news of her pregnancy with him. She finally disclosed the fear she was operating from and her assumptions of the long-term implications of taking maternity leave on her career. In this experience he was challenged to operate differently as a manager and noted where he had been lacking in his professional experience. He leaned into allyship to ensure she took the needed maternity leave and that it was not a setback in her career. He has since learned the importance of being a male ally in managing a diverse team.

AB, a senior leader at a tech startup, was conscious of his identity as a male ally through various corporate experiences; however, in his story of being an effective people leader, he described the experience as that of a “double-edged sword” when you must operate effectively as both an ally and a manager. After joining a new Tech startup, he discovered that one of his most talented female direct reports was under-leveled and her pay did not commensurate with her experience. He found himself incorporating allyship into his managerial principles to get her promoted:

> It's usually when you're campaigning to get someone promoted, you're trying to demonstrate their contribution. I had to also demonstrate in this case that the feelings about this person were not founded. So I had it like a double-edged sword. So in addition to being like, "Hey, look at all these things this person is doing," I had to show … "What are your reservations?" and then I had to pick those apart, because they were mostly not logical.

Male Allyship Extended as Part of Organizational Hierarchies. For CS, a Senior Director in technical operations and programs, allyship became identifiable from male leaders outside of her direct reporting line. Her male ally was described as a leader who had power and influence in the larger organizational network, and he was equipped to drive at creating opportunity for women at various levels of the organization. She described, "So when I talk about sponsorship or allyship, he's the first person I think about because he gave me so much opportunity…. And part of his career had to do with like, how well I did too, right?" She went on to explain that in her story, her male ally was someone who continued to be invested in her and leveraged his access by introducing her to additional allies at various levels of management who presented opportunities. She also noted that male allies from outside of organizational reporting structures stand to equally benefit in the promotion of advocacy of strong female talent across the organization.

In sharp contrast, GY, a senior staff engineer, told her story of how her male ally emerged as someone several levels above her boss and used his influence in the organization to help her overcome gender bias occurring within an incredibly challenging technical project. GY was operating a Tech. Lead and was navigating a tricky situation of working with other male engineers on the project who on different occasions went on to make decisions about the project without bringing her along or consulting her. In her own words, she had no idea that she was the recipient of gender bias in the workplace, and the allyship she received from him was a turning point for her in helping identify when gender bias was occurring in the workplace:

> I feel so sad about it and I was not associating that with gender bias…. I was talking with my mentor, and he used to report to the leader overseeing the project and they are very, very good friends and he told me that I should talk with him and he will bring this up to him as well. At that time the senior leader jumped in and said okay, this collaboration mode is not okay. And it's not my fault that I didn't do a good job or whatever. And he said there is gender bias there and he's jumping in to fix that. He also introduced me to other mentors, other strong women mentors, and he raised my awareness about this. And so that's like the turning point I thought….

MD, a Chief Product Officer at a Tech company, shared how he operated as a male ally when being approached by women from different reporting hierarchies in his organization. He cited the story of helping a skip level female employee navigate the tricky waters of managing her manager and eventually helping her connect to a new manager who was committed to her growth and aspirations:

> I feel I take a lot of pride in building and growing leaders … and, you know, giving people the space and giving people the right skill sets they need that they can grow in their careers, I feel a lot of pride in and I truly do find a lot of joy in helping people be transformed. I've done that a few times in my career….

Mentorship

Male allyship was received and extended as part of mentorship engagements with women participants. A total of 13 out of 27 participants cited that informal mentors played the role of helping women accelerate in their career and provided guidance/advice for their success in the organization. Women expressed that it was easier to seek mentorship from male mentors who self-identified as allies or men who openly supported women in the workplace. QBJ, a principal engineer, shared how being a mentor to the female engineers on the team made him feel special. He indicated that in his role as a mentor he began to see the absence of role models available to women and the implications this had on their long-term careers. He decided that mentoring women was the way to action allyship:

> And that's when I realized that she was asking me questions for which I had had the answers a long time before I had reached that kind of level, and where she hadn't had the answers. And she had to navigate that system of trying to grow, where clearly she was

> not having the same kind of support that I had been having, whether that was through direct support through role models through all of those, those environments.

Male Allyship Experienced from Having a Male Mentor in the Company/Industry. HA, an engineering manager, talked about how he discovered the power of mentorship in coaching his female engineers. In his story of identifying as an ally, he described that presenting women with opportunities was not enough. Mentorship, according to him, was the conduit to ensuring that women felt supported and performed in highly visible stretch opportunities successfully. In his mentorship engagement, he sought to provide regular feedback and help women gain confidence as they went against their comfort zones to gain new accomplishments under their belt.

QBJ, a principal engineer, shared a similar phenomenon in the mentorship conversations he had with his female mentees. Being a role model to women was not enough; the women he mentored required a deeper understanding of how to navigate the organizational ecosystem. He described the aha moment he experienced in the following statement:

> And then I realized that there were not just questions of pure technology, but also questions or behaviors and opportunities that were relevant. So that is how that door opened itself naturally, through talking about hard work first, and then drifting into the questions of behaviors and opportunities and relationships.

ABe, a Senior Director of Engineering and site leader for a prominent Tech. company, discussed the importance of being intentional about mentoring women in Tech. He shared that his realization of the growing absence of women in Tech. and on his teams specifically made him take a hard stance in mentoring women as a way of extending allyship. He remarked the following:

> I think the big difference was being intentional … the way I came to realize this was in a sad way. Like, I was literally doing all my performance reviews listed out all my mentees. And it was just like, it hit me on the face. I'm like, that is crazy … something is completely wrong here. So I had to basically be like, okay, I really, really need to make this a priority now. So, yeah, I think it gave me this momentum to go out.

Self-identified Male Allies Received Reverse Mentorship. Reverse mentorship broadly described non-traditional mentorship dyads and was not bound by hierarchies and/or titles. In this relationship, junior, less tenured or experienced individuals can mentor more senior individuals while receiving mentorship from them. For the purposes of the study, the concept of reverse mentorship extended to women mentoring self-identified male allies operating as mentors. ABe, a Senior Director of Engineering and site leader for a prominent Tech. company, shared that his path to mentorship was in fact inspired by a senior female leader who changed his career and inspired him to be a mentor to other women as a way of paying it forward:

> I didn't go seek out a female mentor, just to be clear, she just happened to be there. She offered to help me. And it did wonders for my career. One of the things she also told me was you need to pay this forward, and just seeing how she was a bit of a rarity as a senior leader…. She invested in me and she sponsored me. And just seeing what it did for my career made me realize, man, like, I could do the same thing.

MD, a Chief Product Officer at a Tech. start up, experienced being reverse mentored by another senior female leader when he received difficult feedback on how he was operating. MD explained in his own words, "She brought up a few times in which she generally didn't get much support from me…. So she set up some time with me. She cited some examples. And she said, 'This is how I felt in the process … and this is how it came across to me.'" He went on to share that the one conversation unleashed a wave of transparency and direct discussions that have continued to be part of how they communicate presently. He said, "We've worked through that, now we understand each other's styles better and approaches better. We work through how I can help support her for plenty more…. So even though she felt she was unimportant, she was able to influence me and gave me an ally to support her work through this."

Sponsorship

Participants in the study used sponsorship (8 out of 27) to describe their identification of male allies for women in Tech. PS, a Director of Engineering at a prominent Tech. company, shared how active sponsorship and advocacy became true identifiers of men who were committed to being male allies for women. She described sponsorship as an active stance where male allies actually take action on behalf of women. She shared how recognizing a male ally as a sponsor was key to building trust in working with them:

> My definition of a male ally is not just someone who sort of like, listens and learns. I think this is a part that a lot of males do well. They listen and learn, or male allies, too. I honestly only graduate a male to a male ally position, once they've done what's the word? Advocate, once they've actually showcased advocacy….

Male Allies are Committed to Breaking the Status Quo in Organizations. A story told by YJ, a CTO and founder of his own technical skills assessment company, described how his experience with male allyship helped him realize his blind spots and his role as an agent of change in the United States military. YJ started his career in the Air Force and remarked on his "catalyst" moment of recognizing his role as an ally when a close female colleague challenged his thinking on sexual harassment. He shared the following story in his own words:

> We in the Air Force had yearly, anti-sexual harassment training. And it may be maybe 14 or 16 years ago, I was coming out of one of these sessions, and a female officer that I knew well, had worked with before, she, I and several other people were walking together coming out of the session. And I said something like "This stuff is really, really important. But I'm not seeing any issues around here." She's just, she just stops the group and says, "You are totally fu*** blind." And she used that word. Yeah. And, and she said, like: This is what happened to me this morning … this is what happened to me yesterday…. This is what happened to me last week…. And you just have no idea at all what's going on…. So this was one of the events that really opened it up as something more concrete for me.

ET, a district manager for a Tech. company, described how her experience with male allyship crystallized when a close male colleague and client decided to sponsor her career transition from IT staffing to a more technical career as an IT reseller. She remarked, "And he sat with me, probably two hours a week for the first year I was there and explained everything that we sold. So we went through, you know, this is what the network looks like, this is how storage works. And he spent so much time…." ET recognized the benefit of that early sponsorship in a trade that had a visible absence of women. She summed up her experience as one that "catapulted" her career in Tech.: "He just made sure that he was always surrounding me with knowledge, making sure he was supportive of me, making sure that he was validating the things that I said in meetings with other people, because I was one of the only women that worked for them."

VW, an experienced Human Resources leader in the Tech. industry, remarked on how in his role he often has to be the voice of neutrality to take action on behalf of women who are being perceived with bias:

> And, you know, I think what I was when I look back to time, in that first ever moment where I was in this room full of men at a table, you know, whether they're talking about their talent or a name comes up, and they make a comment, right, whatever that is, my ears are open and listening. And I would say like, in the very beginning, I mean, I too have a diverse background. Right. And, you know, I may show up a certain way. I have never been scared just to call it what I see.

He shared that being a male ally involved being a sponsor of change even outside of professional environments: "I think not being afraid to use my voice and speak up is the mantra for a person interested in being an ally."

Male Allies Create Opportunities for Women in Tech. Sponsorship on behalf of women was recognized in stories where men acted as allies on behalf of women and created opportunities for them. HA, an engineering manager, talked about his role as a mentor and coach to women resulting in his natural path to sponsorship. He described his influence in making the process for women to land opportunities as "smoother," and his role in helping them become "comfortable" in the role by advocating for them as a sponsor:

> I helped someone get comfortable with it sooner than it might have happened otherwise. And that's it, like just knowing this stuff ahead of time. Oh, this is an opportunity where I can speak out and just give someone that credibility where I'm in the room with another and they're not….

Sponsorship for women in Tech. also came from larger organizational changes and reshuffling roles that presented male allies with opportunities to promote, highlight, or endorse female talent. In one such example, PC, a founder of a Tech. startup, talked about sponsoring a highly talented female leader for a stretch opportunity:

> She had this incredible presence when she had an opportunity to be in the room … and she wasn't often in the room with me and my peers and my bosses, and so I also saw this intentionality or sense of like, not only is she the most qualified person, for this role from a technical perspective, and also from like a leadership perspective. But I also had the sense that I was creating an opportunity for her to sort of be in a forum and show off her leadership that many people had not gotten to see….

In his story, PC aspired for male allyship and sponsorship as a result of an executive business decision he was tasked to make. He summarized the experience as "I was trying to figure out, like, how to act as an ally and how to be conscious about it at the same time."

CS, a Director in technical operations and programs, recounts the sponsorship she received as a result of being part of a growing business with major organizational changes at play. She shared that her male allies committed to finding opportunities for her amongst the reshuffle so that they could retain her at the company. She remarked, "So I would say, that period of my career, I just had amazing sponsorship. And I didn't think it was because I was a woman or anything like that. It was because I did the things that they needed at the time."

Male Allyship in a Professional vs Home Environment

Self-identified male allies (8 out of 13) described many personal, anchoring experiences from the "home environment" that transcended to their being male allies at "work."

Male Allyship Begins at Home

VW, an experienced Human Resources leader in the Tech. industry, remarked on how he leaned into being a male ally at work based on his experiences at home. He described that his identification process as an ally began at birth:

> I'm adopted, and so being adopted and having that love with your mom, right. And that bond, like, that's where it always, that's where it kicked off. For me, personally, I've always had a really, very, very close relationship with my mom, she's my best friend.

LF, a leader in security engineering, described the buildup of trust and personability in getting to the heart of his recalled allyship experience. He described his familial identification of being a brother to a sister in his role as an ally:

> And you know, like, like I said it, it ultimately ended up just being like a big brother little sister type relationship, because it's like, because it also, we were able to actually build such trust that it went beyond just support and Ally ship….

ABe, a Senior Director of Engineering and site leader for a prominent Tech. company, described how becoming a father to two girls helped him further embrace the allyship journey:

> I started thinking about what is like, what, what will this world look like for my girls? And if I could do something? How would I? You know, so it's a better place for, for, for for the little girls growing up?

Male Allies who are a Minority Can Relate to Women's Perspectives

LF, a leader in security engineering, described that, despite being a minority, he had a delayed reaction to understanding how women in Tech. suffered from the same biases that other minorities did. He described the realization of this fact helped him understand the female perspective:

> And I think that's one of the things that, you know, probably prevented me from actually being a better ally earlier in my career is that there's always that affinity towards people that are like you, and maybe they don't necessarily look like you. And you know, one of the things that I have as an advantage, I guess, from a diversity standpoint, or maybe a disadvantage is that I'm a minority within Tech. as well.

AB, a senior leader at a Tech. startup, described how even though he was raised as "a straight, Caucasian male," he grew up with varied experiences that taught him how to appreciate differences and, therefore, lean in with being an ally and "fix what is wrong":

> I got to live all over the country in a lot of different environments and with a lot of people of different cultures, backgrounds, just by my upbringing. So I was already kind of predisposed to identifying, or empathizing with people that were different from me….

> I don't think of myself as white…. I guess I like being male is probably important to my self-identity, but not in a way that's exclusionary to females.

ABe, a Senior Director of Engineering and site leader for a prominent Tech. company, described how recognizing women as a minority and being a minority himself created a better understanding of how he wanted to relate to his female mentees as he extended allyship to them.

Summary: Finding 1

Table 4

Summary of Finding 1: How Do Women in Tech. Identify a Male Ally?

Participants	***Summary Findings***
Women in Tech.	• Unknowingly identified male allies in the managerial hierarchies, mentorship, and industrial sponsorships available in a professional environment. • Identified male allyship when it was accompanied by action and sponsorship for women.
Self-Identified Male Allies	• Male allyship was a conscious identity embraced by men who may or may not have shared this openly with women they supported. • Self-identified male allies described acting on behalf of women as part of the identity of male allies. • Their identification was in some cases influenced by their personal lives.

All women participants unknowingly identified male allies in the managerial hierarchies, mentorship, and industrial sponsorships available in a professional environment. Meanwhile, male allyship was a conscious identity embraced by men who may or may not have shared this openly with the women they supported in their professional network. Self-identified male allies described their identification as allies being influenced by the role they have played in their personal lives and the reverse mentorship they received from women in organizations. Women in Tech. and self-identified male allies shared that male allyship is identifiable in organizational work environments when it is accompanied by action and sponsorship for women in Tech.

Research Finding 2: How Do Women Learn from Their Male Allies?

Finding 2. *All women experienced self-directedness and perspective shifts that resulted in learning how to operate differently as a professional because of the male allyship experience. Most women (10 out of 14) and all male allies described a transformative outcome as part of the male allyship learning experience. Women in Tech. described a perspective shift because of male allyship, which they described as "transformational," "eye opening," and "career changing." By adopting new self-directed behaviors in the workplace, women continued to experience new opportunities and be central in the male allyship learning experience.*

To obtain information for use in answering the second research question, participants were asked about how the allyship experience helped women in Tech. overcome a challenge and what learning they acquired from that experience. Self-identified male allies were asked to describe the learning they believed women had experienced; however, most male allies spoke of their own learning experiences as well to describe what they believed women had learned in the process. Participants were also asked to share how they continued to apply the learning, what was its impact, and how they differentiated the learning as unique to the allyship experience.

Table 5

Outline of Research Finding 2

Finding 2: All women experienced self-directedness and perspective shifts that resulted in learning how to operate differently as a professional because of the male allyship experience. The majority of women (10 out of 14) and all male allies described a transformative outcome as part of the male allyship learning experience.
 	
• **Self-Directed Learning from Male Allyship**
  • Women became critically aware
  • Women adopted/learned new behaviors independently
 	
• **Transformative Outcomes from Male Allyship**
  • Perspective shifts
  • Transformative action/outcomes
 	
• **Learning for Male Allies**
  • The "discourse" of Male Allyship as a long term learning journey
  • Male allyship as a "disorienting dilemma"

Self-Directed Learning from Male Allyship

Women participants described in detail their process to internalize coachable moments, advice, and advocacy they received from their male ally with a commitment to ongoing self-improvement by the advice rendered to them. They described their learning process as self-driven, and they undertook applying learnings independently with the support of their male allies. Some women (3 out of 14) described themselves as self-directed as a result of what they viewed as poor male allyship support.

Women Became Critically Aware

All occurrences of self-directed learning were initiated from a place of critical awareness for women. Critical awareness from the perspectives of these women was expressed as awareness of how they needed to operate differently as professionals. Critical awareness was the key to self-directedness and a place where process and reflection were combined to make meaning in the pursuit of learning (Kasworm et al., 2010). Women experienced critical awareness and became self-directed in their allyship experience. GY, a senior staff software engineer, described how the learning she got from her male ally continued to affect how she chose her future assignments, practicing how to be ‘picky’ in her selection. She went on to explain the accelerated growth she had into leadership as a result of her self-directed approach:

> I’m picky about what kind of leaders I will work with, what kind of colleagues I will work with. If I don’t feel some of their behavior is not right, I will just call that out. And I don’t need to feel that it’s not my fault. Um, and because of that, I think things work pretty well for me, I grow very quickly into a leadership role. I get a lot of sponsorship honestly from male colleagues and they appreciate my straightforwardness when I don’t think something is right.

LF, a leader in Security Engineering, explained how he became an ally to a front desk receptionist in her pursuit to become a security engineer. In his experience, he described the hurdles she experienced and their partnership in helping her achieve her goals by overcoming these constraints and helping her become critically aware:

> And so, you know, ultimately spending, you know, hours, there’s several hours each week, just general mentorship, career navigation. And maybe just some tutoring, but also helping her navigate the organization right? It’s like, okay, well, hey, here’s how you should be talking to your boss, here’s the things that you should be doing to, you know, help get your career down in this track.

He shared that the working relationship was “something he was probably most proud of professionally and personally.” He called her out as a “super senior rockstar staff technical program manager,” and she is currently working at another Tech. company, citing that “she’s in high demand” now.

PS, a Director of Engineering at a prominent Tech. company, shared a different story of critical awareness and how a self-proclaimed male ally operated with deception:

> And so we were almost like, this is the ideal male ally. And as we got to know him over the two years, even like, oh, my gosh, he’s not…. He takes your ideas behind your back and puts them in front of other people without attributing it to you.

She recruited other women who came together and became critically aware and motivated in driving their learning experiences:

> … It's interesting how me and my female ex-colleagues ended up forging really strong bonds over just talking about these experiences with each other. Like, we first thought this guy was an amazing male ally, what happened? And, and like the other person saying, yes, absolutely. I feel that way, too. Like what happened here? And so yeah, we've had more experiences with proclaimed male allies.

PS summarized, "I don't think women need another male ally who provides lip service because it's the cool thing right now … we'd rather do without male allies." They learned how to discern a true male ally and recognize real allyship in a cohort of women.

Women Who Adopted/Learned New Behaviors Independently

ABe, a Senior Director of Engineering and site leader for a prominent Tech. company, talked about how he helped the women he mentored develop their professional brand by encouraging them to write and publish their thoughts to share broadly with their networks. He described the accountability in the working relationship helping women overcome their fears while still encouraging them to pursue their writing independently:

> So for at least two of them, I've actually held them accountable. I'd be like, I need a first draft of something by this day. And you know, if it's not a first step that we're not there yet, I need a list of topics by this day. Then they will actually start stressing a little bit, which is good because I want them to … there's always this like inertia, like stopping you from doing it the first time, right? And eventually we'll get to the topic. And then I'll say I need to drop by this day, and I'm gonna help you do all the editorials like feedback. So now there's a little more pressure on them. But they do it and it's amazing!

Finally, he talked about the challenges it helped them overcome and the moment of learning they experienced from working on sharing their independent voices as female engineers:

> They get super excited because of the reception they get…. And, they've told me, you know, sometimes I want to write about a woman's perspective on things, but I don't want to be pigeonholed … because I am an engineering leader in my own right.

Transformative Outcomes from Male Allyship

Participants in the study described transformative outcomes and described these experiences as many 'aha' moments in their allyship journey. Women described these experiences as "eye opening," "catalyst moments," "life changing," and transformative for their careers in the long term. In one such case, SS, a sales Director at a prominent Tech. company, reflected on the transformational perspective she had when she realized that an ally is someone whose organizational level was irrelevant to the allyship experience:

> I think I want to hone in on this perspective, which is that allyship is not patronizing. Allyship does not mean that your mentor or manager is in a position of higher power than you are. With him, it very much started off as a supportive cheerleader of sorts.... So yeah, it was really important for us to be on equal ground, as we work through situations versus I'm your manager, and this is what I'm telling you what to do.

She described an "equal ground" that was established by being open and vulnerable in the relationship and how that shifted the way she had always operated in organizational hierarchies.

Perspective Shifts

Women described stories where their male allies helped them learn by shifting their mindset, reviewing their way of operating in the industry, and helping them adopt changed habits. These shifts ranged from encouraging women to find their voice, learning to advocate for their decisions, and leaning into opportunities that may have been denied to them previously. GL, a Senior Data and Applied Scientist, described how her ally helped her recognize simple techniques in helping her land her next job in Tech. She remarked about the transformation she experienced in her own understanding of allyship and how his guidance helped her find confidence in her approach, which she continued to share with others as part of her allyship journey:

> I think what I learned the most from him is that you don't have to be a unicorn to get a job in Tech. Like you don't have to be, quote, unquote, this incredibly ingenious

> person. But he also made me realize that I should also regard myself as a smart person as well.

CT, an insurance underwriter in the fintech industry, shared how her male ally similarly helped her grow in the organization and helped her acquire both confidence and exposure to new professional experiences. With his allyship, she was able to bargain for highly visible project work as a new employee, putting her on an accelerated path in her career.

ET, a district manager for a tech. company, decided that male allyship was the only way for her to succeed in her industry and adopt a perspective shift. In her experience, she took the learning to help ultimately improve the diversity in her industry and hire women who could learn from her perspective and her experiences:

> I've only had male allies, I've never had a woman coach, I've never had really any support from women in my job. So it was like, I had to find male allies, it wasn't an option, or else I wouldn't have had any support. But what I've tried to do from the learning experience side of things is to take in more of what I'm learning from them and try to help other women in our business and I have my second woman coming to work for me and I'm super, super excited!

Transformative Action/Outcomes

Action was recognized as the final component in the learning experience, and it ranged from a new way of doing something to a radical approach/stance. Women participants shared how their allyship journeys took them down a transformational path that secured learning with new experiences and shifted their perspective. These ranged from promotions to higher levels of responsibility, calling out men on biases or simply operating from a confidence stance. LL, a product engineering leader, recalls how she learned from her manager the importance of voicing what you wanted. She shared the following:

> It was like when he told me I got promoted, I was super happy. I was like, oh, this is something that I've wanted for a long time…. The thing that he told me was that, Oh, I wish that you had told me that … he was telling me that he wished I had asked him about it versus, done the stereotypical female thing of like, oh, I'll just do the work. And it'll happen, which it did.

He helped her realize that going forward she had to be explicit about her desire to be promoted, advice which ended up being helpful for her career through the years.

KJe, a Director of Engineering at a prominent subscription Tech. company, shared how her male ally taught her two invaluable things that have remained a constant in her career. In her remarks she shared how she has continued to live by what she learned and improved upon her craft with time. First, she learned "insane" attention to detail by following his example, and second, he ingrained in her a model of integrity that he demonstrated throughout his career, which she now follows fearlessly because of his example:

> I don't know if I've had a specific moment of aha. But the sorts of things that he ingrained in me was just how to be a high integrity person. And that it is incredibly important in not just the workplace, but in life, he is probably one of the highest integrity people I know, maybe the highest integrity person I know.

Some of these outcomes were experienced by self-identified male allies who learned in their allyship relationships. They expressed that talking through their shortcomings became an inflection point to gather deeper learning on how to operate as allies. PC, a founder of a Tech. startup, described how he made a "mistake" in how he went about a leadership announcement for a highly visible role that had been secured by an incredibly talented female on his team. In his announcement, he described her achievements, her accomplishments, and the fact that she was a woman as the reasons for her selection into the role:

> And when I composed the email and sort of thought about how I would announce to people, that these were the leaders, I made, what I now know, is a mistake, that when I was talking about her qualifications, I included the fact that she was a woman as a sort of a thing that I was celebrating.

He shared the devastation he felt when she shared her feedback with him and how it transformed his way of thinking about ongoing allyship toward women in the future. QBJ, a principal engineer, although effective at mentoring, reflected on an experience of hiring a female engineer on his team. He described that early experience of setting her up on the team and his reflections around where he felt they fell short in setting her up for success:

> For me, mostly, I would have been a better ally if I had understood much earlier. I can remember many years before that, I was a hiring manager. And my team was growing. And I hired one engineer straight out of college. And I am sure that I and my team could have done a better job at helping her grow into that role. She was at the time, the only woman in my team and looking back I ask myself, could things have been different if I had been more aware, the type of biases that she could be facing?

A story told by YJ, a CTO and founder of his own technical skills assessment company, described how transformational it was for him when his boss helped him normalize crying in the workplace by giving him some direct feedback about his negative reactions:

> My peer was female. She had messed up something. And she was basically getting chewed out, and because she had messed up something that was tied to me. My boss felt I needed to be there. She started crying. And my boss afterwards said something to me that really stuck with me. I had said something negative about her crying in the meeting. And he told me, you don't understand. Don't view the crying negatively, it is a stress reaction. And he's like, look at you right now. Your armpits are soaking wet. Some women and a few guys cry. It's a stress reaction.

He described how the story resonated for him when he started his career in Tech. as a manager. He noticed immediately the lack of awareness that his engineers had about diversity on his team. He decided to host a class with them, and during the training session, he could see how uncomfortable they were, looking at the only Black and woman engineer on the team. They looked at him, stating, "Is it okay to talk about this stuff?" YJ helped his team normalize awareness of diversity and inclusion by leveraging organizational resources and creating a safe space to ask questions. This became part of an ongoing business practice for him, even as he started his own company.

Learning for Male Allies

In every story discussed by male allies, they raised questions about their effectiveness as allies. Male allies rummaged through their perspective shifts only to realize that the concept of

"Male Allyship" is still foreign to them and it is difficult for them to discern their effectiveness. AB, a senior leader at a Tech. startup, reflected on what he learned from his allyship experience with some hesitancy on what could have been better. He remarked on the impact it had on the woman in his story, who was at risk of internalizing a lot of negative judgment if he had not acted expeditiously:

> So again, I'm thinking out loud, yeah. In terms of things I could have done differently. Honestly, I'm not sure. And it's not because I'm saying I was perfect about it, but I got what I needed. And it was a pretty expeditious route. Yeah, I think the other piece is like, what could have been better for her, like, you know, who this is not a judgment on the person or like, hey, improve this. But I think over time, if you have enough people that like, naysay, you, you start to internalize it.

The "Discourse" of Male Allyship as a Long-term Learning Journey

"Discourse" is a term associated with transformation and has been coined to demonstrate that male allies view male allyship as a long-term learning journey. They are still trying to extrapolate what male allyship truly entails as a concept and place emphasis on collecting feedback from women in Tech. ZZ, an engineering manager at a fintech startup, described his commitment to ongoing allyship by going straight to the heart of the problem and helping women find a technical career path. He described this attempt at allyship in the following:

> I always believe that it's not easy to just do the work inside the industry … so that's the reason I actually work with some universities right now, as a volunteer. Basically, I try to go to some organizations whose codes are basically written by younger, female students who are expressing they are interested in joining the Tech. world. I try to be like a mentor, because I have several years' experience.

PC, a founder of a Tech. startup, talked about his ongoing dedication to allyship in the form of learning from other women's experiences and listening to their feedback on how he operates as an ally:

> But the point is … finding those opportunities to build relationships with these women, has been, I think, given me a foundation, so that I can learn what matters to them and learn…. I've shared my story about allyship with other women and then asked them what they would do and what they would think and how, what should I learn from it?

WA, a senior staff engineer, introduced his discourse with male allyship by participating in the focus group. He presented the question on how to evangelize more men toward male allyship. He shared that in recent events regarding a Women in Tech. event, only a handful of male allies showed up to support speakers:

> And afterwards, we were chatting, and she said to me that she was really upset about the panel. And I was like, Why? I thought it went really well…. And she says, Why didn't more of my male allies support me? There were 200 people in the Zoom chat. She took the time to scroll through the entire participant list. She's like, there was one or two other people there out of 200 people … outside of you and the VP….

Male Allyship as a "Disorienting Dilemma"

A "disorienting dilemma" is a term used to describe a trigger for questioning of assumptions that can result in transformed beliefs. Self-identified male allies found themselves at the core of this dilemma as they explored their own stories of extending allyship to women. HA, an engineering manager, described his dilemma when he encountered that some men see allyship as a path where women can take over their jobs. He talked about how he discovered that men need to learn to not worry about "a problem that does not exist yet." He discussed how to normalize male allyship in organizations and recognize that the investment in allyship for men is an investment in themselves as a "selfish" exercise:

> Why am I worrying about a problem that doesn't exist?… I think that's one of the things to help people overcome the fear that if you give opportunities to others, that means less opportunities, basically, what I want to do is … I want to start making allyship actually selfish. It's a, especially in corporate America, where if we get the right leaders in the right position … then like, we will do better as a company. And that means it'll be more opportunities for everyone.

PC, a founder of Tech. startup, described how he made a "mistake" but went on to course-correct himself by continuing to lean on the woman in his network for feedback in advance of taking action. He leveraged the same female leader who had given him the feedback on his announcement for all leadership positions going forward:

> There are other situations in my life where I get feedback where I, you know, I don't have this sort of resolve or vulnerability or whatever to go back to it. But it was so important for me to understand this, she became a mentor to me, when I was gonna communicate about something … I would literally send her an email draft or something and say, here's what I'm going to say and can you read this and tell me if I'm doing it well?

He summarized by talking about how the commitment to the ongoing relationship created inroads in his relationship with her and something they could continue to build on. He summarized by talking about his current startup and how this experience ties in with his current hiring strategy: "And yeah, so like, and I think it is really that moment, that actually, helped me basically improve my foundation, and not just myself, I think just like the team around me, the company around me…."

VW, an experienced Human Resources leader in the Tech. industry, described a tough disorienting dilemma with one of his mentees. She described how she interpreted his message of "finding your voice" to mean that she was not using it currently. In his interview, he shared how grateful he was for the opportunity to receive her feedback with vulnerability and re-clarified his commitment to wanting to see her succeed:

> And, she ran off like several examples of what she's done since then, based on my feedback … and I am so glad I had the opportunity to clarify with her. Because basically, I was super stoked to have her in that job. She worked her ass off to get into that job and be promoted….

He went on to describe the importance of clarification and not getting stuck in the same patterns of bias: "And unfortunately, I think what she was up against, and what she's probably experienced along the way ... she heard me saying she wasn't doing X, Y, Z. Yeah, what I was really saying was keep going, we've got you here."

HR, an Associate General Counsel for a media Tech. company, described the disorienting dilemma for male allies by describing the need for ongoing learning and practice. In her words, they need something similar to a "daily yoga practice." In her story of watching male leaders take unconscious bias training, she remarked:

> You know, these were actually, not nefarious people, they're actually, just so used to ignoring the women in the room that they didn't realize that they were talking over them, and later on getting credit. And sometimes they weren't even the ones taking the credit, but the credit was given to them, and they weren't correcting it. And so I remember feeling very confused about this, almost like a cognitive dissonance. I'm sure they thought of themselves as allies. I know it. I know, they identify it as that. And they have daughters, and they and they think they're very progressive and all that, but why are they doing this in meetings? Um, and so that's how I realized that, that it's a daily practice, it's, you know, it's like yoga. You can't just go to one class and say you're yogini like you have to practice and it has to be part of your awareness all the time.

Summary: Finding 2

Table 6

Summary of Finding 2: How Do Women in Tech. Learn from Male Allyship?

Participants	***Summary Findings***
Women in Tech.	• Women learned independently and by driving the learning process with their self-directedness. • Women learned in spite of negative experiences in the male allyship experience.
Self-Identified Male Allies	• Men expressed that women learned by experiencing a perspective shift and a transformative outcome in their careers. • Men learned from the male allyship experience by reflecting on the impact they made on women with their support.

All women in Tech. and self-identified male allies experienced learning by becoming critically aware and changing their perspective, resulting in transformative outcomes. Women demonstrated "self-directedness" and the ability to apply and operate learning independently. Male allies went on to explain the ongoing discourse of what male allyship entailed and how it is an ongoing process of learning for them. At the heart of the male allyship experience lies a "disorienting dilemma" as allies try to understand how to be effective as male allies and women try to assert their unique qualities. Participants share that the learning they received from any experience with male allyship (positive or negative) resulted in learning.

Research Finding 3: What Attributes Do Male Allies Possess to Be Successful in Supporting Women from the Women's Perspective?

Finding 3: *All women described that male allies needed to have an active stance and possess courage to be effective male allies. To obtain information for use in answering the third research question, participants were asked about what attributes they looked for in a successful male allyship experience and what attributes were missing from their experiences. They were also asked to expand on advice they would have for men interested in male allyship and women who want to seek a male ally for support.*

Table 7

Outline of Research Finding 3

Finding 3: All women described that male allies needed to have an active voice and possess courage to be effective male allies.

- **Male allyship for women is an active process:**
  - Male allies should be ready to undertake action in supporting women
  - Male allyship is empowering and does not require validation or recognition

- **Male allies possess the right blend of qualitative attributes:**
  - Male allyship operates with vulnerability and trust
  - Male allies are experienced coaches, mentors and advisors
  - Male allies focus on the female experience

- **Male allies can normalize male allyship in the workplace:**
  - Men can be male allies for women as part of daily rhythm of the business activities
  - Men can be better male allies to women by education on how women's careers are different from theirs

Male Allyship for Women is an Active Process

The most promising attribute experienced by Women in Tech. was active versus passive male allyship. Women shared their frustrations when men do not act as allies for women by speaking up with courage. PS, a Director of engineering at a prominent Tech. company, described active passive allyship with an example:

> I think of male allyship as a sort of active male allyship, not passive male allyship. It's like gauging the room, understanding where speaking up is needed and then speaking up…, looking at what's happening and using that contextual awareness to actually do something about it….

HA, an engineering manager and self-identified male ally, described his own frustration as an ally of wanting to see more action and less talk on the subject of male allyship. He described his biggest concern: "There's almost too many cooks in the kitchen, when it comes to women in Tech., that's too many people trying to do things and nothing actually happens…."

Male Allies Should Be Ready to Undertake Action in Supporting Women

ABe, a Sr. Director of Engineering and site leader for a prominent Tech. company, went on to explain that being an active ally implies being ready to take action and call out injustices toward women at work: "A big part of this is about just like, never let anything go unchallenged. Like if you feel like it's unfair, or in any way, derogatory, whatever, you need to stand up because there will be women in that room that don't always want to be the person that always has to fight for all women, right?" He shared that men need to pay attention to things that "feel off" and "express concern" in the moment.

AB, a senior leader at a tech startup, highlighted the importance of self-awareness for male allies before they undertake action. He reported the importance of being aware of scenarios where gender bias is subtle or hidden and requires a conscious voice of support to call it out: "Be on the lookout for situations where their gender might be influencing something that's holding them back. And have that awareness, have your ears perked, it kind of gives you a sense, like, oh, maybe that's this…."

GY, a senior staff software engineer, described the feeling of active male allyship as inspiring and helpful. She shared her own recent experiences: "Like if I am in meetings and if I get interrupted, some other man will stop there and say, okay, oh, do you want to say something? Do you want to continue to say something?"

ET, a district manager for a Tech. company, discussed the need for male ally readiness in supporting women more actively in Tech. She described the dismal lack of women in IT and acknowledged that, even for the men who want to help, "this is hard." She went on to explain that a male ally is someone can speak up as a way to challenge the norm on hiring:

> I think any man who is willing to like, really advocate and speak up in support of just women in the business is a male ally. And it's because people will always default to another 40-year-old white man…. But I think the people that are really willing to go out of the norm and also give chances as well, because I think there's a lot of nervousness still around hiring women in their, like, early 30s….

PC, a founder of a Tech. startup, summed up that the actions of men as male allies is of utmost importance. The need for men to take action as a key attribute to demonstrating allyship goes beyond the scope of allyship in general. According to PC,: while "not specific to allyship … it's probably more pronounced in allyship, which is the relationship between intent and impact...." He explained that men often have a difficult time aligning their intent to be allies with their actual impact as allies to women.

Male Allyship is Empowering and Does Not Require Validation or Recognition

Women reported that providing allyship does not come with recognition for male allies, nor should it be expected. Male allyship in the absence of formal recognition was viewed by women participants as both empowering and everlasting. CS, a Director in technical operations and programs, described one such case of allyship she continued to receive, even after she was no longer connected to her ally. She described the feeling as "something in your arsenal" as she recounted how he continued to be available to her to broker new introductions and secure the next opportunity:

> I'll tell you like, there was a piece of me that forgot I had him. And so I feel like I'm realizing like that is a super strong something in your arsenal that you can choose to just invoke. And to make sure you know how powerful it is … he would introduce me to anyone, right? And even in other jobs … people don't know me. I haven't stood out….

KJe, a Director of Engineering at a prominent subscription Tech company, described a similar model of gaining valuable allyship from the men who chose to be "less exuberant" or "eager" to be allies. She shared that the male colleagues that she has worked with, who have had the best impact on her, are the ones that have never had to declare themselves an ally. She described her own feeling of rejecting forward approaches to allyship, stating, "I'm conflicted, because I don't want affirmative action. I want to know what I have achieved; I've achieved on my own merits. Not because I'm a woman. And so there have been times where I think people would believe that they were male allies."

HA, an engineering manager and a self-identified male ally, described similar discomfort in taking credit for his work as a male ally. He said, "I feel very uncomfortable if, like, if we're recognizing people, we should be recognizing the women, not the allies that help them…." He describes the male ally's journey as one that is not distracted by personal incentives, and therefore, for men it is a true commitment to driving women to career goals that they are aspiring for.

Male Allies Possessed the Right Blend of Qualitative Attributes

Women in Tech. (43% of women participants) described several favorable qualitative attributes in the male allies they worked with. These included "intelligent," "empathetic," "honest," and "reliable." Most of these attributes were found when male allies were operating in the capacity of coaches, mentors, and advisors in an organizational environment. According to the participants, men must also be vulnerable and open to sharing their personal selves into the relationship in order to make it successful for both parties. Qualitative attributes of vulnerability and trust exhibited by men in various roles as allies were received as most successful by women in Tech.

Male Allyship Operates with Vulnerability and Trust

KJe, a Director of Engineering at a prominent subscription Tech company, described the power of trusting someone's motive when you extend yourself into an allyship partnership. She portrays the Tech. environment as one that does not provide a great experience to trust anyone. However, extending vulnerability helps the discovery of valuable trusted allies:

> The richest experiences that I've had at work have involved defaulting to trusting someone's motives, and trusting them with me … being vulnerable to someone and trusting that they will not do you harm as a result. And so if they've not declared themselves as an ally to you, it's really the next level of extending that trust….

PC, a founder of a Tech. startup company, described vulnerability and honesty as the key to unlocking the allyship relationship. He described these qualitative attributes as necessary: "I think it's to be vulnerable, and be honest about what you need and what you want. And it's one of those things, it's probably easier said than done…."

SS, a sales Director at a prominent Tech. company, discussed the same advice to women who are seeking out male allyship. She described the need for women to be vulnerable and exhibit the same unguarded honesty they expect from male allies. She described the need for an authentic connection that comes from an equal position of power from both individuals operating in a high trust relationship:

> The biggest piece of advice that I have for women partnering with male allies is that approaching it from a position of equal power and empowerment. Break down what that relationship might be, whether a manager, employee, or partner appears, ignoring that for a second and just focusing on what it is that you're trying to accomplish.

Male Allies are Experienced Coaches, Mentors, and Advisors

Most participants (13 out of 27) recorded that in order for male allyship to be successful, male allies need to have experience with mentorship, coaching, and/or managing women in Tech. LL, a product engineering leader, explained how male allies are carefully selected because of the experiences they bring with them and what they can offer to women. Her advice to women who are junior in the field of product engineering: “I wouldn’t choose somebody who, like, doesn’t have any sort of experience of this and then try to make him into a male ally. I would say, look for the people who are visibly male allies....” She recommends that male allies who support multiple women kick off early allyship for women who have not experienced male allyship before.

ET, a district manager for a Tech. company, described the value of having a male ally who was vested in her success by being an industry leader. His mentorship was geared to ensure that she had the highest amount of success, as that impacted his brand as a leader. For an industry that has an almost negligible number of women in the field, her advice is that having an experienced ally who is invested in your success is a must:

> He had a vested interest because he was starting a new job and he had pulled me over because he had been my customer. And so of course, he wanted me to succeed because he’s the one who told this company that they should give me a chance.

QBJ, a principal engineer, had similar advice to women. His advice to junior engineers has been to leverage an ally who is a leader. Leaders in organizations, according to him, must bear the responsibility of listening to the questions women have and advocate for them. They have the experience and are well versed to provide guidance that has a practical application.

Male Allies Need to Stay Focused on the Female Experience

Crucial to the male allyship experience was the sustained focus on women; their goals, their aspirations and their career journeys. Self-identified male allies like LF, a leader in security engineering, remarked on the fact that the focus on women as the recipient of the allyship was key to a high quality experience and can sometimes be a point easily forgotten by male allies:

> Remember, it's about support, and that person. And I think the other thing that we sometimes forget about when we become allies … is that it's not about what your dream of your perfect life is…, it's actually about the person that you're supporting, and your ally and your friend.

DA, an engineering manager, shared his thoughts in recognizing that women experience challenges unique to them and their gender in Tech. He remarked that men interested in allyship should remember that as they consider what is 'helpful' behavior that it operates within a larger system of constraints. His advice was to focus on women and how best to address their needs with the goal of inclusion overall.

KJ, a software engineering manager at a rising fintech startup, appreciated male allies who called out bias and placed importance on the women who did not always have a voice. She said, "And when you see a woman in the room with you and she's the only woman out of like 20 people, maybe reach out or maybe speak up when something weird and super hyper-masculine comes up."

WA, a senior staff engineer, described his conundrum with leading male allyship forums comprised of only males:

> And I have a real problem with this meeting.... I'm like, we have seven guys sitting around the room talking about what's best for women. And there's not a single woman in this room, or at least a single person that identifies as a woman. And I just feel like we're wasting a shit ton of time here. Like, why are we going to spend a whole bunch of time talking about what's best for women?

He went on to say that men being exclusionary at this point is "somewhat systemic," and his conclusion was "we're mansplaining women," and hence, this is the problem with allyship in general. His final words to the team were, "Why don't we like to involve ourselves with some women, I don't know, like, crazy idea…."

Male Allies Can Normalize Male Allyship in the Workplace

In the study, self-identified males described male allyship as part of a natural inclination of doing something good and helping women. They commented on how male allyship needs to be normalized in professional work environments, an expectation of men as part of their professional success and their existing role and responsibilities. MB, the head of engineering at a Fintech company, responded with the following statement when asked about what is missing from the male allyship experience today: “We need a playbook and a more systematic approach to education. This is all over the place today.”

Participants further shared that the way male allyship exists today creates an expectation that women need help from men to be successful professionally, a perverted reality. HA, an engineering manager, resets that expectation by explaining that normalizing male allyship also normalizes that expectation and makes it comfortable for both men and women to request input and support from each other: “And I think women think if you ask for help, you’ll be seen as weak. But no … we all need help! So it needs to be seen as part of the normal thing.”

Male Allyship Implies Adding Women to Operating Business Rhythms

The absence of women in daily business operations was a recurring theme observed by male participants in the study and an inflection point in their allyship journey. PC, a founder of a Tech. startup, noticed the absence of women when his younger daughter began to point out the number of women on the zoom screen in virtual meetings. He described that moment with vulnerability in the following remarks:

> One of the things that I don’t share often, but I was a little surprised when I started seeing women and engineering at my organization, because I’ve never seen women and engineering. And I feel it’s a very vulnerable thing for me to say, because I worry that people will judge me, but initially this was kind of a surprise. Now, I feel, It’s fu**ing ridiculous that, like, you shouldn’t be surprised by anyone being an engineer, much less a

> woman, right? I have a four-year-old daughter, and I see her. And I'm very proud that when I'm on a zoom call, that she would point at all the women on the screen.

His takeaway from this experience was that men need to see women as part of everyday operations, and women need to present to be role models to other women: "So I think one of the things that informed me was that now I feel the need to highlight amazing women professionals … so that they can be role models to other women."

MG, a Senior Staff engineer at a social media Tech. company, explained how different her onboarding experience was a result of proactive male allyship and her male ally acknowledging the privileges of his gender at the onset of their engagement. She shared her experience as a surprise, and she remarked, "And I even got awkward for him for a second. I was like, Oh, are we going to talk about our genders? But I was like, I appreciate that. Thank you."

HR, an Associate General Counsel for a media Tech. company, explained that leadership positions are not the only way to be allies for women. She described the important role of baking diversity goals into OKRs, emphasizing the role that hiring managers play, and continuing to build the importance of training in fighting unconscious bias in male-dominated workplaces. In her own words, all of us can play a role: "And, and, you know, that's how you can make sure that your impact trickles down to the rest of the company, even if you're not leading."

DQ, a principal founder, explained that white men can play a big role to create space for women in Tech. She questioned rhetorically, "And it's white men, specifically owning the fact that they still have the power, right?" She went on to drive the point around creating inclusion for women as part of daily business practices:

> And so the engineering teams that I have worked with, for most of my career, I rarely see a woman of color, who is or a woman who is disabled, who is defining solutions that will solve bigger world scenarios. So the power still rests in the hands of white men.

ABe, a Sr. Director of Engineering and site leader for a prominent Tech. company, talked about the importance of senior leaders in organizations that need to play the role as male allies. He explained that organizational titles and hierarchy always negatively impact true mentorship conversations; however, if investments in women at the senior levels are part of regular business practice, it would change the game for women and male allies:

> I think there's a lot of male allies there. But they're not approachable, for whatever reason, sometimes it could be because these are senior people. And that title or whatever always gets in the way…. I think there is a lot of appetite just to take a chance.

QBJ, a principal engineer who mentors women regularly, summed up the same intention in the following remarks: "Offer mentorship for more junior female engineers giving them a chance to have female role models in the future by helping them get there."

ET, a district manager for a Tech. company, added that male-dominated workplaces suffer from lack of men enthusiastically supporting women, affecting morale negatively. She went on to highlight that bringing women to Tech. is not restricted to changing the optics of the industry but also ensuring long-term retention of women in Tech. jobs:

> I just think that the more men help women in super male-dominated workplaces and the more that they are enthusiastically supportive, that just helps the company long term. That's how you know people are gonna get women to stay in these jobs longer.

Male Allies Need to Understand the Career Trajectory of Women in Tech.

QBJ, a principal engineer, shared that acknowledging how big the gap was in how men and women get treated in the Tech. is something he still struggles with. He now shares advice of how male allies can continue to understand these gaps and be active mentors to women:

> From that point, I've tried to be more conscious about giving, trying to give everybody equal opportunities, through the kinds of questions that I had heard, and by providing advice, and to me that has mostly translated into a lot of mentorship.

GY, a Senior Staff engineer, shared similar advice for men, asking them to hear the stories of women in Tech. She described their reactions when they are exposed to this sentiment and how they process that information into allyship: “Once they hear those stories, they can feel … even if they don’t feel, it’s a big deal for them.”

CT, an insurance underwriter in the fintech industry, encouraged male allies to keep asking questions. It is through questions and prompts they get closer to the experiences of women and the perspective they have on male allyship: “Men who want to be allies, it’s okay to keep asking … it’s okay to check if this is helpful? Because sometimes what a man might think is helpful is actually not super helpful to a woman.”

AB, a senior leader at a Tech. startup, encouraged male allies to keep learning and signing up for resources to get closer to how these experiences are different from their own. He said, “Understand a true authentic self of the experience of people who are different from you … ask questions, do research, go to meetings, volunteer, because until you’ve kind of experienced it yourself … you don’t really know.”

Summary: Finding 3

Table 8

Summary of Finding 3: What Attributes Do Male Allies Possess to be Successful in Supporting Women from the Women’s Perspective?

Participants	***Summary Findings***
Women in Tech.	• Women attributed taking an active stance on behalf of women as the most successful attribute for male allyship. • Women favored male allies who were vulnerable in building trust with women.
Self-Identified Male Allies	• Men expressed being open to constructive feedback and constant improvement were successful attributes perceived by women for allyship. • Men described effective listening skills and understanding women’s career roadblocks as essential to operating as successful male allies.

All women described that male allies need to have an active voice and possess courage to be effective male allies. Women need to be core to the allyship experience and feel favorably to male allies who place emphasis on building trust and vulnerability for allyship to work effectively. Men who were motivated to act on behalf of women while being open to feedback for improvement were viewed as having the most successful attributes for male allyship from the perspective of women. Male allies in the study stated that men had a long journey of learning and paying attention to the differences of women's career journeys from their own. Both women in Tech. and self-identified male allies (37%) continued to highlight that male allies are a salient aspect of the male allyship process, and that recognition should not be an incentive for successful allyship.

Chapter Summary

This chapter presented the three findings that were drawn from the study that explored male allyship from the perspectives of women in Tech. Participants were ten women in Tech. and ten self-identified male allies who were asked individual questions of how women in Tech. identify male allies, learn from them, and aspects of what makes the allyship successful. Another seven participants (three self-identified male allies and four women in Tech.) participated in a focus group where questions were asked as a group and individual responses were collected. Participants shared personal stories, and in keeping with qualitative research practices, a large number of quotations from interview transcripts were included to illustrate the findings and provide readers with a sense of the participants' authentic voices.

The first finding was that all women said their identification process happened "unknowingly" to describe the unconscious nature by which they found male allies in professional environments. Women saw male allies as an extension of their current role as effective managers, mentors, and sponsors. Women described a positive outcome from solving professional challenges with the support of a male ally, and this became an anchoring realization of what comprises male allyship and who their male allies are. Self-identified male allies, although more conscious of their identities as male allies, struggled with the nature of how to be effective allies and looked to support women the best way they could professionally. They shared their struggle with being effective as allies in discerning allyship from their existing role and responsibilities.

The second finding was that women operated independently and with self-directedness from the male allyship and experienced transformational outcomes as part of their learning journey. This was highlighted in the critical awareness that women experienced in their allyship experience. Women sought out the advice and counsel of their allies and strove to act, while male allies provided support in the form of lifting organizational blockers, advocating for them in male dominated forums, and sponsoring them for new opportunities.

The third finding described that male allies needed to have an active stance and possess courage to be effective male allies to women in Tech. Men who were motivated to act on behalf of women while being open to feedback for improvement were viewed as having the most successful attributes for male allyship from the perspective of women. Male allies acknowledged they had a long journey of learning and paying attention to the differences of women's career journeys from their own.

Taken together, the findings provided insight into the perspective of male allyship from women in Tech. The findings show how women identify male allyship unknowingly, experience self-directedness and perspective shifts as part of their learning experience, and see active action on the part of men as successful attributes for male allyship.

Chapter 5: Analysis, Interpretation, and Synthesis of Findings

Introduction

The purpose of this study was to explore with women employed in Tech. companies their perspectives on how male allies have influenced them. The researcher was interested in interviewing these women to better understand their overall experience with allyship and their perspectives on what comprises effective male allyship. The study extended to interviewing self-identified male allies to better understand the data on how males believe they operate effectively as allies to women. The study also had four women and three self-identified male allies who participated in a focus group. To carry out this purpose and shed light on the problem, the following questions were addressed:

1. How do women in Tech. identify a male ally?
2. How do women learn from their male allies?
3. What attributes do male allies possess to be successful in supporting women from the women's perspective?

The three major findings derived from the research were as follows:

1. All women in Tech. participants expressed that they found their male allies unknowingly and used words like "unintentionally," "accidentally," and phrases like "I was not conscious of it" to articulate their identification process. The identification process was made in professional work and industry environments where allyship was accessible in the form of effective managers, mentors, and sponsors operating as allies in the undertaking of their professional responsibilities. This finding was

inclusive of 7 out of 14 women who identified male allies as men who supported women unknowingly and did not assert themselves as allies. Male allies confirmed that women found them through their existing roles in organizations and by declaring their role as allies to them.

2. All women experienced self-directedness and perspective shifts that resulted in learning how to operate differently as a professional because of the male allyship experience. The majority of women (10 out of 14 women) and all male allies described a transformative outcome as part of the male allyship learning experience.
3. All women described that male allies needed to have an active stance and possess courage to be effective male allies. Male allies corroborated this finding with establishing that male allies that took action to support women were most successful as male allies.

Leveraging Bandura's (1978) theoretical framework of reciprocal determinism, the current chapter is structured around three analytic categories that applied to the sample study, namely, a cognitive, behavioral, and environmental analysis that explain the inter-relatedness in understanding male allyship from the perspective of women in Tech. This framework was identified in the process of integrating the answers to the research questions as they related to the central phenomenon under study:

1. *Environmental*: Women in Tech. identified male allyship as part of a transformative outcome for themselves or by declaration of allyship on the part of males in organizational environments.

2. *Cognitive*: Women are driven by their self-efficacy and to learn from the male allyship experience. Their learning falls under three categories: (1) personal, (2) proxy, and (3) collective agency in the organizational context.
3. *Behavioral*: Women in Tech. attributed successful male allyship from men who were effective in their existing roles as managers, mentors, and sponsors and took an active stance to support and sponsor women.

In the following pages, the researcher analyzes those accounts considering the three categories and presents her interpretation of the findings. Within each analytic category, she provides examples in the form of quotations from women participants. She then revisits the assumptions presented in Chapter 1, describes the contributions of the research to the related literature, and reflects on her experience in conducting the study.

Participant Groupings

The male allyship experience, as told by participants in the study, covered a variety of what comprised male ally behavior. Self-identified male allies recollected stories of recognizing their role as allies in support of women they managed, mentored, and advised in their professional lives. Their stories shared the consistent theme of trying to apply what was readily available as learning content of what was male allyship to their own examples of being first-time allies. Most participants shared their early mistakes and continued to question if they could have done better in supporting women through their allyship. Another common theme was that the male allies in the study felt that their allyship endeavors had at best been reactive, and they struggled to see how to be consistent and active allies to women throughout their careers. They described that not all business environments were conducive to their intentions of supporting women; businesses that prioritize immediate business returns over long-term growth compromise instilling a learning environment and up-skilling talent. In these environments, male allies recalled not having any general idea or mental understanding of what was male allyship and how it should be applied.

They re-confirmed their identities of being male allies as they picked up a better understanding from their own accidental experiences in their existing role, recognizing the mutual benefits of allyship. Some of the male participants highlighted the exact moment they became crystallized with their ally identities—their personal transition to fatherhood and becoming a father to daughters. Several males expressed with vulnerability what they did not know when they started on this journey and how the growing popularity of male allyship in their organizations helped them continue to embrace this role of being a male ally to women. They applied learning according to them, not just to the professional environment and the women they worked with but the women in their personal lives.

The women in the study described stories of male allyship upon critical reflection of their careers and the presentation of how allyship helped them achieve a transformative outcome. An example of a transformative outcome was described as a male ally who took on fighting biases on behalf of a female lead on an all-male team where her leadership was being overlooked simply because she was a woman. In another example, a transformative outcome was described as a supportive male manager who understood that a women's career was different from that of men. She called him out as "quietly effective" in how he reinforced recognition for the women on his team while bootstrapping them with investments to grow in an all-male business. Finally, a transformative outcome was a male mentor taking the entirety of his four-month paternity leave in support of continuing to evolve parental leave policy with equity. For example, male allies set the bar for a new standard of equitable best practices in organizations to elevate women and other underrepresented minorities.

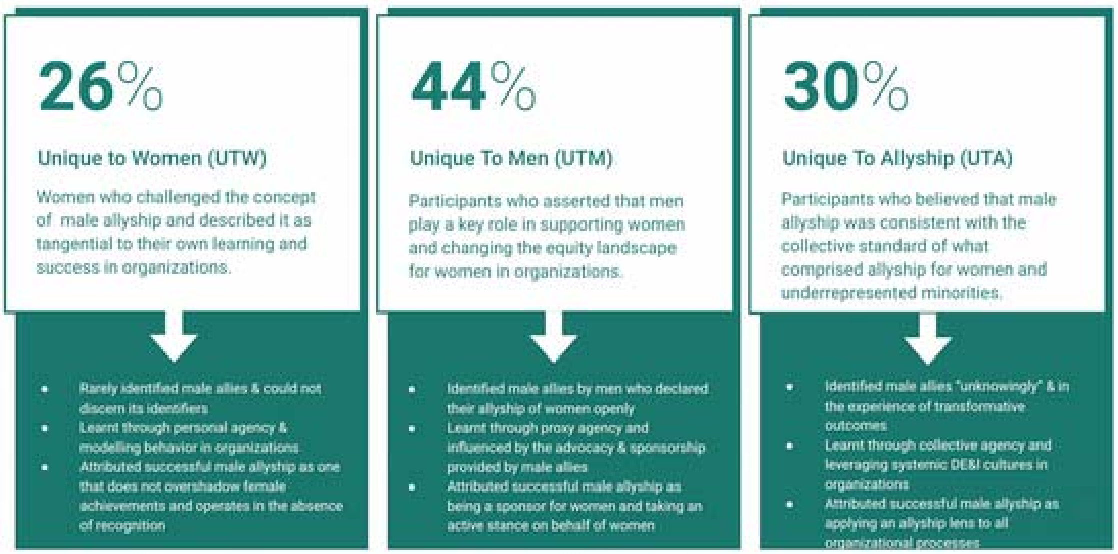
Women described an ambiguous view of the Tech. industry from “back in the day” where it was difficult to assert the exact year or early tenure of women in the industry. In this time contingent, they described the absence of male allyship in action and its awareness amongst professionals. “Allyship” and “equity” were not common terms and not part of existing company cultures. These women had to learn to band together, model successful behaviors from observing men, and take on new challenges to prove their worth. They also described their male allies in this climate as salient professionals who provided support without prompting and received no recognition of their role as male allies. In this organizational climate also, men were viewed as instruments of power and had a unique position to be allies to women. Allyship came in the form of sponsorship, and these male allies cast a wide web of connections, creating a network for women to land opportunities across an organization and industry.

As the Tech. industry matured, women participants acknowledged that the organizational culture of companies has come to play a big part in building the male allyship rhetoric into practice, and it has slowly become something expected of male professionals. In these scenarios, women asserted that male allyship was not unique to the position of men but more an extension of an allyship culture for women and underrepresented minorities at large. In these examples, male allyship was pervasive to institutional practices in organizations. It was applicable in how male leaders check for biases in their performance management process, the language they use when delivering feedback, and the way they continue to create gender-balanced teams to maintain an open, equitable culture for their teams. As a collective, the goal of male allyship strives toward equity at large, challenging organizational policies, sustaining a working environment of psychological safety, and operating a free and fair hiring process for organizations.

As a result of these recorded experiences, three main participant groupings emerged in how women perceived male allyship. Three participant groupings emerged from the research because of the range of these perspectives of male allyship, as shown in the figure below:

Figure 3

Summary of Participant Groups



First, in the Unique to Women (UTW) category, 26% of participants exclusive to women only (7 out of 27 participants) described male allyship as an experience driven by women. They saw their experiences as organic to their careers and adopting new behaviors to survive challenges historically only solved by men. They did not identify male allies and described men who were true allies to them as salient, operating without recognition or definition of their support. Second, in the Unique to Men (UTM) category, 44% of participants, which included men and women (12 out of 27 participants), asserted that men hold the key to changing the equity landscape for women. Men were identified when they self-declared into allyship for women and women are influenced by their advocacy and sponsorship in organizations. They attributed successful male allyship as one that supports women with activism and opportunities for growth. Finally, in the category of Unique to Allyship (UTA), 30% of participants, which included men and women (8 out of 27 participants), asserted that male allyship was nothing more than an extension of allyship at large and was not unique or customizable to women alone. Women learned from allyship best practices and holding men accountable to equitable organizational practices and attributed successful male allyship to upholding a high bar of equitable organizational practices. Each grouping will be described below and used to inform the discussion and interpretation of findings within and across the three analytic categories.

Unique to Women (UTW)

This category was only observed in women participants who shared early career experiences of male allyship. Their description of male allyship dated to self-proclaimed early days where embracing affirmative action was the only artificial way in which women were hired to male-centric organizations and little was done to create the right environment for their learning. They started their interviews with a proclamation of how incredible the concept of male experience stands with them and questioned its validity, when in fact, these women were driven to do all the work in driving their own success. These women shared a common theme of seniority in their tenure (Directors, Senior Directors, Founders, and Executives) and operating in organizations that, unlike most modern Tech. companies, lacked accountability in holding men responsible for allyship toward women. Therefore, these were women who had carved success for themselves independently of male involvement.

Their lack of conviction was not, however, impartial to their acknowledgement of the men who did in fact present themselves as great role models to them. They identified these males as the closest to what they would describe as true male allyship without declaration and/or recognition on the part of men. Several women expressed that they learned to manage teams, navigate the bureaucracy of Tech., and climb corporate ladders as a result of channeling their behaviors. Additionally, the experiences recounted by these women covered how male allyship resulted in alternative experiences for them, driving them toward seeking out other women and creating an elite network of empowered women in support of other women in Tech. In their current beliefs, they continue to lack trust in the fact that men could be allies to women, but are receptive to the current industrial trend, which compels them to keep an open mind. They attribute successful male allyship to the men who are biased to take action in their current roles with the understanding that they need to flex their styles to better understand how women succeed in Tech.

Unique to Men (UTM)

Participants who came from software engineering professions and with experience in prominent, modern-day Tech. companies came with prior knowledge of the importance of diversity and subsequently male allyship to improve gender diversity in Tech. companies. The majority of these participants, men and women, described familiarity with privilege as a concept and its presence with men who dominated the Tech. industry and technical teams as a majority. Women described male allyship from the perspective of men having power and influence in organizations; they sat higher in reporting hierarchies, dominated leadership discussions, and were decision makers that drove impact. Self-identified male allies in this category asserted their role as allies to women and saw it as their responsibility as allies to support women for organizational success in the industry.

Women learned from male allyship by influencing men who were willing to be allies and had the resources, knowledge, and means to act on their behalf to secure the outcomes they desired. They worked with males who were open about being allies and committed to sponsoring women. Sponsorship and an open declaration of being male allies helped both parties establish mutual goals and, in some cases, establish mutually beneficial relationships. Women attributed successful male allyship to men who saw their commitments through and aided women in achieving transformative outcomes otherwise difficult to achieve on their own. Interestingly, in the grouping, both men and women were still unpacking the learning journey and what it entailed for them. Men continued to express curiosity on how to continue the learning experience when goals were achieved and their role as allies had suitably come to an end; contrastingly, women described learning as a continuous process of asserting their new behaviors and achieving success in the absence of male ally support.

Unique to Allyship (UTA)

Participants who had a general commitment to allyship and supporting all underrepresented groups applied male allyship as an extension of the concept. These male allies did not differentiate in their role of allyship by gender and believed in the more foundational concept of equity in the workplace. Participants in this group were more balanced across Tech. companies in the industry and not necessarily dominant to software engineering roles. As a result, there was a general exercise of building a collective in which men and women pooled their knowledge, skills, and resources and acted in concert to shape their future. Women described that male allies in this grouping were unrecognizable but prominent in calling out biases and operating from fairness in their roles.

Given that male allies in this grouping were not perceived as customized to women, in some examples women struggled harder to challenge what was part of the collective understanding of allyship. In their stories, the advice rendered to them could well in fact be applied to men as well, which sometimes felt like male allyship ‘lite’ and capped. Men shared that their allyship was more universal and often driven from an understanding of how to lean in to be inclusive as a first step and delineating how to support underrepresented communities, including women. Participants congregated their learning experiences in contributing to the work of allyship, and women attributed effective male allies to male professionals who were effective managers, advisors, and coaches.

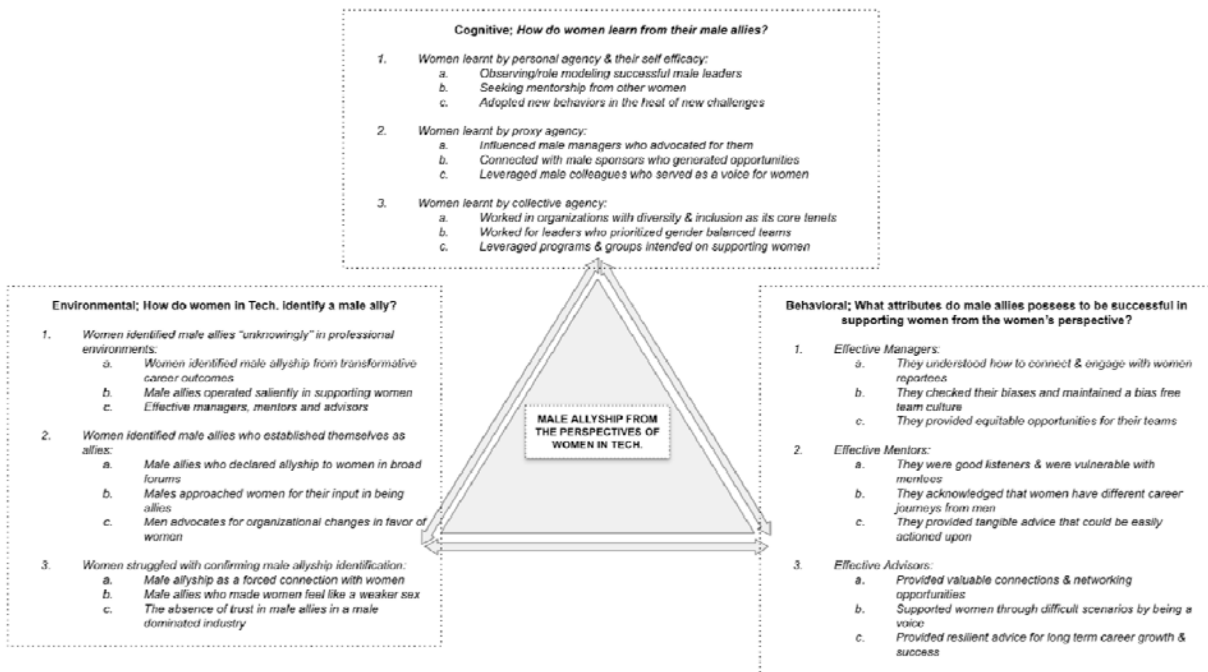
While other factors may have impacted and differentiated the participants in the study, e.g., age, ethnicity, type of organization, and/or number of years in the workforce, etc., the researcher could not discern clear patterns or relationships that would suggest that any of those factors significantly influenced the participant groupings and the overall analysis.

Analysis

Leveraging Albert Bandura’s Theory of Reciprocal Determinism (1977), the researcher attempted to organize the analysis that explained how male allyship is perceived by women by three factors: environment—how women identify a male ally; cognitive/personal characteristics—how women learn from male allyship; and behavior—what attributes male allies possess to be successful in supporting women from the women’s perspective. Building on the conceptual framework, the researcher used this framework to draw out how the data gathered against each question were interconnected. This framework presented overlapping themes that show how the responses from each research question present a more connected analysis of how women in each participant grouping perceive male allyship.

Figure 4

Analysis of Male Allyship from the Perspectives of Women in Tech.



Analytic Category 1: Environmental

Women in Tech. identified male allyship as part of an experienced transformative outcome or by declaration of allyship on the part of males in organizational environments. This category will be used for analysis of the answers to the research question: How do women in Tech. identify a male ally? (Research Question 1).

The majority of women in Tech. (greater than 45% of the sample of women) shared that they did not recognize and identify male allyship at the onset. They described it as an unknowing experience that was only recalled through a conscious reflection exercise of how it made them feel and what resulted for them in their long-term professional careers. This was opposite to the experience of men who participated in the study and asserted their allyship or aspirations to be male allies at the onset, in part because the terms of the study dictated an assertion to participate in the research. All participants identified male allyship as a viable concept, with some men referring to their roles at home being a triggering event to have the manifestation of male allyship in the workplace.

Transformative Outcomes for Women were a Key Identifier of Male Allyship

Across the participant groupings, women shared that male allyship was an experience that was hidden in plain sight. It was not until they assessed for transformative outcomes in interacting with their male colleagues that women were able to identify a male allyship connection to their career. In the case that men declared their roles as allies (UTM), women held them accountable to their responsibilities. They cited men as being advocates and sponsors for them and influenced them toward helping them build their long-term career and drive their overall development. The identification of male allies in the form of effective managers, mentors, and advisors (UTW) also came with a strong association of results and being empowered to work through organizational bureaucracy and networks. Male allyship, although on the spectrum of collective allyship for some participants (UTA), still held the standard of building and contributing to the body of work for it to be tagged as allyship.

All women in the study, regardless of participant grouping, underscored the importance of male allyship in all roles held by men in the Tech. industry. A few women circled the positive result of men extending allyship to women as securing their own positions for promotions and visibility in organizations, hence citing a mutually beneficial relationship to both parties, but still only identifiable with transformative results.

The Catalyst for Male Allyship Can Come from Home but was Recognized Only at Work

An interesting phenomenon across participant groupings was the commonality of experiencing male allyship in organizational contexts with strong reference points to a personal connection. Women associated some of their allies as “fathers” that they never had or guidance that they would usually get from someone at home, while men called out personal events like becoming fathers to daughters that made them more attentive to male allyship for women. The previous analysis discussed the dichotomy of male allyship either being fully declared or almost an unknown experience in the absence of results; however, how it manifested speaks directly to how males were motivated to operate as allies and women were motivated to receive their help.

In the experience of male participants across groupings, they shared individual stories that helped them understand the context behind the struggles that women faced in Tech. They described their experience of male allyship as an extension of the role they played for other women in their personal lives. These men referenced relationships with their daughters, wives, sisters, and closest female friends as references to lock into their roles as allies at work. Other men shared that an experience with being a male ally at work shifted how they operated with women in their personal lives, building into the idea that the male ally identity can formulate both at and outside the professional environment while it continues to dominate industrial environments.

This gave them an anchorage to the male allyship experience, and they experienced their own connection to it, making it easier for women to recognize them. Some male allies described vulnerability as an important attribute of the allyship journey, not just for women who need support, but for men who need their help to be better at understanding what women need.

Therefore, it can be said that women identify male allies through an active process of buy-in based on resonating environmental experiences.

Analytic Category 2: Cognitive

Women are driven by their self-efficacy and to learn from the male allyship experience. Their learning falls under three categories: (1) personal, (2) proxy, and (3) collective agency in the organizational context. This category will be used for analysis of the answers to the research question: How do women learn from their male allies? (Research Question 2).

Women were asked to share their learning from the male allyship experience, specifically the overall impact it had on them along with what made the learning distinct from other experiences. Men were asked to share what they think was the learning impact they made on women by extending allyship to them. The work of Bandura explains that self-efficacy beliefs are foundational to human behavior and that people have a sense of agency in their behavior because they believe they can produce desired effects by their actions. People with high perceived self-efficacy have a strong sense of agency as they perceive themselves as the subject shaping the course of events in their lives.

All participant groups shared in a common reflection of male allyship being a transformational experience for women, helping them learn directly from the support of allies or the absence of them. Perceived self-efficacy and outcome expectancies determine how adults learn, and women learn from their perceived positive and negative consequences of operating in the Tech. industry. Women demonstrated three forms of agency that demonstrated learning in the male allyship experience.

Women Learned Through Personal Agency in the Absence of Male Allyship

Women were self-directed in how they learned from their male allies, and they resorted to modeling behavior from observing the abundance of male role models in the Tech. industry. They acted independently and were driven to evaluate behaviors, human connections, and opportunities that were going to be most valuable in the growth of their career trajectory. Albert Bandura (1990), in the article entitled, "Perceived Self-efficacy in the Exercise of Personal Agency," shared how children who thought they had self-efficacy performed better than children who did not. Despite the delta in skill level, underperformance was observed most in children who had low self-efficacy and low self-worth. This is similar to the stories shared by women who activated their own personal agency to learn from the abundance of men but did not necessarily have the direct connection to a male ally. In the absence of what women believed was missing in male allyship, women resorted to leaning into their own beliefs, perceptions, feelings, thoughts, preferences, choices, values, attitudes, and feelings of self-efficacy.

For several women, the learning was the perseverance of survival in a male-dominated workforce and operating from a place of high self-worth in challenging the assumptions made about women in the workforce. These women in the study shared examples of calling out men for their biases openly, building women-only mentorship and support groups, and even entailed sifting through strategic techniques that resonated most with men to demonstrate their ability to lead in organizations. In several cases, these women took bold steps in challenging the status quo, which made the men in their networks emboldened to provide support 'behind the scenes.' Women described this learning experience as one that continued to remind them to have faith in their own abilities and pay it forward to other women who, in fact, did not have the same self-efficacy to survive in the absence of male allies.

Women Learned Through Proxy and Collective Agency from Declared Male Allyship

Women who had committed male allies working with them described life-changing events in their professional careers and described the learning they experienced as a result of receiving the opportunities that these allies mobilized for them. These learnings encapsulated examples of women being given an opportunity to enter a new technical field, taking on a role they did not have any prior experience in or being encouraged to follow their goals by being introduced to influential connections. In these examples, their male allies were described as sponsors and advocates leveraging their position as men (UTM) and allies (UTA) to influence decisions in support of women. In their experience, the learning was fueled by seeing the outcomes it had on their careers, hence described as "transformational" by several of the participants in the study.

Men who claimed that women had transformational learning experiences from their allyship gave credit to women for chasing new opportunities and forging through new learning scenarios with their support. These men acknowledged their role in providing women with visibility and recognized that their path may not be as straightforward as men or, in some cases, their own. Transformational outcomes were rampantly seen in participants who saw men in the unique position of creating inroads for women, completely altering their career paths (UTM).

Institutional Male Allyship Helped Women Learn Through Collective Agency

Male participants who fell in the category of extending allyship as an institutional requirement (UTA) saw themselves as guardians of the equitable female experience in Tech. They actively made time to provide direction, were active listeners, and prioritized problem solving their grievances in upholding the standard of best organizational practices. In answering questions about learning, these men claimed that women learned mostly through an interactive process of taking advice and providing feedback to their allies. Allies and women created a shared plan as they worked to attack roadblocks. Men and women pooled their knowledge, skills, and resources to act together to raise the bar for women. Male allyship sparked women (UTW) to consider the existence of male allyship with more of the collective representing equitable interests for women in companies today. Male allyship as an expectation of the role gave women (UTM) key learning to get ahead in organizations and share their experiences with men and women in an effort to preserve the learning for a collective endeavor.

Analytic Category 3: Behavioral

Women in Tech. attributed successful male allyship from men who were effective in their existing roles as managers, mentors, and sponsors and took an active stance to support and sponsor women. This category will be used for analysis of the answers to the research question: What attributes do male allies possess to be successful in supporting women from the women's perspective? (Research Question 3).

The majority of participants shared the importance of seeing male allyship as an active process where men are recognized as allies by the commitment to action they take on behalf of women. This included examples of speaking up for women when they were not represented, holding a high standard for male allyship with other men, and driving positive change for more women in Tech. organizations. Men recognized that their commitment to action included a combination of the right qualitative attributes, which ranged from being effective listeners, being open and vulnerable, and building trust with the women they were extending allyship to, a shared datapoint with the women in the study. These translated over to the belief that most men shared on being experienced as coaches, advisors, and mentors to women. Women did not place as much emphasis on men's experience and credibility in their current roles and saw the value of men operating as partners to women without much recognition of the actions they were taking or touting their experience in the industry.

Successful Male Allyship Deemed No Recognition

Women in the UTW grouping asserted that the recognition of male allyship is only through action on the part of males that does not require public recognition. Women in the UTA and UTM categories shared the collective belief that the recognition of men as allies is in the impact they make on women's careers and contributing to the best practices of what comprises male allyship as a persuasive organizational culture. This assertion encompassed the understanding that male allyship comes in the form of an extension of the role that men play as managers and mentors. Effective organizational leaders and influencers, according to women, reinforce the idea that men need to pay attention to the fact that women operate differently in male-dominated Tech. environments and experience unique challenges from men.

Male allies in the UTM and UTA grouping described similar insights of the importance of building allyship relationships and the unique position they have in taking the first step to initiate these relationships with women. They underscored the importance of men taking action on behalf of women while continuing to let women be at the forefront of their experiences. Their focus, according to them, should be on staying open to their own learning and addressing gaps in how they are operating as allies. Men also shared the incentive of institutional materials, a learning playbook, exposure to training and conferences that provided education to recruit more men to become male allies to women in the vacuum of a recognition culture.

Successful Male Allyship is Attributed to Men Who Have the Courage to Take an Active Stance

A recurring comment made about successful attributes of male allyship was that of having an active stance. All participants, men and women, shared a variety of verbs that described male allyship as an active process and were recognized in the form of actions taken by men. These included "standing up," "speaking up," "fighting for," "calling out," "paying attention," and "being active." Women called out that men need "courage" to continue to challenge the status quo of male-dominated cultures. For some women in the UTW grouping, successful male allyship was identified and attributed in the same way; by taking action on behalf of women in the absence of any acknowledgement and recognition for their effort.

Men felt similarly and described successful allyship as an ongoing journey of learning to effectively tailor their actions for and on behalf of women. They described their plight of little to no formal learning on how they could be better allies and the fear of approaching women directly for how to be effective allies. Some men shared their challenges with collecting constructive feedback from women in their pursuit of being better allies to women, defaulting to actions that did not always have the best results for women.

The Absence of Affect

The categories have facilitated the researcher's efforts to derive higher meaning from both women in Tech and self-identified male ally participants. The researcher acknowledges the role of participant emotions as an underlying theme in the framework, but chooses not to call it out as a separate analytic category for the following reasons. First, participants did not acknowledge explicitly the role of their emotional state in how they were motivated to identify and learn from male allyship. Second, the researcher coded interviews for what was shared verbally in the responses from participants, including references to a state of affective behavior. This included examples of women feeling frustrated by the absence of support, men experiencing empathy by being closer to the women in their personal lives, or men and women feeling compelled because of a triggering event. The researcher did not, however, infer a state of affective behavior on account of how participants shared their stories in interviews or the focus group as a way to conclude how they perceived male allyship. Finally, the researcher recognized a pattern of predicted emotional responses from participants in the absence of organizational resources in support of male allyship that they felt was worth further study along with how it drives the learning experience for women.

Summary of Analysis

In this section, the researcher has examined male allyship from the perspective of women in Tech. Leveraging Bandura's theoretical framework of reciprocal determinism, the current chapter is structured around three analytic categories that applied to the sample study, namely, a cognitive, behavioral, and environmental analysis that are inter-related in understanding male allyship from the perspective of women in Tech. This framework was identified in the process of integrating the answers to the research questions as they related to the central phenomenon under study:

1. *Environmental*: Women in Tech. identified male allyship as part of a transformative outcome for themselves or by declaration of allyship on the part of males in organizational environments.
2. *Cognitive*: Women were driven by their self-efficacy and to learn from the male allyship experience. Their learning falls under three categories: (1) personal, (2) proxy, and (3) collective agency in the organizational context.
3. *Behavioral*: Women in Tech. attributed successful male allyship from men who were effective in their existing roles as managers, mentors, and sponsors and took an active stance to support and sponsor women.

Male allyship from the perspective of women falls under three categories of participant groupings: (1) UTW, exclusive to women—these participants described male allyship as an experience driven by women; (2) UTM—participants of both genders shared that men have the unique position of power and influence to create male allyship for women; (3) UTA—participants of both genders shared that the male gender and male allyship are agnostic to an overall allyship experience for women.

There were some trends and insights in the experiences of self-identified male allies and women in Tech. across these groups:

(1) Male allyship was viewed as an organizational event and identified in professional environments. This was consistent even in men who learned allyship at home; they had a deeper sense of allyship for women at work. Self-identified male allies in the study were intentional and declarative about their identity as male allies because of the requirements of the study.

(2) Women adopted agency in their learning process and leveraged self-efficacy in driving the learning experience. Women in the UTW category applied personal agency to go after their goals and did not see men as central to the allyship and support they needed to succeed in organizations. Women in the UTM category applied proxy agency to influence and mobilize men as sponsors for women to help them grow. Women in the UTA category applied collective agency to hold men accountable to a higher standard of equitable reform and work collaboratively with men who are accountable to the larger organizational standard of being inclusive and honoring diverse workforces.

(3) Successful male allyship was attributed to taking an active stance on behalf of women. It is an extension of the current role they play effectively as managers, mentors, and advisors. Following the desired characteristic of being active as a male ally, being open to

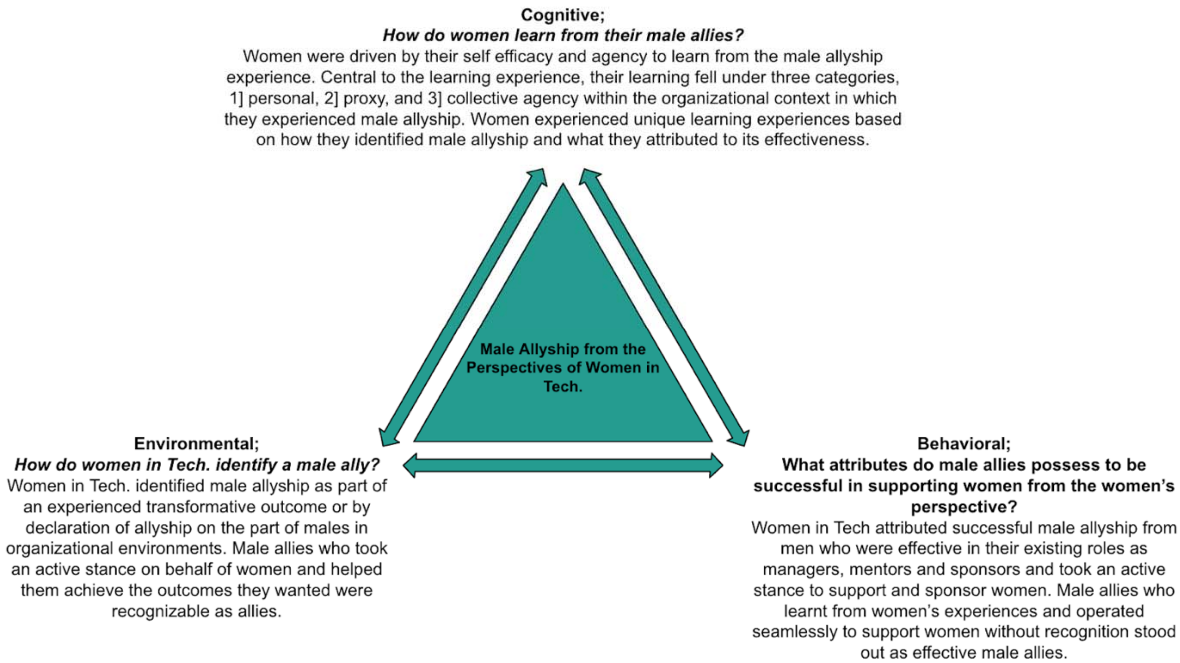
learning and constructive feedback as a male ally was perhaps the most desirable qualitative attribute that was heard across participants in the study, along with other qualitative attributes like building trust and being vulnerable. Women in the study underscored the importance of men operating seamlessly as allies without recognition and placed credit for men in how women gain from the overall allyship experience.

Interpretation

Interpretation involves the researcher providing an accounting of her understanding of the deeper meaning that could be interpreted from the data collected. It serves to take apart the responses to the interview questions and the focus group through the unique perspective of the interviewer and reviewer of related literature to paint a conceptual rendering of the essential "why" that lies behind the participants' actions and experiences. This task was accomplished by revisiting each analytic category and leveraging Albert Bandura's theory of Reciprocal Determinism (1977) that explained how human action is influenced by three factors: environment, cognitive/personal characteristics, and behavior. Bandura established that the environment not only influences a person's thinking, but their subsequent behavior influences their environment. In other words, the environment influences how a person thinks and feels, which in turn influences their behavior, which impacts the environment, and so on. In addition, all three factors are influenced by each other, known as triadic reciprocal causation.

Figure 5

Interpretation of Male Allyship from the Perspectives of Women in Tech.



Environmental Factors

The environmental component refers to the context in which the behavior occurs. More than a person's physical environment, this includes their social environment as well—specifically, what people are present (or absent) and the attitudes, beliefs, and ideas these people hold. The study demonstrated that male allyship was identified in professional workplaces and industry environments. Environmental factors influenced how men showed up for women as allies and whether their intent was declared or undeclared. These factors also drove at the heart of how women identify men as allies and how they expect men to operate as allies in a professional environment.

Cognitive Factors

Personality and cognitive factors play an important part in how a person behaves, including all the individual's expectations, beliefs, and capacity for learning. Self-efficacy represents a personal factor in reciprocal determinism. Women with high self-efficacy are more likely to drive their own learning experience, which means they may be more likely to succeed in the recognition of male allyship and how to leverage it (the environment). The study reflected cognitive factors in how women learned from the male allyship using agency in different environmental contexts. The study called out women as central to the learning experience and helping men funnel their own learning in being effective allies to women.

Behavioral Factors

According to the concept of reciprocal determinism, a person's behavior is influenced through cognitive processes and environmental factors such as social stimuli. Men operating effectively in their current roles as managers, mentors, and advisors contributed to the behavioral attribute that most women identified as most successful in helping them learn and identify them as allies. Their contributions helped them achieve transformative outcomes, described as incredibly difficult career milestones that they secured with their allyship. Men stood out as allies by understanding women's careers and implementing their learning in their current roles as against declaring themselves as allies and relying on women for feedback on how to be effective.

The study demonstrates that the way male allies were identified in their environments was influenced by the level of agency women exhibited. Women were found as central to driving the learning experience (cognitive), and men who helped contribute to transformative learning were identified (environmental) more easily as allies versus those who declared themselves as such. Women learned from their experience and operated from self-directedness that was reflected in their level of agency (cognitive) to drive toward a learning experience. Men who were effective in their current roles as managers, mentors, and advisors were recognized for their favorable attributes in being allies to women and supporting their learning journey (behavioral).

In turn, this helped male allies become more effective and experience their own learning and identity as male allies for women (cognitive). Men who came to the study as declared allies for women (environmental) shared that part of solidifying their identity was acknowledging no formal recognition for their roles and aspiring to be better allies to women (behavioral).

Analytic Category 1: Environmental

Women in Tech. identified male allyship as part of an experienced transformative outcome or by declaration of allyship on the part of males in organizational environments. As indicated in the Analysis Section of this chapter, this category is used for interpretation of the findings related to the research question: How do women in Tech. identify a male ally? (Research Question 1).

Given that male allyship as a trend has grown in popularity in the Tech. industry, it was not a surprise to see that most participants had a fairly decent understanding and reference to what it entails in the workplace. Surprisingly, even while participants had the choice to provide answers of identification that alluded to the home environment, most participants easily gravitated to examples from work and professional environments to describe the impact felt on their careers. All participants ran through a process of reflection to describe trigger experiences that illustrated for them what male allyship comprises, including other examples that felt relatable but were not their own experiences to claim. This could be described as a natural reaction to the lack of male allyship programs and education in organizational environments.

Self-proclaimed male allies were in part requirements of the study; however, male participants also embraced the conscious desire of being allies to women and being recognized accordingly as an active choice they had made. They linked their motivation to the influences they had in their home environment from familial and friendly connections that translated over to being allies at work. Therefore, some saw allyship as a continuation of how they operated in their personal lives while still citing male allyship as an organizational concept. Men shared anecdotes from their professional experiences that shifted their mindset and made them aware of the unique challenges women had to face and how they had to grow into adopting allyship behavior. In some cases, men of color (3 out of 13) or men who identified as minorities saw being allies to women as relational to their own experiences and where they needed support. Men consciously took on the role of allies in service of empowering women and increasing their representation in male-dominated environments by either establishing themselves as allies for women or allies at large. Some men explained the role as "selfish" and truly beneficial for all involved, including male allies who consciously supported women as allies.

Women who opted into the study shed light on the lack of realization they had when they stumbled into male allyship. Most of their accounts were prefaced with a contextual and a very prevalent reality that described a rarity of male support or consideration in a male-dominated industry, making it difficult to decipher allyship until it had a uniquely positive transformative impact on their professional lives. Women who cited longer tenures in the Tech. industry described their fundamental distrust with the concept of men supporting women, and their participation in the study was to illuminate how their early career experiences were proof of why the male allyship experience remains unidentifiable for women at large and mostly driven by ambitious women. In both instances, women shared through their accounts that they never sought out or recruited male ally support but rather it was offered to them or they had a life-altering engagement that made them realize its existence as a concept. Interestingly, women asserted that male allyship will continue to be a difficult process of identification for women until more men choose to fulfill their allyship toward them with tangible results and consistent activism in supporting women in the workplace.

Analytic Category 2: Cognitive

Women were driven by their self-efficacy and agency to learn from the male allyship experience. Their learning fell under three categories: (1) personal, (2) proxy, and (3) collective agency in the organizational context. As indicated in the Analysis Section of this chapter, this category is used for interpretation of the findings related to the research question: How do women learn from their male allies? (Research Question 2).

Transformational learning can be best described as a rewiring process where brand new perspectives are formed by challenging original assumptions and beliefs. The connection to transformational learning was not clear in the accounts of the participants in the study; however, the majority of participants described transformative outcomes, which they cited as “life-changing,” to summarize their learning experience. This trend was experienced in all women, including those in the UWA group, who described being self-directed in what to do and what not to do while role modeling men in their organizations. They used the word “transformative” to describe a changed state of operating at work from what they had observed as successful behaviors to get to positions of leadership in the organization and, therefore, did not necessarily attribute that transition to male allyship. Women in the other participant groups of UTM and UTA mentioned “transformative” as a word to describe an outcome that would have been unachievable in the absence of male support and intervention. These women described working for organizations that had a deeper understanding of diversity and inclusion and their application across the employee working culture.

Men’s accounts of women’s learning were also described more by the outcomes they achieved than the description of a clear learning style or theoretical process. Men in the UTM and UTA participant groups described learning as an interactive process between male allies and women in Tech. in part because of the organizational culture of reinforcing allyship principles. They also shared that the process was accidental, and it was not always clear who should initiate the relationship around extending allyship, making it difficult to navigate. By leveraging their unique position, men in the UTM group shared examples of how women helped them understand the challenges they faced and how they could use their influence in helping women by being advocates for them.

Men operating as sponsors saw a clear connection between helping women succeed and aiding in the growth of the business as a mutually positive result. A collective goal experienced by the men in the UTA group aimed at reinforcing favorable equitable practices in organizations, ensuring that men operated with a reference of what were acceptable allyship practices and women helped them check their biases accordingly with constructive feedback. These men continued to lean into understanding their privilege from the perspective of women and saw benefits in using their position in the higher ranks of organizational hierarchy in service of women.

The independence with which women learned and their ease of converting advice they received from male allies made it difficult for men to discern their contribution to the learning experience for them. While they described women as having a butterfly-like transformation from addressing their old problems with new solutions, they described the lack of transformation in men until they fully embraced male allyship behavior more actively. Men continued to share additional context on the question of learning by addressing the learning gap that existed from other males in the Tech. industry. In their accounts, males don't learn about allyship naturally from other male allies, and they often default to women to "teach them." They imagined that a structured learning program for men on how to be an effective male ally for women would best address the learning challenges for men to be effective allies in present-day Tech.

Women, contrastingly, continued to describe the learning acquired through male allies as an organic process in their rhetoric. Women played the central role in the learning process, accustomed to being in positions where they are responsible for the challenges that are unique to them and their visibility, and it was solely their responsibility in driving toward the learning outcomes from the advice and guidance they received from men. Even in cases where women were provided with new opportunities by their male allies, women described a strenuous learning process of adapting and acquiring new skills using the support of their ally. In summary, women determined their overall learning experiences and set the bar for what was their ideal "transformative" state in the male allyship experience.

Analytic Category 3: Behavioral

Women in Tech. attributed successful male allyship from men who were effective in their existing roles as managers, mentors, and sponsors and took an active stance to support and sponsor women. As indicated in the Analysis Section of this chapter, this category is used for interpretation of the findings related to the research question: What attributes do male allies possess to be successful in supporting women from the women's perspective? (Research Question 3).

Men and women were asked the question, *What makes male allies successful in extending allyship to women?* to determine what combination of attributes women are looking for in a male ally. While women and men both agree that male allies are active in their pursuit to act on behalf of women as the most highly desired attribute, their range of activism varies. Women who fall in the category of seeing male allyship as UTM and UTA viewed activism as courage to challenge organizational decisions and policy, while men in the same category view activism as taking a stand and believe holding a position is an active stance. Women's stance on activism is tied to how they identify male allies, and most of them don't see the value of male allyship until it yields a transformative result. The men in the study had a slightly more nuanced stance, resulting from their own unfamiliarity with how best to be allies for women. In their accounts, openly declaring themselves as male allies came with the call to action associated with being active as male allies for women. Some men who were confident in declaring themselves allies still struggled to find the best way to convert that declared intention to allyship.

While women described qualitative favorable attributes as men who demonstrate vulnerability, trust, and openness to learning as male allies, they also reinforced that men can be most effective allies with these attributes in their existing roles. Women described examples of men who went above and beyond as managers, mentors, and advisors by truly understanding the plight of women in male-dominated spaces. They shared examples of working with some of the best managers, mentors, and coaches who were men and allies to them in their careers, emulating their styles and demonstrating learning they acquired to be a version of them in their careers. Men who did not position themselves as the experts made women comfortable in engaging and driving their own learning process, allowing them to build trust. Women described vulnerability as an important trait that was often found missing in males and, therefore, the male allyship experience at large. It came with the added complexity of not allowing women to be instantly comfortable or trusting of male allies who wanted to help. This was especially seen in the UTW participant grouping, where women attributed male allyship as salient and unrecognizable. Trust was essential for male allyship engagement to proceed; women refused to entertain the idea of talking to men about the obstacles they faced unless they had contracted an arrangement of trust beforehand. Trust was most often seen as the foundation of women engaging with men in their role as managers and mentors.

Women described male allyship as working for the best manager they have ever had or the mentor who changed their career perspective for life. This became pivotally important because of the male-dominated components of the Tech. industry, where most women have male managers and don't get access to female mentors as easily. Women faced obstacles in their career journey that were not always apparent and described the uphill battle in trying to explain that to men they did not trust. Women described men's willingness to learn as a way of being active in their role as male allies. They challenged men to learn in the same self-directedness and observing through modeling that women have demonstrated. Being active as learners also accounted for converting male allyship to longer-term engagements outside of managers, mentors, and advisors. In the examples described by the participants, male allyship was best experienced only in these professional relationships, and these lacked ongoing connection once men and women moved on to new roles or new organizations.

The Role of Power

While the framework for reciprocal determinism outlines a non-linear, interactive model of how women perceive male allyship, it does not expand on the role of power and privilege in organizations and its influence over the person or the situation as a locus of behavior. Sociologists have remained conflicted on whether the power of the situation or the power of the person are responsible for the causation of behavior and have different theoretical views (Bandura, 1999). For the purposes of the research, privilege in organizations is associated with those who have access, and those who have the power can provide that access within the organization. The study revealed subtle views on how male allies versus women in Tech. viewed power and privilege.

Self-identified male allies explicitly highlighted their power and privilege in decision making regardless of being in leadership roles. They cited its use in supporting women to break organizational barriers or achieve sponsorship for new opportunities. Men in the UTM and UTA categories saw operating with this access as part of organizational responsibilities in achieving equity in their environments, a historical flaw where women were not granted the same access, and that it needed to be overridden in the current business reality. Women across all categories had a high expectation of transformative outcomes as a result of power and privilege that male allies possessed. According to them, not all male allies possessed the same power, and they placed higher expectations on men who were in senior leadership roles. Women in the study also highlighted the fluidity of power by the actions taken by male allies and its impact when used for investment versus empowerment in women. In some typical examples, women discussed that sometimes men taking actions on behalf of women, perceived as investing in women, was not the same experience as women benefitting from a shared power dynamic model that empowered them for the long term, in some cases even in the absence of male allyship. Women in the study embraced that men possessed a more transitional power and privilege dynamic based on their leadership levels in organizations and their standards of how to be effective leaders.

Summary of Interpretation

The researcher sought to explain the 'why' behind the behavior of the study participants as categorized within three groupings: women operating as central to the male allyship experience (UTW); men having the unique position in driving the male allyship experience

(UTM); and men operating as general allies in driving the male allyship experience (UTA). Given that the most participants fell in the normal distribution of the UTM bucket at 44% being a dominant position, flanked by UTA at 30% and UTW at 26% in polarizing positions, the researcher interpreted that most participants had worked or had the experience of working in companies that touted a culture of diversity and inclusion to make the identification process. This helped men and women form a general idea of what entails male allyship in the larger realm of allyship behavior. Male allyship experiences driven by women (UTW) continued to be inferred that in the absence of that culture, women did not recognize male allyship and its relevance in helping them achieve their goals. Male allyship experiences driven by men (UTA and UTM) also continued to be inferred by the role of self-identified male allies who raised their hand to participate in the study as well as established a more declarative process in stepping up as sponsors for women in organizations.

Transformative outcomes became embedded in the verbal rhetoric used on the part of participants to describe learning. The researcher inferred this was probably because it was difficult for men to ascertain learning, as women receiving allyship were staunchly independent and mostly self-directed while taking their support. Women participants described the learning process based on the level of agency they employed through the experience; women used personal agency in the absence of evident male allyship and organizations that held a high standard for equitable culture. Women used proxy and collective agency where there was a deeper expectation of inclusionary practices and mobilizing men to play the role of sponsors and allies to support women. While there were many qualitative attributes used to describe what comprises a successful male allyship experience from the perspective of women, these were an extension of men continuing to operate in their current roles as managers, mentors, and advisors.

Women shared that men did not need special training in being allies to women but rather needed to become effective in their current role by being allies to women and understanding what makes their careers different from men.

Women attributed an active stance as discernible to the male allyship experience and a way to build trust and credibility with men in a shared partnership. This inference was made from the fact that women do not easily trust men in a male-dominated professional environment where men have historically had better access to opportunities and a broader sphere of influence. Additionally, women shared that men must learn to be vulnerable as a way of understanding the challenges that have been endured by women and the roadblocks that continue to exist for them. Men are not naturally inclined to share such feelings and often come across as experts, making women feel like a weaker sex in need of assistance. Learning and continuing education were inferred as a requirement of continuing to help men succeed as allies.

Summary of Analysis, Synthesis, and Interpretation

This study explored male allyship from the perspective of Women in Tech. and interviewed a sample of both women and men who volunteered to share stories of male allyship from their experiences. Participants were asked the same questions differently; women were asked to share how they identified, what they learned and attributed successful male allyship to, and men were asked to record their experience as allies from the perspective of women who received their allyship. When considering the analysis of the responses from all participants, the underlying focus on organizational culture surfaced, along with its role in bringing the importance and need for equity to the forefront. Men are more inclined to be allies where organizations place importance on being inclusive toward women and minorities. Women are more inclined to hold men to a higher standard of allyship and leadership in a similar environment of equitable standards. These factors in turn drive the identification process of how male allyship occurs when men are open to being allies for women and welcome critique on how they continue to operate without bias.

Organizational culture also impacts learning in the male allyship experience. Women are comfortable learning through proxy and collective agency with men in organizations that support the growth and representation of women. Women learn through personal agency in organizations that have not historically supported a culture of equity. They learn from modeling males and adopting their behaviors to navigate their own challenges as women, thus undertaking the burden of solving for the absence of women on their own and creating inroads with new female collectives in Tech.

An agentic form of learning discussed in the participant groups described women as central to the experience, operating with self-directedness and independence. It presents an interesting view that men are unable to ascertain how women learn and focus largely on their own learning as a result. There is not enough research to substantiate how women learn from male allies, but there were enough examples in their stories to stipulate that women learn from practical advice that they could act against and test in their position. Acting upon advice and guidance comes with the binary effect of either success or failure, reinforcing what they held onto versus lost from the guidance shared by male allies. In some cases, failure was the better teacher in how they needed to challenge the status quo of organizational decisions and policy. Men discussed their own learning in relation to women and struggled to keep up with women's ability to learn. They felt they did not know how they could be further effective for women's careers after rendering advice or advocating for them and described the experience as abrupt. Men sought to learn from women but did not know how to start and how to maintain the relationship, given that women were central to driving the experience. Some men also described that a single experience was not enough to give them the confidence in being successful allies to other women.

Revisiting Assumptions

In Chapter 1, the researcher disclosed three assumptions she held as she embarked on this study. The first assumption described that women in Tech. experience a positive impact from having a male ally or male allyship experience. This assumption was mostly found true by the study findings. Majority of participants (22 out of 27) in the study described positive outcomes associated with the male allyship experience shared in their stories. In some cases, male allyship was the catalyst to a positive experience outside of the relationship with a male ally compelling women to cast a net broadly to find other women in their professional network for support.

The researcher's second assumption was that "male allyship" is unique from the support women in Tech. experience from other women. This assumption was the main motivation for the discovery of what is unique and differentiating about allyship extended by men to women. This assumption was founded in the research that showed that 44% of the participants saw men in the unique position of power and privilege to help women achieve transformative outcomes for their professional careers. The assumption was also refuted by 26% of the participants who were women and confirmed that in the absence of male allyship, women were capable of modeling successful behaviors from men and achieving organizational success. The remainder of the 30% of participants expressed ambivalence to this assumption, confirming that when men operated as allies in organizations that support diversity and inclusion as a culture, women were not unique in receiving this support, given that allyship was not gender-specific.

Finally, the last assumption was that male allies are truly committed to the growth and empowerment of women and are not reflecting a superficial commitment to what the industry deems as popular work vernacular. This assumption was based on the researcher's personal experience in seeing men dominate the Tech. industry, leaving little room for women to compete and aspire for opportunities suitable for them in the workplace. This assumption was proven by the study findings and the narratives of the self-identified male allies. Most male participants expressed curiosity and genuine sincerity on how they aspired to support women and evaluated themselves as allies toward the end of sharing their stories. For many men, their desire to participate in the study was to see the research in action by better understanding how to focus on the attributes women find successful in male allyship. Women shared a similar perspective in acknowledging that men want to help but need guidance on how to be better allies and take an active stance in supporting women.

Contributions to the Literature

The researcher has identified three contributions to the literature offered by the findings from this study and corresponding areas of opportunity for more research in the future.

Social Cognitive Learning in Women

The first involves the discussion of women's self-directedness and being central in driving their own learning from the male allyship experience through agency. Most existing articles and research focus on the benefits of male allyship for women and focus on outcomes of the engagement, with little emphasis on how learning takes place in these relationships. Learning through agency provided a framework for understanding how women operated in the range of male allyship that was salient to declarative. It also helped uncover the impact of organizational culture and a sense of having a collective in helping women make connections to male allies as well as holding men to a higher standard of allyship expected of them.

It was clear that when there is a culture of support within an organization, there are many positive outcomes for minorities, including women. For several women, these outcomes were not defined and reflected upon as an identifier of the male allyship experience. This dissertation offers a glimpse into the idea of how environment, cognition, and behavior come together to describe social cognitive learning that takes place for women experiencing male allyship, but needs further work and study. There is an opportunity for the research to define deeper connections between how learning organizations and the role of informal learning help women seek male allies and define what male allyship they require to achieve their professional goals. It also lays the foundation on how self-efficacy continues to be the driver for how women naturally experience social cognitive learning in their professional lives.

Male Allyship Attributes and Skill Development

The second relates to the attributes women seek in a male ally and male allyship. Current research describes competencies that men must possess to be successful allies, as described by male researchers and/or male participants, and this research is constrained from the female perspective. Additionally, there is considerably more research on how to be an ally at large for minorities and women; therefore, the research does not differentiate how women’s experiences translate into what attributes they need from a male ally. This study serves to validate many of these competencies highlighted by women and expand on their preferred qualitative attributes; however, it does not predict a ranking order of desired attributes based on where women are in their career.

Additionally, the study is strategically positioned to consider intercultural perspectives of women when engaging in a male allyship experience, but the small sample set does not do justice to uncovering these themes, setting up a perfect opportunity to study male allyship from an intercultural perspective from women in Tech. The stories from the study unveiled complex interactions between racial and professional identity in how women and men operated in an allyship relationship. They did not explain why some allyship relationships were linear and structured and why some were circular and triggering for women.

The work on male allyship attributes is incomplete with the discovery that several women noted that men can be successful as allies in their current professions just by recognizing the differences in women's careers. Additionally, women remarked that there were men who continued to operate as male allies without ever introducing themselves as allies. Women described male allyship similar to a trait that can be developed similar to a skill, and it was a unique proposition that did not touch on the purpose of the study but continues to have relevance in the ongoing work around successful attributes for male allyship and how to develop these skills. In today's research, there is a gap in evidence-based methods of how allyship is developed. There is an opportunity for the study to continue to invest in the research on what types of programs are most effective at developing allies, and what are the key aspects of any program that should be included.

Women in Tech. and Others

Third, the study directly contributes to the ongoing body of research on empowering women in Tech. and addressing the 'leaky pipeline' of women leaving the industry. While the academic research on these subjects alone is somewhat lacking, this study contributes to how men can understand the female perspective and adopt new practices in being better allies to women. The area of male allyship is ripe for research as it pertains to the Tech. industry, and research on the specific outcomes of allyship is less prominent than research on allyship in general. More scientific evidence supporting male allyship would be useful to practitioners as well as minority communities in general; evidence showing its effectiveness could help sway organizational leaders to invest the time and resources into allyship as an organizational cultural expectation. Similarly, research exploring moderating factors and/or boundary conditions to its effectiveness would also be helpful. In what situations is allyship effective? How far do the benefits of allyship extend? Future research should address all these questions.

As the first of its kind study on women's perspectives, there is an opportunity to build on the ever-growing body of research on how women can be retained to work in technical industrial professions dominated by men, and how men can help play a role in directly addressing the gender gaps in organizations today. This dissertation focuses on a particular subset of this group of young Tech. professionals; however, there is relevance to the research that is applicable broadly across any male-dominated professions with an unfavorable gender balance.

Chapter 6: Conclusions and Recommendations

The purpose of this study was to explore with women employed in Tech. companies and the industry their perspectives on male allyship. The researcher was interested in interviewing ten women to better understand how they identified a male ally and learned from them, and other attributes of what made the male allyship experience successful. As part of the participant pool, the study extended itself to ten self-identified male allies, and they were interviewed to better understand how they operated as allies to women—specifically, how they made themselves identifiable, how their involvement helped women learn, and what they believed demonstrated successful male allyship to women. In addition, a group of three men and four women participated in a focus group to share their experience with male allyship. In order to carry out this purpose and shed light on the problem, the following research questions were positioned to both participant groups:

1. How do women in Tech. identify a male ally?
2. How do women learn from their male allies?
3. What attributes do male allies possess to be successful in supporting women from the women's perspective?

The researcher has gained insights into the perspectives of how women in Tech. experience male allyship. By exploring the study findings and the analysis and interpretation of the data, the researcher determined three conclusions based on the findings in this study. The first conclusion relates to research question 1 and provides insight into the fact that male allyship is most identifiable by creating transformative outcomes for women. With its popularity mostly in organizational workplaces, in the absence of a transformative outcome, most women doubt the true existence of male allyship. The second conclusion relates to research question 2 and provides insight into how male allyship is a learning journey for both women and self-identified allies, resulting in a mutually beneficial professional undertaking for both parties. The personal, environmental, and cognitive elements that influenced how women learned from their male allies placed them as central in directing their learning in the male allyship experience. Their learning process influenced how male allies learned and what they identified as ongoing learning to be better allies. The third conclusion relates to research question 3 and provides a multitude of attributes, including the most preferred attribute of active action from men on behalf of women as favorable to the male allyship experience. The three conclusions are discussed in greater detail below.

Conclusion 1

Male Allyship is identifiable in the form of transformative outcomes for women in organizations.

This conclusion is attributed to Finding 1: All women participants expressed that they found their male allies unknowingly and used words like "unintentionally," "accidentally," and phrases like "I was not conscious of it" to continue to articulate their identification process of male allies. The identification process was made in professional work and industry environments, and allyship was accessible in the form of effective managers, mentors, and advisors operating as allies as part of their professional responsibilities. Women described their male allies as men who supported them, supported their aspirations, and demonstrated their support with action. These actions ranged from helping women enter a new industry and/or role, helping them step up to a new challenge of work with visibility to senior leaders, and/or connecting them with sponsors who helped them navigate complex organizational bureaucracies.

In the words of these women, these actions were deemed “incredibly difficult,” “almost impossible,” and “unheard of” to rise to the standard of what they viewed as transformative for their careers. They struggled with the definition of what male allyship entailed outside of the impact it had on their professional careers. The clear identification of what men did to operate differently as allies was subtle at best and hidden behind their organizational roles and influence. They supported women by taking on extraordinary actions that went beyond the scope of what was expected of them, and in some cases declared that this was the role they wished to play for women.

Men described male allyship as an intentional process and where men naturally align with the male ally identity. Their description on how to establish themselves as male allies to women fell short except for asserting their support of women in their current capacity. Several male allies confessed that they saw their role as allies to be salient to women and were conscious of not overpowering women. Others shared that part of their identification process came from reflection and introspection inspired by personal events. Men alluded to activism as a way to cement their identities as male allies, confirming that they felt connected to both the achievements and failures of their advice for the women they were supporting.

After considering the perspectives of women and leveraging the data shared by self-identified male allies, male allyship was recognized by women only when men’s action resulted in transformative action for women. Men could self-identify as male allies and declare themselves as male allies; however, according to the perspectives of women, men are not recognized as such until they are willing to take an active stance on behalf of women and help create transformative outcomes for them to demonstrate support.

Conclusion 2

Male Allyship created mutual learning benefits for both men and women.

This conclusion is attributed to Finding 2: The women in the study experienced self-directedness in their learning because of their male allyship experience and reported that they learned how to operate differently as a professional as a result of that experience. The male allyship experience created a perspective shift for women as they learned independently, through the influence of those in their networks or by following a collective standard that compelled them to challenge their current status quo. The majority of participants agreed that male allyship encompassed a self-directed learning journey for women, and men benefitted in their own learning process from analyzing how women learned.

Men took pride in sharing the transformational successes that women experienced. Some male allies rendered advice, and others cleared organizational roadblocks to create inroads for women. Men confirmed that while their focus was not on creating a learning experience but helping women achieve their goals, they benefited from how women learned from the male allyship experience and what steps they took to implement their learning. The male allyship experience had learning outcomes for both women and men. Men benefited from differentiating themselves as popular mentors; by having the unique ability to mentor women and understanding their career journeys, they gained credibility as managers by helping women get promoted and grow in the organization, and they learned how to be effective sponsors to women by casting a wide web of opportunities that inadvertently helped them grow their professional networks.

Men assessed that the biggest mutual benefit of their learning was absorbing the experiences of women; they described that it helped them connect to the male ally identity and recognize the systemic issues of inequity that plagued women's careers. In their learning process, they shared the benefits of striving to be better male allies and helping women in their professional networks while simultaneously contributing to creating an equitable workforce and organizational culture. Some men shared connecting the learning from professional male allyship to examples in their personal life. Men described that the real signature of effective allyship came from being able to take feedback and adapt to the needs of women, making their needs focal to the relationship.

Conclusion 3

Successful male allyship is attributed to men who take an active stance for women.

This conclusion is attributed to Finding 3: The majority of the participants described male allyship as an active process that yielded tangible results for women. Women described men who possessed the courage to see through organizational challenges and be advocates for women as amongst the most successful attributes in being male allies. Self-identified male allies added that men should take a deeper interest in women's career journeys by actively listening, taking feedback, and educating themselves. As a result of this finding, women described successful male allies as unafraid, courageous, and willing to put the effort into the fight, describing male allyship as activism against the male-dominated Tech. industry and toward gender balance at all levels of the organization.

An active stance according to both sets of participants contributed as the most described attribute in the male allyship experience. Women did not necessarily see activism as men taking action on behalf of women but saw their own transition as professionals as central to the active process. For several women that entailed finding a voice, learning a technical skill, or getting coaching on how to approach a complex situation. Women, however, did say that when men take action on behalf of women without overshadowing the feminine experience, it does encompass an active stance. This included examples of men operating as sponsors and connecting women to others in their network, men who challenged organizational policies that are biased toward women, and/or men who create visibility for women's contributions in male-dominated forums. In these examples, women described male allies as active behind the scenes to continue to draw focus on the feminine experience and the support they need.

Women summarized that for male allyship to be effective, it needs to operate from the understanding that the lack of women in Tech. is a problem for both men and women and not women alone. Changing the face of the Tech. industry from male-dominated to equitably represented should be a shared goal and not an optional stance, as described from the women's perspective. Therefore, it should be a genuine act of activism on the part of men as allies and should not be perceived as something that women need to get ahead in organizations. Several women shared that men who operated with an active stance without looking for credit and/or recognition were seen as trusted allies to women. Men described male allyship with an equal passion for activism with responsibility. They attributed success to an interactive process where women should provide feedback and assistance to men committed to being allies. They placed emphasis on the learning and bringing other male allies to the movement of supporting women in Tech.

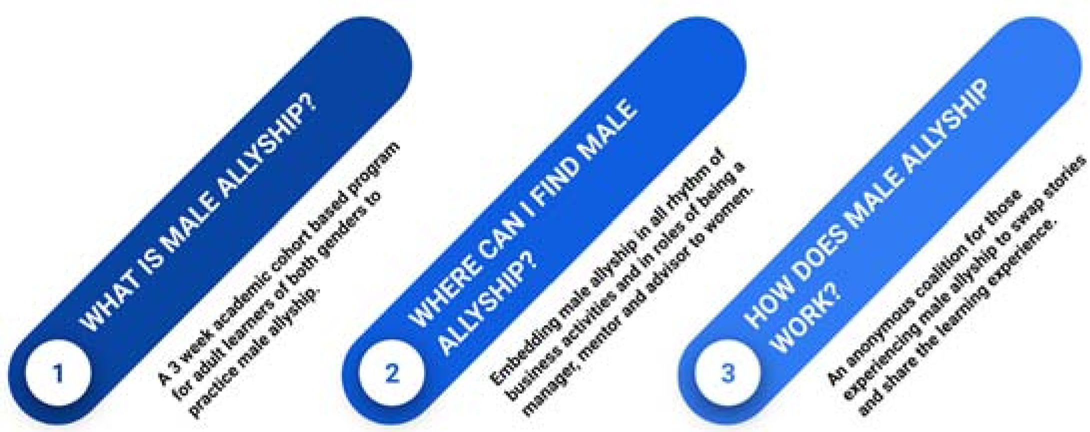
Recommendations

The impetus for this study was based on the deplorable representation of women in the Tech. industry and how in the absence of women, men can play a pivotal role in helping restore a healthy gender balance in Tech. organizations by playing the role of male allies. The participants in the study revealed that male allyship is not solicited but in fact volunteered by men who are genuine in their pursuit of supporting women by playing an active role and where both parties can learn from the male allyship experience. Women experienced transformative outcomes as an identifier to what entailed a male allyship experience despite some women being skeptical of the intentions of men as allies. Motivated to operate independently in the pursuit of their goals with the management, advice, mentorship they received, these women drove their own learning experience.

The researcher asserts that there exists a set of recommendations aligned with these conclusions that can be crafted into actionable steps to be implemented as follows: (1) *What is it?* An academic cohort-based program for adult learners to practice male allyship; (2) *Where can I find it?* Embedding male allyship in all rhythm of business activities and roles; and (3) *How does it work?* An anonymous coalition to swap stories on the male allyship experience, creating awareness for men and women on best practices, hurdles, and considerations when engaging in a male allyship experience.

Figure 6

Recommendations for Male Allyship from the Perspectives of Women in Tech.



What is Male Allyship?: An Academic Cohort-based Program for Adult Learners to Practice Male Allyship

While conducting the research, it became clear that participants had varying definitions of what was male allyship and what it entailed. Definitions and explanations gathered in the study helped contribute to what successful male allyship looked like for the participants; however, it was limited to the interviews and the discussion of the study, and not all participants were privy to individual stories, perspectives, and aspects of what comprised the experience. The men in the study made multiple requests for a formal learning program or even a playbook that could set them up for guidance on how they could be better allies to women and what aspects of the relationship they should continue to be mindful of to better serve women as an ally. Women in the study indicated that men needed to better educate themselves on the experiences of women before they solely relied on them to highlight how they should be better allies. The researcher found that although there was a rich variety of male allyship education available, the content of these educational materials was limited. Education materials and content ranged from allyship articles, self-guided learning modules and even conferences, created within organizations, published as part of scholarly research, or shared as part of initiatives driven by independent research institutions to support women in Tech.

First, the education around male allyship presently stands to be overly theoretical. Male allyship is presented as an isolated definition where men are central to the entirety of the experience. Educational content felt designed either for an all-male audience or an all-female one, giving each group different contextual understanding on allyship. Second, nearly all content lacked interactive simulations of how male allyship takes place in practice. There is a scarcity around examples that illustrate the unique elements of the relationship and how it ranges depending on organizational culture, the rate of agency demonstrated by women, and the personal motivations that compel men to be allies to women. Finally, most content strives to cover rich material on the evolving diversity, equity, and inclusion landscape in organizations (not constrained to Tech.) and, therefore, misses unpacking male allyship as an important aspect of supporting women in male-dominated industries and workplaces.

The researcher recommends a male allyship program available to male and female professionals in an academic environment with the goal of learning from experience in gender-balanced cohorts of adult learners. The tenets of the recommended program could be designed around the findings of the researcher's study on male allyship from the perspective of women in Tech. This recommended three-week intensive course would encompass a curriculum aimed at leveraging a highly interactive program design where definitions of male allyship would be collected based on student experiences. The cohort would have the opportunity to work with simulated experiences to give students the ability to practice allyship and learn as a collective. Recommendations on how to continue to embark and be effective in the male allyship journey would be curated per the cohort experience and the professional roles they play in organizations today. The creation of an academic leadership lab, according to the researcher, would allow students to learn about the aspects of male allyship in an uninhibited space, giving them the ability to learn from students from varying organizational experiences. The recommendation includes a cohort experience to drive at the heart of the cohort-based learning experience for students.

Where Can I Find Male Allyship?: Embedding Male Allyship in All Rhythm of Business Activities and Roles

While Tech. companies continue to invest tons of resources into gender diversity and equitable business practices, most organizations still struggle with that ideal program or initiative that can address these gaps across the organization. Given the researcher's background in Human

Resource Management, she has visibility into organizational programming that makes male allyship difficult to measure and evaluate if it is effective for women in organizations. The study lays out a simpler consultative model to help companies develop male allyship and measure its effectiveness by making it a requirement of all business activities and professional roles and responsibilities. The study describes male allies as a powerful source of sponsorship and advocacy for women while obtaining mutual benefits that collectively help organizations operate with greater productivity. With male allyship as a key indicator for success for managers, mentors, and advisors, organizations stand to benefit from bringing gender diversity to their highest levels of leadership and distributing their resources to already established roles and expectations in the company.

The study presented three main roles for men to extend their responsibilities as male allies: (1) managers, (2) coaches, and (3) advisors. These recommendations are organized by (a) Numerical Allyship—visible and tangible actions often summarized by organizational metrics and numerical trends; and (b) Qualitative Allyship—techniques and styles that male allies can adopt to drive at the heart of the allyship experience. These recommendations have been provided at a high level and are not limited to the following actions:

1. *Male Allyship as Managers/People Leaders:*
   a. **Numerical Allyship:**
      1. Number of women who experienced career growth on the team via a change in level or change in role.
      2. Number of women hired on the team internally or externally tabulated with overall attrition on the team.

3. Number of women in attendance of team/staff meetings and maintenance of gender balanced ratios.

b. Qualitative Allyship:

1. 360 feedback from women in evaluating manager performance.
2. Female performance in stretch roles/assignments provided by the manager.
3. Dedicated efforts to connect women to mentors and support resources across the organization and maintain ongoing engagement.
4. Create aspirational plans separately from regular 1:1's conversations in helping women pursue their career goals.
5. Create an inclusive team environment that checks biases that impact women on the team.

2. *Male Allies as Coaches:*

a. Numerical Allyship

1. Establish a reputation of having a gender balanced coaching pool of mentees.
2. Provide coaching on tangible tools and trainings that women can seek out for career development.
3. Connect women to other women as part of the ongoing coaching experience.

b. **Qualitative Allyship:**

  1. Build a coaching approach where you can understand the careers of women by actively listening.
  2. Operate with vulnerability to build trust and collect feedback.
  3. Familiarize and understand the roadblocks experienced by women.

3. *Male Allies as Advisors:*

a. **Numerical Allyship:**

  1. Be proactive in being an advisor on women initiatives, programs, and resource committees.
  2. Create a strong referral system amongst women for advisement.
  3. Land opportunities as a sponsor of women on critical projects and assignments.

b. **Qualitative Allyship:**

  1. Tailor advice to the experiences of women and not by career ladders in Tech.
  2. Consider having a Female coach in developing a feminine lens to advice rendered.
  3. Collect ongoing testimonial feedback from women on advisement.

How Does Male Allyship Work?: An Anonymous Coalition to Swap Stories on the Male Allyship Experience

Evident in the researcher's study was the strong desire for participants to exchange stories of their male allyship experiences and describe the challenges and the pitfalls that could provide deeper learning experiences. Tech. companies today have often used the phrase "safe space" to create psychological safety for employees to talk freely without implications on job evaluation and tenure in companies; however, there were limited opportunities to share learning experiences. Participants described the researcher's study as presenting them with that opportunity for reflection, and their answers were collected as part of live introspection in answering feedback around the research questions. Reflection was called out as a powerful tool for analyzing retrospectively what effective male allyship is and how it really works around the uniqueness of women's needs and male intentions to be supportive.

Participants in the study also called out the discomfort that came with sharing these stories. Men described the feeling of being "outed," "inexperienced," and "judged" when they described stumbling into their role as a male ally. Women shared equally difficult feelings of being "spotlighted," "not taken seriously," and "concerned" as they described the pressure of receiving allyship and the self-doubt of taking support while still pursuing action independently. On both accounts, men and women in the male allyship experience were concerned about the implications of how they were seen in the relationship and the organizational impact this could have on their careers. To counter those feelings and continue to help create learning around male allyship, an anonymous coalition of male allyship participants and others interested in the concept of male allyship was recommended. This was described as an independent forum outside of Tech. organizational structure where men and women could continue to interact on their male allyship stories and learnings and stay organization anonymous. Per this recommendation, coalition as a concept went beyond the scope of alliance alone to include a movement in the direction of influencing and building the modern-day definition of male allyship.

Some participants described experiencing a version of this recommendation through company anonymous surveys, audio podcasts where their experiences had been shared, and some referenced even the researcher's study that maintained the anonymity of participants while continuing to share stories broadly in the research.

For Further Research

The researcher has identified three areas of further research.

First, further research is needed on the role of self-efficacy in how women learn from male allyship or allyship in general. The study revealed that women learn through agency and operate within the reciprocal relationships of their environment, behavior, and personal psychological cognition. Even though the term "male allyship" could assume that men were central to the relationship, the study found that the women were ultimate drivers of their learning outcomes. The role of self-efficacy in women is left unexplored in all of this with a healthy curiosity for the analysis of if the rate of self-efficacy had an impact on the overall effectiveness of male allyship received by women. Per the participant groupings, there were some assumptions around if self-efficacy could be deemed as lacking as amongst lower tenured women versus higher tenured individuals, providing open questions around what women need from male allies when they have lower self-efficacy. There were even some assumptions about whether men in fact help women to gain self-efficacy in the process of extending allyship.

Second, further research is required into organizational culture and whether professional workplaces where the male allyship took place could be labeled within learning organizations. Learning organizations provide an informal culture that allows its employees to ask questions, explore relationships outside of strict reporting hierarchies, and develop professional learning interactions. The study did not clearly delineate the tenure of participants to make the best determination of the type of organization and its culture to encourage or discourage male allyship in the workplace. Women in the study described organizational culture as a way to recognize what men were able to do or not do to support them. For example, one participant alluded to a male ally who successfully challenged organizational policy, and another described an ally who provided active advice without asserting their role as an ally in public forums. They also called out the shifts in their experiences just by changing to new companies and getting exposure to new organizational cultures. More experienced participants placed emphasis on the changing organizational culture at the same company to help explain how male allyship became more effective.

Finally, continuing the study in Tech. to include cross-cultural industrial environments is an important opportunity for scholarly research. Participants were clear about the impact their cultural identity had on their allyship undertakings and its integration with the values of the organization they were employed in. For example, an Asian woman challenged her cultural beliefs by recognizing the need to be outspoken, advice provided by her male ally and something that had resulted in her being overlooked for future opportunities in the past. In another example, a male ally who struggled with his own hurdles being a minority related to a woman he was mentoring and coached her from his own experiences. A participant flagged that male allyship is an unknown concept in the Chinese and Indian teams as part of Tech. companies that focus heavily on North American organizational environments. They described strong patriarchal cultures that prevented women from succeeding and organizational microclimates within larger Tech. companies that were overlooked for broader diversity and inclusion efforts. On these teams, male allyship was an unknown concept, and organizational culture reflected the limitations of the local culture.

The same participant recommended that male allyship should be socialized in higher education institutions in countries that contribute to the bulk of Tech. talent. They highlighted that most of the global talent consists of men because of this cultural significance, which provides men with greater opportunity and investment in succeeding in Tech. Women naturally drop out of technical education because of lack of resources and investments in them. The study of male allyship as it applies to cross-cultural lenses could be relevant to draw out the systemic cultural challenges that prevent women from succeeding in the Tech. industry.

What Would the Researcher Have Done Differently?

The researcher has reflected on her experience writing this dissertation and makes some conclusions about what she would have done differently summarizing her own learning from this experience.

Adjusting the Sample

The researcher recognized through the research that the study would have well served an adjusted sample of women in Tech. and male allies from certain Tech. backgrounds. This would have allowed the researcher to go deeper with understanding how organizational culture and exposure to sophisticated diversity and inclusion practices influence male allyship and collect best practices to make it more effective. This would have also created an opportunity for the researcher to do deep work with cross-cultural and personal influences impacting male allyship.

Studying the Rate of Learning

The researcher realized halfway through the study the missed opportunity to study the rate of learning in male allyship. If done again, the researcher would endeavor to study male allyship pairings of men and women over time to determine how learning takes place and at what rate it helps women, comparing it to other tools for support and learning that organizations provide today.

Unpacking Efficacy

The researcher was deeply interested in how self-efficacy in women drove the learning and engagement process in male allyship. If done differently, the researcher would have spent more time to socialize the concept of agency to women and see if there was a relationship between agency and self-efficacy in influencing their perspective of male allyship.

The researcher has learned the virtue of patience in research through the writing of this dissertation and has experienced her own transformation. While writing this dissertation, the researcher pivoted to work for an industry-led Tech. company and built her network of professionals that provided ideas and thoughts into narrowing this into a research problem that could be studied. With the conclusion of this dissertation, she hopes to build out some of her suggestions for recommendations and continue to contribute to the Tech. industry's aspiration of having gender-balanced workforces.

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Appendix A: Interview Schedule

Appendix A1: Interview Schedule [Women in Tech]

OPENING SCRIPT: Thank you for making time to participate in this interview/focus group. Please take the next 5 min to review the consent form and sign off on it. We will cover any questions you have before we begin. The purpose of this interview is to gather perspectives on male allyship from women in Tech & self-identified male allies. Given the broad nature of what comprises male allyship for the purposes of the study we describe male allyship behavior as that which ranges from actively fighting unconscious bias, speaking up as a voice of support and mentoring women in their career journeys.

INTERVIEW SCHEDULE [Women in Tech]

I. How do women in Tech. identify a male ally?

Let's kickoff by talking about a story where you first experienced male allyship –

1. How did you first make your acquaintance with your male ally?
2. Given the circumstances, what helped them stand out as an identified ally?
3. What did you find yourself looking for in a male ally? What outcomes were you hoping to achieve from having a male ally?

II. How do women learn from their male allies?

Using the same example, lets transition from identifying the allyship to the learning experience

from having a male ally -

1. **What learnings did you get from your male ally?**
    a. *Did they help you overcome a challenge?*
    b. *They provided needed guidance/support?*
    c. *When you had to do something new or differently?*

2. **How did the learning help you in the future/long run?**
    a. *How would you describe the impact of the learning experience?*
    b. *What is an example of how the learning helped you in their absence?*
    c. *Was there an example of how the learning experience was not helpful?*

3. **How did you apply the learning?**
    a. *What were the outcomes of the learning in your life?*
    b. *What is an example of how you demonstrated that learning?*
    c. *What is an example of knowing you had learned from your male ally?*

III. What attributes do male allies possess to be successful in supporting women from the women's perspective?

In summary, let's close with the final piece on what attributes make up for a successful allyship experience based on the story you shared and what advice would you give to other women & male allies -

1. What do you recommend to women when engaging with a male ally experience?
2. What attributes should women be looking for in evaluating a successful allyship experience?
3. Broadly speaking, what would you summarize as attributes missing from the male allyship experience?

Appendix A2: Interview Schedule [Male Allies]

OPENING SCRIPT: Thank you for making time to participate in this interview/focus group. Please take the next 5 min to review the consent form and sign off on it. We will cover any questions you have before we begin. The purpose of this interview is to gather perspectives on male allyship from women in Tech & self-identified male allies. Given the broad nature of what comprises male allyship for the purposes of the study we describe male allyship behavior as that which ranges from actively fighting unconscious bias, speaking up as a voice of support and mentoring women in their career journeys.

I. How do women in Tech. identify a male ally?

Let's kickoff by talking about a story where you first identified as a male ally –

1. What was the context in which you introduced yourself as a male ally?
2. Given the circumstances, how did you stand out as an identified ally?
3. What did you find yourself doing differently or the same as a male ally? What outcomes were you hoping to achieve in engaging in allyship?

II. How do women learn from their male allies?

Using the same example, lets transition from allyship identification to the overall learning experience -

1. **As a male ally how did you help women learn?**
   a. *Did you help them overcome a challenge?*
   b. *Did you provide needed guidance/support?*
   c. *Did you lean in when they had to do something new or differently?*

2. **How did the learning help them in the future/long run?**

a. *How would you describe the impact of the learning experience you provided them?*
b. *What is an example of how the learning helped them in your absence?*
c. *Was there an example of how the learning experience could have been better?*

3. **How did they apply the learning?**
    a. *What was the feedback on the impact the learning had in their life?*
    b. *What is an example of knowing they had learned from your allyship?*
    c. *What did you learn from the women's learning experiences? What would you start, stop and/or continue to do as a successful male ally?*

Appendix A3: Interview Schedule [Focus Group of Women in Tech & Male Allies]

OPENING SCRIPT: Thank you for making time to participate in this interview/focus group. Please take the next 5 min to review the consent form and sign off on it. We will cover any questions you have before we begin. The purpose of this interview is to gather perspectives on male allyship from women in Tech & self-identified male allies. Given the broad nature of what comprises male allyship for the purposes of the study we describe male allyship behavior as that which ranges from actively fighting unconscious bias, speaking up as a voice of support and mentoring women in their career journeys.

INTERVIEW SCHEDULE [Focus Group of Women in Tech & Male Allies]

How do women learn from their male allies?

1. **Tell us a story about how you learned from your male ally experience? (for participating men and women)**
2. **What is a unique example of the learning you acquired through the male ally experience that impacted your life? (for participating men and women)**

What attributes do male allies possess to be successful in supporting women from the women's

perspective?

3. **What attributes do you feel provide a positive allyship experience? (for participating men and women)**

Appendix B: Informed Consent

Teachers College, Columbia University
525 West 120th Street
New York NY 10027
212 678 3000
www.tc.edu

INFORMED CONSENT FORM

DESCRIPTION OF THE RESEARCH: You are invited to participate in a research study that explores male allyship from the perspective of women in Tech. For this study, we define the term *male allyship* to describe male allyship behavior as that which ranges from actively fighting unconscious bias, speaking up as a voice of support and mentoring women in their career journeys.

Your selection for this study is based on the following four criteria:

1. Must be/or have been employed at a Tech. company (for example, Microsoft, LinkedIn, Facebook, Uber, Google etc.).
2. All participants (Tech. women participants and male allies) must be willing and able to participate virtually for 1 hour in independent interviews or for a 1 hour focus group.
3. Preference for women with technical and leadership experience of 7+ years with a college degree and/or technical educational degree.

You will be asked to share your experiences with male allyship, your perspectives and your role in providing or receiving allyship.

If you agree, the interview will be video recorded to allow the researcher a more accurate reflection of your views. The research will be conducted by Ms. Piya Kishore, a doctoral candidate at Teachers College, Columbia University.

RISKS AND BENEFITS: Potentially, the risks associated with participating in this study are minimal. However, your participation in this study may allow you to experience the intrinsic benefits of (1) sharing your experiences with male allyship, and (2) helping others understand how male allyship should be extended in service of empowering and supporting women in Tech.

DATA STORAGE TO PROTECT CONFIDENTIALITY: The video recorded interviews, transcriptions and written materials will be held in confidence, and kept in a secure location with the researcher. Only the researcher will have access to the materials. Moreover, the participants and their employer's name will be substituted with pseudonyms to ensure confidentiality.

TIME INVOLVEMENT: Your participation will take approximately 60 minutes.

HOW WILL RESULTS BE USED: The results of the study will be published as a dissertation, which is a partial fulfillment for the degree of Doctor of Education at Teachers College, Columbia University. In addition, information may be used for educational purposes in professional presentation(s) and / or educational publication(s).

Appendix C: Participants' Rights

Teachers College, Columbia University
525 West 120th Street
New York NY 10027
212 678 3000
www.tc.edu

PARTICIPANT'S RIGHTS

Principal Investigator: Piya Kishore

Research Title: Male Allyship from the perspectives of Women in Technology (Tech.)

- I have read and discussed the Research Description with the researcher. I have had the opportunity to ask questions about the purposes and procedures regarding this study.
- My participation in research is voluntary. I may refuse to participate or withdraw from participation at any time without jeopardy to future medical care, employment, student status or other entitlements.
- The researcher may withdraw me from the research at his/her professional discretion.
- If, during the course of the study, significant new information that has been developed becomes available which may relate to my willingness to continue to participate, the investigator will provide this information to me.
- Any information derived from the research project that personally identifies me will not be voluntarily released or disclosed without my separate consent, except as specifically required by law.
- If at any time I have any questions regarding the research or my participation, I can contact the investigator, who will answer my questions. The investigator's phone number is (808) 780 -8167.
- If at any time I have comments, or concerns regarding the conduct of the research or questions about my rights as a research subject, I should contact the Teachers College, Columbia University Institutional Review Board /IRB. The phone number for the IRB is (212) 678-4105. Or, I can write to the IRB at Teachers College, Columbia University, 525 W. 120th Street, New York, NY, 10027, Box 151.
- I should receive a copy of the Research Description and this Participant's Rights document.
- Video recording is part of this research. The recorded materials will be viewed only by the principal investigator and members of the research team. Please check one below:

(   ) I consent to be video recorded

(   ) I do <u>NOT</u> consent to being video recorded

- Written, and/or video recorded materials

( ) may be viewed in an educational setting outside the research
( ) may <u>NOT</u> be viewed in an educational setting outside the research.

My signature means that I agree to participate in this study.

Participant's signature: _________________________________ Date:____/____/____
Name: _________________________________

<u>Investigator's Verification of Explanation</u>

I, Piya Kishore, certify that I have carefully explained the purpose and nature of this research to ___________________________________ (participant's name). S/he has had the opportunity to discuss it with me in detail. I have answered all his/her questions and s/he provided the affirmative agreement (i.e. assent) to participate in this research.

Investigator's Signature: ____

Date: _______________________

Appendix D: Demographic Inventory

DEMOGRAPHIC INVENTORY

The information collected from this questionnaire is completely confidential and will only be used for the purposes of this research study.

1. My age is _________.

2. With which of the following races do you identify? (Check all that apply)

____ African-American	____ Native American
____ Asian	____ Pacific Islander
____ Latino	____ White
____ Other	

3. With which of the following sexual orientations do you identify? (Check all that apply)

____ Homosexual	____ Heretrosexual
____ Transgender	____ Bi-Sexual
___Gender Fluid	____ Other

4. With which ethnic group(s) do you identify?

___________________________________ ___________________________________

___________________________________ ___________________________________

5. What is your highest level of education?

____ Some high school ____ Completed college

____ Completed high school ____ Some graduate school

____ Some college ____ Completed graduate school

6. What is your current job title? ____________________________________

7. Where are you currently employed (name of company/organization)?

____

Appendix E: Conceptual Framework

1. How do women in Tech. identify a male ally?

- *Male allyship connections were made unconsciously vs. consciously*
- *The male ally was identified from the "Home Environment" vs. the "Work Environment" of colleagues and professionals*
- *The male ally was identified randomly by a supportive male experience*

2. How do women learn from their male allies?

- *Women learned by observation (observational learning):*
- *Role modeled ally leadership style*
- *Followed ally led career path*
- *Adopted male behavioral traits*

Women learned by self-directedness (self-directed learning)

- *Took advice/counsel independently*
- *Targeted a change in promotion/role*
- *Got a raise/increase in benefits*

Women learned through transformation (transformational learning):

- *Found confidence/their voice in male dominated forums*
- *Found resources/funds & advocacy in a collective*
- *Lifted organizational barriers/broke the glass ceiling*

3. What attributes do male allies possess to be successful in supporting women?

- *Male allies are effective mentors*
- *Male allies are effective coaches*
- *Male allies are effective role models*
- *Male allies are effective advisors*
- *Male allies have the right qualitative attributes:*
- *Approachable*
- *Honest*
- *Reliable*
- *Consistent*
- *Positive*
- *Other..*

Appendix F: Timeline

Dissertation Component	**Date**
Proposal Hearing	Mid November
IRB Submission	End of February
Data Collection	May - July
Findings	August - October
Analysis and Interpretation	October - November
Conclusions and Recommendations	December
Final Dissertation	March
Dissertation Defense	End Aug