Methodological and Theoretical Advancements in the Study of Gendered Household Decision Making

by

Rebecca Lehrman

Public Policy Studies
Duke University

Date:_______________________

Approved:

Elizabeth Oltmans Ananat, Supervisor

Seth Sanders

Anna Gassman-Pines

Jessi Streib

Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Public Policy Studies in the Graduate School of Duke University

2018
ABSTRACT

Methodological and Theoretical Advancements in the Study of Gendered Household Decision Making

by

Rebecca Lehrman

Department of Public Policy Studies
Duke University

Date: ______________________
Approved:

_________________________________________
Elizabeth Oltmans Ananat, Supervisor

_________________________________________
Seth Sanders

_________________________________________
Anna Gassman-Pines

_________________________________________
Jessi Streib

An abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Public Policy Studies in the Graduate School of Duke University

2018
Abstract

Household-level decisions such as whether to marry or whether to move for a career opportunity are often thought to be driven by the financial position of the man within a heterosexual couple, rather than the woman. Historically, men’s greater relative income and labor market participation within a household provided a gender-neutral explanation of his influence over such decisions. However, as the gaps between couples’ relative education and earnings narrow over time, it appears that women’s economic gains have led to little change in this pattern, raising skepticism about whether a gender-neutral, resource-based explanation can account for household bargaining outcomes. This dissertation research explores why this unequal pattern persists; what prevents men’s and women’s economic resources, such as income and educational attainment, from being equally predictive of their respective bargaining power in household decisions?

I focus specifically on the way gender norms, such as expectations of women’s primary caregiver roles or men’s responsibilities as financial breadwinner, shape how couples make decisions. Using a mix of quantitative and qualitative methods in three studies, I explore these dynamics in couples across a range of socioeconomic statuses. Through (1) a unique experimental survey design and (2) in-depth interviews, I collect original data that evaluate how men and women in dual-career couples decide which partner’s career should be prioritized during a household move. These two studies focus on medical student couples applying to residency, an early-career decision with important implications for future career investments among highly-skilled workers. Using (3) a longitudinal dataset of low-income unmarried parents sponsored by the Administration
on Children and Families, I evaluate how the relative and overall resources of each parent predict changes in the couples’ relationship status and reported relationship quality. Together, this collection of three studies examines the extent to which women’s improved economic position, relative to their male partners and to their peers, translates into greater agency over their career and family goals.

Overall, results suggest that, while women on average have lower economic resources than their partners, these resources are equally predictive of household decision-making. Women’s disproportionate caregiving duties, however, remain an important barrier to women’s career achievement. Supportive partners who advocate for an egalitarian division of work and childcare, and effective policy that facilitates women’s financial and educational success, can ensure men’s and women’s preferences are equally weighed in household decisions.
# Table of Contents

Abstract .............................................................................................................................. iv

List of Tables ....................................................................................................................... ix

List of Figures ..................................................................................................................... x

Acknowledgements ............................................................................................................ xi

Introduction ......................................................................................................................... 1

1. Whose Career Comes First? Household Bargaining and Joint Career Migration Among Medical Couples ........................................................................ 6

1.1 Background .................................................................................................................. 10

1.1.1 Applying Household Bargaining Theory to Joint Career Decisions .................... 10

1.1.2 Expectations of Work and Family Roles: Statistical Discrimination or Social Norms? ................................................................. 12

1.1.3 Anticipated Contribution to the Literature ......................................................... 15

1.1.4 Current Study ......................................................................................................... 18

1.2 Methods ....................................................................................................................... 21

1.2.1 Sample .................................................................................................................. 21

1.2.2 Experimental Design ......................................................................................... 23

1.2.3 Key Variables ....................................................................................................... 26

1.2.4 Analytic Strategy ................................................................................................. 30

1.3 Results ......................................................................................................................... 32

1.3.1 Baseline Results ................................................................................................. 32

1.3.2 Interaction Effects of Vignette Factors ............................................................... 34

1.3.3 Interaction Effects of Respondent Characteristics ............................................ 39

1.3.4 Specification Checks ......................................................................................... 42
3.1.2 The “Couples Match” ................................................................. 102
3.1.3 Pre-Match Decisions................................................................. 104
3.2 Methods......................................................................................... 106
  3.2.1 Recruitment.............................................................................. 106
  3.2.2 Interviews and Materials......................................................... 108
  3.2.3 Data Analysis........................................................................... 110
3.3 Findings......................................................................................... 112
  3.3.1 Deciding on a Specialty............................................................ 113
  3.3.2 Taking a Research Year............................................................ 121
  3.3.3 Translating Personal Preferences into Joint Rankings............... 125
  3.3.4 Future Childcare Plans............................................................. 138
3.4 Discussion..................................................................................... 142
3.5 Conclusion..................................................................................... 146
3.6 Tables & Figures........................................................................... 150

Conclusion ......................................................................................... 152

Appendix A. Regressions on Bar Definitions (n = 4,444)...................... 154

Appendix B. Multinomial Regression of Meeting Economic Bar on
Relationship Status, by Definition of the Bar (n = 4,444) ....................... 156

Appendix C. NRMP Couples Match Worksheet .................................... 157
Appendix D. Interview Guide............................................................... 159
References......................................................................................... 163
Biography......................................................................................... 177
List of Tables

Table 1.1: Respondent-level Characteristics ................................................................. 53
Table 1.2: Vignette Dimensions, Levels, and Text Phrases ........................................ 54
Table 1.3: Association Between Vignette Dimensions and Predicted Prioritization Outcome, Average Marginal Effects ................................................................. 57
Table 1.4: Interaction of Respondent Gender and Vignette Dimensions, Average Marginal Effects ........................................................................................................ 58
Table 1.5: Interaction of Dual-Medical Couple Respondents and Vignette Dimensions, Average Marginal Effects ........................................................................ 59
Table 2.1: Baseline Characteristics of Couples (n=4,444) ............................................. 90
Table 2.2. Economic Bar to Marriage Index (n=4,444) .................................................... 92
Table 2.3: Impact of Economic Bar on Relationship Quality (4,444) ......................... 95
Table 2.4: Comparison of Association Between Marriage and Individual Items At 15 Months (N=4,444) ..................................................................................... 97
Table 3.1: Characteristics of Couples ............................................................................. 150
Table 3.2: Outcome of Joint Ranking ............................................................................ 151
List of Figures

Figure 1.1: Example Vignette (Woman Dominant) ................................................................. 55

Figure 1.2: What Respondents thought the Couple Would Do, by Couple’s Childcare Plans .......................................................... 56

Figure 1.3: Interaction of Respondent Egalitarian Gender Ideology and Vignette Factors, Average Marginal Effects ............................................. 60

Figure 2.1: Predicted Probabilities of Relationship Status at 15 and 36 months, Meeting the Economic Bar, Either-Parent Definition (n = 4,444) ............ 93

Figure 2.2A. Predicted Probabilities of Relationship Status at 15 months, Meeting the Bar and Contributor’s Gender (n=4,444) ........................................ 94

Figure 2.2B. Predicted Probabilities of Relationship Status at 36 months, Meeting the Bar and Contributor’s Gender (n=4,444) ........................................ 94

Figure 2.3: Likelihood of Marriage, Comparison of All Bar Items to Individual Bar Items, 15 and 36 months (n=4,444) ................................................. 96
Acknowledgements

This journey would have been nearly impossible without the unwavering support of so many people.

I would like to express my deepest appreciation and gratitude to my advisor, Elizabeth Oltmans Ananat. Thank you for pushing me to question my assumptions and work hard, for reassuring me after each rejection, and for always supporting me and my sometimes unconventional goals. I also want to thank Seth Sanders for being an invested advocate of my research and career, and a tireless believer in his students. I am very grateful to Anna Gassman-Pines for providing me with research opportunities and mentorship, and for her tremendous investment in my learning and growth. And thank you to Jessi Streib for being an excellent teacher who is always willing to share her knowledge honestly and openly.

Thank you to the Sanford faculty who I’ve had the immense pleasure of learning from, including Amar Hamoudi, Christina Gibson-Davis, Deondra Rose, Manoj Mohanan, and Maria-Giovanna Merli. Thank you to Lisa Kukla and Penny Sanders for all the behind-the-scenes work they have done to get me to this final step.

To Lady Brain Trust, my LBT: Ade Olayinka, Anika Schenck-Fontaine, Emily Pechar, and Sierra Smucker. You all carried me through. There may be a small chance I would still be here writing this document, but it would be nowhere near as good and I would be nowhere near as happy. Thank you for reading every draft and critiquing countless presentations. But equally, thank you for being such wonderful friends,
confidants, and advocates. I have loved every moment with each of you, and will forever treasure the magic that is our LBT.

The community I’ve fostered at Duke has been a guiding light even during the darkest moments. Thank you to all my friends at Sanford, who make the program the warm community it is. In particular, I want to thank Laura Bellows and Yulya Truskinovsky. Laura, thank you for always being there, with statistics help, fizzy water, music playlists, your ear and your heart. Yulya, thank you for being my mentor in all things from the best yoga studios to research advice. To my Econ family: Brian, Eugene, Gábor, Javo, Maria, Sarah, and Tom. You were my first friends in Durham, and I often doubt whether I would could have emerged from first year without you.

I’ve been lucky to meet some truly amazing people in Durham who have filled my heart with love and joy. To the Generals/Clarendon: Elisabeth, Jess, Kathryn, Nick, Sarah, Tess, and V. Thank you for bringing so much laughter, dancing, and positivity into my life. Your friendships have sustained me in so many ways. To Bradford, for always knowing how to cheer me up, sometimes well before I knew how to ask for it. And to Poster the cat, who I will always love dearly.

To my amazing friends who have known me way longer than they bargained for. Liya, thank you for being my rock, and for your steadfast affirmation when I need it most. Heather, thank you for always knowing how to make me laugh, and for all the ways you go out of your way to support me. Mel, thank you for showing me that hard work does pay off, and for inspiring me to persevere. And Rosie, thank you for being my
partner in adventures across the globe, across the country, and everywhere in between.

You have each contributed greatly to the person I am today.

And to my loving family, who have constantly supported me, despite me moving farther and farther away from home. To my mom and dad, Celia and Bob Lehrman, who accepted from an early age my determination to forge my own path. Thank you for never once questioning my choices, and for always being the sympathetic foil for my rants about academia. To my brother, Daniel, whose maturity, intellectual curiosity, and compassion make me so proud to be your sibling. Thank you for your visits, even when you did the worm (twice).

This dissertation is dedicated to my Grandma Fanny, whose own terrible hardships I reflected on in challenging times, to remind myself that getting a Ph.D. is a privilege. Thank you for inspiring me, for teaching me independence, and for always being my fierce advocate.
Introduction

Women’s economic and emotional well-being are significantly affected by decisions made at the household level, such as whether to marry or whether to relocate one’s family for a career opportunity. Theory on household decision-making argues that the partner with greater economic resources (i.e., earnings or educational attainment) determines the outcomes of such joint decisions (Blood & Wolfe, 1960; Lundberg & Pollak, 1996). Yet, research suggests that women’s economic gains have not translated into greater influence over such decisions (Bianchi & Milkie, 2010; Tenn, 2010). While the pattern is clear, the underlying mechanisms have not been adequately identified. This is due to three major data limitations facing researchers: (1) inadequate information on resources of each member of the couple that are necessary in order for researchers to make relative comparisons; (2) a lack of information on individual career and family preferences, which is necessary to identify welfare changes; and (3) a focus in available data on earlier cohorts that cannot reflect women’s social, political, and economic gains over time.

Using a mix of methodological approaches and contexts, I address these limitations in three studies to uncover the factors that influence joint decisions.

The first chapter examines whether men’s and women’s resources are equally predictive of career precedence among dual-career couples. While the gaps between couples’ relative education and labor force attachment have narrowed over the last fifty years, women’s economic gains have had little effect on their influence in determining household migration decisions (Tenn, 2010). This study investigates this phenomenon among high-skilled professionals, to understand why women’s economic gains have not
translated into more egalitarian relationships. Using an experimental vignette survey, this study causally tests gender biases by disentangling individual economic resources and the couple’s childrearing plans from gender. I evaluate whether respondents expect men and women with the same profiles will be equally likely to receive career precedence in household migration decisions. This paper leverages a unique official process known as the “Couples Match” whereby medical student couples create a joint ranking of their residency placement preferences. By presenting medical students \((n=238)\) with the rank-ordered program preferences of each hypothetical partner and their childrearing plans, this study has the advantage of a well-defined operationalization of underlying preferences and ultimate career precedence within a couple.

Results show that, when provided with full information about each partner’s resources and preferences for their career and family, respondents evaluate the resources of hypothetical men and women symmetrically. Men and women are each expected to compromise on their preferred location in similar ways, and are equally likely have their preferences prioritized. While expectations of an individual’s career precedence within a couple are highly influenced by that individual’s future childcare responsibilities, the gender of that primary caregiver has less of an effect on the results. These results suggest that childcare plans are an important predictive factor for determining career precedence during a household move, over and above individual resources, and demonstrate an overall lack of gender bias once respondents are provided with full information.

The second chapter is focused on how low-income mothers’ and fathers’ economic resources influence their decision to marry and relationship quality. My co-authors,
Christina Gibson-Davis and Anna Gassman-Pines, and I examine low-income parents’ marriage decisions and reported relationship quality using longitudinal data on couples in the Building Strong Families program (n=4,444). Qualitative evidence suggests that low-income parents perceive a financial barrier, or “economic bar,” to marriage (Edin, Kefalas, & Reed, 2004; Gibson-Davis, Edin, & McLanahan, 2005). The economic bar is multi-dimensional, referring to a bundle of financial achievements that determines whether couples feel ready to wed. However, there is little quantitative evidence that this barrier is associated with marriage decisions. Moreover, most research on financial prerequisites to marriage focuses on the father’s economic resources alone (Harknett & McLanahan, 2004; Smock, Manning, & Porter, 2005). We construct a comprehensive set of financial resources of each parent to determine whether couples who met a minimum economic bar were more likely to marry than couples who did not.

Meeting the bar was associated with a two-thirds increase in marriage likelihood over the course of the study. The bar was not positively associated with cohabitation, suggesting that it applies specifically to marriage. Examining different definitions of the bar based on whether the mother, father, or both parents contributed items, all variants were associated with marriage, even when the bar was met based on the mother’s economic accomplishments alone. When mothers contributed to the economic bar, they reported significantly higher relationship quality. These results provide quantitative support for the economic bar to marriage, and new evidence for the importance of a woman’s resources for relationship decisions and her well-being.

The final chapter of this dissertation investigates whether there are gender
differences in the ways individuals consider their partner’s preferences when making early-stage career decisions. While workplace policies have made some adjustments to facilitate dual-career households, and men now engage in more domestic work than past generations, the expectation remains that women adapt and accommodate their work for the family (Becker & Moen, 1999; Gerson, 2010; Hochschild, 1989). Through semi-structured, dyadic interviews with coupled medical students jointly applying for residency ($n=34$), I investigate the strategies men and women use to approach such decisions, and the extent to which this process includes considerations of their partner’s career. By interviewing each partner separately during this crucial application process, I evaluate whether underlying patterns of career compromise—through decisions regarding specialty, academic path, and residency application rankings—differ by gender. Furthermore, I triangulate the interview data with data on their personal preferences and ultimate residency application rankings, to evaluate whether the man’s and woman’s preferences were equally weighted, or instead one partner’s preferences were prioritized.

Women in the sample reported considering their partner when making career decisions on their specialty and academic path more often than men. When applying for residency, couples most often either prioritized the man’s program preferences or took an egalitarian approach. The outcome appeared to depend on the extent to which the man advocated for his partner’s career goals and was willing to make career sacrifices on par with his partner. Research on work-family balance often reflects an individual-level approach of two competing roles (career vs. family), where the individual in question and the strategies taken typically focus exclusively on the woman (Moen & Yu, 2000). This
paper offers a unique perspective by collecting data on both members of the couple to explore how men and women navigate conflicting career goals, as well as the ways in which these couples understand and express the compromises they each make.
1. Whose Career Comes First? Household Bargaining and Joint Career Migration Among Medical Couples

Switching jobs is a major source of wage growth for young workers, and career advancement frequently requires relocation (Molloy, Smith, and Wozniak 2011). The increasing emphasis placed in the modern economy on the ability to be mobile for professional growth is particularly difficult to balance for dual-career couples (Costa and Kahn 2000; Stroh, Brett, and Reilly 1992). Couples in professions that require geographic mobility, such as medicine, academia, and the foreign service (among others), may need to make relocation decisions that require one or both partners to compromise on their career preferences. This decision often effectively sorts individuals in couples into a primary or secondary earner role; a move that prioritizes one partner’s career has implications for unequal earnings and job quality within the couple, as well as future career advancement opportunities (Agarwal 1997, Lundberg & Pollak 1996).

The decisions that dual-career couples make about whose career to invest in are central to the study of gender differences in employment outcomes (Livingston 2014). While the gaps between couples’ relative education and labor force attachment have narrowed over the last fifty years, women’s economic gains have had little effect on their influence in determining household migration decisions (Tenn 2010). Indeed, even when women have higher occupational prestige or earnings capacity than their male partners, they appear to be more likely to make career sacrifices for their family (see, e.g., Bertrand, Kamenica, and Pan 2015; Bittman et al. 2003; Stamm and Buddeberg-Fischer 2011; Tichenor 2005; Wong 2017). If women have the same or greater economic resources than men (i.e. earnings, educational ability, occupational prestige, etc.), why do
couples appear to defer to men’s careers in household migration decisions? Women’s human capital gains and increased professional investments relative to past generations imply that it is now less socially efficient for women as a group to not participate to their full potential in the labor force.

Recent research has highlighted the influence of extra-household factors that can guide how couples make migration decisions. Social norms, such as expectations that the man should be the primary breadwinner and the woman should be the primary caregiver to children, may influence the ways in which couples are expected to determine career precedence (Pedulla and Thébaud 2015; Risman 2004; Wong 2017). To gain some insight into the persistent patterns of men’s career precedence, it is crucial to evaluate whether and how social expectations of work and family roles influence whose career takes priority in migration decisions. This study explores perceptions of gender norms, asking: are men’s and women’s economic resources considered to be equally predictive of their career precedence in a household move? How do childrearing plans and gender interact with economic resources to affect peoples’ perceptions of whose career will take priority?

Examining social attitudes regarding career prioritization provides greater insight into the persistence of gender norms as a guiding factor in household decision-making. If women do not expect their career preferences to be given equal importance in household moving decisions, this may have feedback effects on their own decision to invest in labor market skills and their advancement in the workforce (Blau and Kahn 2017; Eby 2001; Goldin 2006; Stroh et al. 1992). In addition, social expectations can also influence
women’s career success on the supply-side (e.g., mentors who advise women to pursue
certain career paths) and demand-side (e.g., employers who do not hire partnered women
assuming they are less willing to relocate than men) (Moss-Racusin et al. 2012; Rivera
2017). Understanding the extra-household factors that contribute to men’s greater career
precedence within the household is crucial for understanding the gender wage gap, which
is largest and most persistent among high-skilled men and women (Blau and Kahn 2006,
2017; Kassenboehmer and Sinning 2014), and household migration may be an important
driver of the gap (Cooke et al. 2009).

This paper seeks to uncover the causal pathways that contribute to expectations of
differential career precedence within mixed-gender couples in high-earning, high-skilled
occupations. Using medical students as a case study, this paper leverages an official
process known as the “Couples Match.” Here, medical-student couples must translate
their individual preferences into joint rankings of their residency placement preferences. I
use an experimental vignette survey to investigate how earnings potential, educational
ability, and childrearing plans affect whose career preferences are expected to be
prioritized in the joint ranking. Specifically, I examine whether men and women with the
same profiles are equally likely to be prioritized in household migration decisions, or
whether gender plays an independent role. Survey respondents—medical students
enrolled in six U.S. medical schools—are asked to predict how they think hypothetical
couples will resolve their career migration conflict. Using an other-based vignette
approach leads to higher rates of admitting sensitive behavior than vignettes describing
respondents’ own hypothetical behavior (Auspurg and Hinz 2015; Finch 1987). By
conducting the survey with medical students, I can ensure that the situations are recognizable and of relevance to respondents, an approach that also more effectively uncovers the decision-making process in real-life contexts (Grønhøj and Bech-Larsen 2010).

Results show that, when provided with full information about each partner’s resources and preferences for their career and family, respondents evaluate the resources of hypothetical men and women symmetrically. Men and women are each expected to compromise on their preferred location in similar ways, and are equally likely have their preferences prioritized. I find that respondents react most similarly to the resources of hypothetical men and women when the couple plans to have an egalitarian division of childcare, or when the couple does not anticipate having children. In contrast, expectations of career precedence are highly influenced by an unequal division of childcare, but notably, the gender of the primary caregiver has less of an effect on the results. These results suggest that evaluations are highly sensitive to anticipated childrearing plans; when evaluating expected career prioritization, respondents are less likely to draw upon gender roles when given full information about individual resources and preferences for career and childrearing. Results are highly symmetric, and suggest that an important barrier to egalitarian outcomes is the unequal division of labor within dual-career households. By highlighting the influence of childrearing on household career precedence, this paper provides insight into effective policy design to address persistent inequality between highly-educated men and women.
The remainder of this paper is organized as follows. Section I provides the theoretical background and context, highlighting how the current study contributes to the extant literature. Section II describes the sample and experimental design; Section III presents the results; Section IV discusses possible interpretations of the results; and Section V concludes.

1.1 Background

1.1.1 Applying Household Bargaining Theory to Joint Career Decisions

When individuals decide whether to move for a new job opportunity, they consider their own preferences to determine whether the move will advance their career. But if they are a member of a dual-career household, the proposed move may not align with their partner’s career preferences. Couples may need to choose between options that either advance one partner’s career but are suboptimal for the other partner, that involve mutual compromise of individual career preferences, or that compromise relationship quality by living apart (Lundberg and Pollak 2003; Maume 2006; Pixley and Moen 2003).

When individual career preferences conflict during a migration decision, household bargaining theories posit that the ultimate decision depends on the bargaining power of each member of the couple (England and Farkas 1986; Manser and Brown 1980). This power is considered to be derived from the resources that each individual holds, such as earnings, earnings potential, wealth, education, and occupational prestige (Blood and Wolfe 1960; Lundberg and Pollak 1996; McElroy and Horney 1981). These theories predict that the partner with the greater resources will be given preference in any
household allocation decision, such as the division of household labor, spending decisions, or household moves. Specifically regarding household moves, the decision to move will reflect the preferences of the partner with the primary career over the partner with the secondary job. This assumption was justified due to the resources of the primary earner, which provided them with a “comparative advantage” relative to their partner (Lundberg and Pollak 2003).

An underlying assumption of these neoclassical economic and resource-based theories is that they are symmetric with respect to gender; the gender of each partner should not influence the decision-making process independently of resources (Manser and Brown 1980; McElroy 1990). As such, the high-resource partner is expected to receive career precedence in a household move regardless of gender. Historically, evidence that men had greater influence over household migration decisions was attributed in these models to women’s low earnings potential relative to their partners, supporting the symmetric nature of the theory (Becker 1991; Bielby and Bielby 1992). These theories predicted that, if the woman in a couple had greater earnings or educational attainment than her husband, her preferences would be weighted more heavily in the migration decision. At the time these theories were developed, there were too few such cases to test this counterfactual empirically.

Yet, as women have made economic gains relative to their partners over time, evidence overwhelmingly rejects the predictions derived from household bargaining theories, instead demonstrating that men’s and women’s resources are not equally predictive of migration decisions (Tenn 2010). The vast majority of empirical work on
household migration finds that, regardless of each partner’s earnings or occupational prestige, women appear to be more likely to move for their partner’s career than men (Duncan and Perrucci 1976; Geist and McManus 2012; Shauman 2010). Married women are more likely to decline a job requiring migration than married men (Bielby and Bielby 1992; Brandén 2014; Shihadeh 1991), and women typically experience lower economic returns to household migration than their partners (Cooke 2003; McKinnish 2008). The negative relative impact of migration on women’s career decisions over the life course has also been documented in longitudinal work that follows households over time (Han and Moen 1999; Winkler and Rose 2000). It appears that women still face barriers to their career success relative to similarly positioned men, suggesting that other factors may influence couples’ migration decisions beyond their individual economic resources.

1.1.2 Expectations of Work and Family Roles: Statistical Discrimination or Social Norms?

While individual resources matter greatly for predicting how couples should optimally make joint career decisions, different expectations of work and family commitments by gender may influence perceptions of household bargaining outcomes. Gender differences in expected labor market outcomes may be better explained by intra-household factors such as statistical discrimination or social norms. Statistical discrimination is the process by which individuals (often employers or other evaluators) draw upon average group differences to efficiently make assumptions of individuals’ preferences and skills (Altonji and Blank 1999). Social norms, in contrast, are inefficient determinants of household decisions that draw upon culturally proscribed gender roles (Agarwal 1997; Ferber and Nelson 2009; Fernández 2013). Thus, social expectations
may help account for the predictive shortcomings of symmetric bargaining models.

Statistical discrimination draws upon group membership (here, gender) to provide information about relevant characteristics in the face of imperfect information. Without full information on individual career preferences and plans for childrearing, it may be reasonable to draw upon observed average differences by gender to predict how couples will resolve migration decisions. For example, women, on average, perform better academically than men (Goldin, Katz, and Kuziemko 2006), and are more likely to pursue certain lower-earning and/or geographically dispersed occupations (Benson 2014). In addition, women are more likely than men on average to be the primary caregiver and experience career interruptions due to childrearing (Becker and Moen 1999; Bertrand, Goldin, and Katz 2010; Blau and Ferber 1987). The partner who is expected to invest in childcare may be expected to invest less heavily in their career. These observed average differences by gender may lead to expectations (by employers, men and women in dual-career households, etc.) that the man is more career invested and thus more likely to be prioritized. In other words, gender differences in evaluations can be attributed to observed average differences among men and women. Statistical discrimination avoids invoking bias; as long as perceptions of group differences are accurate this serves as an efficient second-best prediction (Blau and Ferber 1987).

With full information on men’s and women’s career and childrearing plans, it is no longer efficient to assume the man’s career will take priority. For example, given information that a woman plans to pursue a male-dominated occupation or that a couple plans to have an egalitarian division of childcare, we should expect that people will
update their expectations of the woman’s career precedence. If this is not the case, it becomes more likely that people are instead drawing upon social norms to ascribe career priority to the man, regardless of individual factors. These norms ascribe certain behaviors to men and women, particularly in household-level interactions, that have less to do with individual resources and more to do with fulfilling male-breadwinner/female-caregiver roles (West and Zimmerman 1987; Williams 2000). Such gender norms may also structure the expected behaviors of men and women, and in particular serve as barriers to women’s progress as they seek to advance professionally (Heilman 2001).

To investigate the influence of social norms on expectations of work and family roles, researchers in an ideal world would like to compare the outcomes of individuals who are identical in all aspects but differ only on gender. Indeed, experimental research, which constructed resumes of men and women with identical qualifications, has found compelling evidence for differential evaluations by gender. Professional women are typically recommended lower salaries and less mentoring support, held to a higher standard, and are less likely to be judged as competent, relative to identical men (Byyny 2017; Moss-Racusin et al. 2012; Pinholster 2016). These studies also find little difference by respondent gender, perhaps since men and women are both exposed to social norms (Moss-Racusin et al. 2012).

The influence of childcare responsibilities may further complicate the predictions of household bargaining models, helping to explain the empirical findings that men’s economic resources have a greater impact on migration decisions than their wives’ resources. England and Folbre (2002) consider the implications of childcare on
bargaining power and argue that children weaken women’s bargaining power due to the social expectation of women’s primary responsibility for childcare. Laboratory experiments suggest that mothers and pregnant women are evaluated as less devoted to their careers than childless women, while fathers are evaluated more positively and receive a pay bump relative to childless men (phenomena coined the ‘motherhood penalty’ and ‘fatherhood premium’, respectively) (Correll, Benard, and Paik 2007). Research consistently finds that parenthood is negatively associated with women’s work hours, but either positively or not associated with changes in men’s work hours (Bianchi and Milkie 2010). These unequal evaluations by parent’s gender, however, cannot uncover whether this is due to average differences in childcare responsibility by gender, or social norms that more negatively impact female caregivers than male caregivers.

This experimental research suggests that respondents continue to draw upon gender-based social norms, even in the face of conflicting information. Applying these social expectations to the dynamics of couples’ migration decisions, evaluators may draw upon social norms of the man’s role as primary earner to assess expected outcomes. In other words, if survey respondents evaluate hypothetical men’s and women’s expected career precedence differently, despite equivalent resources and full information about preferences, this suggests that the evaluator assumes that social norms will be a persistent guiding structure for these couples.

1.1.3 Anticipated Contribution to the Literature

In evaluating patterns of career precedence within household migration decisions, previous literature faces several limitations. First, many economic factors that determine
couples’ investment in each partner’s career tend to be correlated with gender, including earnings, occupational prestige, and full-time employment, making it difficult to identify the causal mechanism underlying differences in outcomes by gender (Auspurg, Hinz, and Sauer 2017). Furthermore, the resources each partner brings to the bargaining table are themselves a function of occupational sex segregation and gender wage disparities (Acker 1990). Thus, with conventional labor force and household surveys, it is difficult to entirely disentangle resources from gender.

To more accurately compare couples with similar personal and professional paths, previous work has restricted analysis to couples in the same occupation, in order to control for many of these unobservable differences. Evidence on couples in the same profession continues to show that men’s careers tend to take priority: among dual-academic couples, men are more likely to be considered the “primary hire” or able to take a job that requires their academic partner to accept a lesser position in academic searches (Rivera 2017; Wolf-Wendel, Twombly, and Rice 2004); women in medical couples are less likely than men to report that their career has been prioritized in family decisions and more likely to report having sacrificed their career for their family (Dyrbye et al. 2014; Hinze 2000; Stamm and Buddeberg-Fischer 2011). Furthermore, the majority of the gender pay gap appears to come from within occupation differences in earnings, rather than between occupation differences (Goldin 2014). Thus, this suggests that there are important unexplained differences in men and women’s career experience within occupation, and that looking at specific occupations can provide further evidence on how to equalize earnings by gender (Goldin 2014).
One critical explanation for differing career trajectories within occupation appears to be the different ways in which childrearing affects men and women (Bertrand et al. 2010). Despite young men’s and women’s egalitarian desires, women are more likely to be the primary caregiver for children (Pedulla and Thébaud 2015). Furthermore, previous research cannot speak to the minority of couples in which the man plans to be the primary caregiver, or in which the couple does not intend to have children. If respondents are explicitly informed of a couples’ childrearing expectations and behaviors, we should expect women’s career trajectory to look more like that of the average male if childrearing explains this difference.

To understand whether households prioritize careers by gender, it is particularly important to examine early-career decisions of couples at the stage when partners have equal human capital and earnings. The outcome of a decision to invest in one partner’s career over the other partner’s career may lead to a cumulative advantage for the prioritized partner, further perpetuating the prioritization of that partner in future decisions (England and Kilbourne 1990; Pixley 2008; Wong 2017). Research suggests that women’s career decisions over their life course are negatively impacted by migration (Han and Moen 1999; Winkler and Rose 2000). Thus, focusing on couples at the same career stage provides a means of abstracting away from many confounding factors, such as age, experience, and educational attainment. In addition, focusing on the attitudes of young men and women offers a window into changing trends in egalitarianism not found in older datasets (Gerson 2010).

Lastly, without explicit knowledge about each partner’s career preferences, it is
difficult to make any sort of welfare claim following a household move. Often, studies using cross-sectional data can only distinguish the tied mover as the partner who experienced lower earnings or a change in employment following a move. However, without knowing what each partner’s preferences were, it is unclear whether the decision was an efficient one or not. To answer such a question, we need explicit knowledge of each partner’s preferences for their career and for the household migration outcome.

To my knowledge, no study has directly tested whether couples are still expected to make decisions that prioritize one partner’s career when given full information on both individuals’ skills and preferences. Given full information, men and women should be expected to be equally likely to be given career precedence in a migration decision.

1.1.4 Current Study

This paper offers a causal test of household bargaining models, asking whether men’s and women’s economic resources are viewed by others in their profession as symmetrically predictive of their likely career precedence in a household move. I use an experimental vignette study design to assess expectations of career precedence, given explicit information on couples’ preferences for their career and expected childrearing investments.

Through this design, I can effectively test the symmetric nature of the bargaining framework: if we switched the profiles of the man and woman in the couple, would the expectations of prioritization switch as well? I ensure that all respondents are presented with the exact same scenarios on average, allowing for a causal identification of the separate impact of the interaction of gender with educational ability, earnings potential,
and caretaking on expectations of career precedence (Atzmüller and Steiner 2010; Dülmer 2007). I expect that men will be more likely to be presumed to have career precedence, and that domestic responsibilities will influence the predictive power of individual resources for the female, but not the male, partner.

To evaluate joint career migration, I focus on an early-stage career decision among couples in the same occupational context. I exploit a unique empirical opportunity known as the “Couples Match,” an official process whereby senior medical students apply for residency programs. Medical student couples1 must formally rank their joint preferences in a high-stakes setting.2 By translating individual residency program preferences into a joint ranking, this process provides an explicit visualization of individual career preferences to operationalize career precedence. Furthermore, by linking applications to determine one’s training, this decision has important implications for the training residents receive, as well as for future placement in academic medicine or fellowship programs. Medical student couples also serve as an interesting case study because of their career timelines; the vast majority of medical students enroll straight from university3 and have a very clear idea of what the next decade (at least) of their professional lives entails due to lengthy training periods. Because of this, medical students typically determine their career and childrearing plans well in advance of

1 While much of the research in this area focuses on married couples, I take a broader approach to defining a couple that considers the increasing prevalence of other types that long-term, committed relationships. Following Rivera (2017) and others, I refer to individuals in any self-defined, long-term, serious relationship (whether married or not) as “partnered.”

2 The number of couples electing to Match together has increased almost every year since the official process was established in 1984, from 347 to 1,165 couples in 2018 (Main Match Results and Data 2018, National Resident Matching Program). Over a third (35%) of female physicians and 18% of male physicians under 35 are married to physicians (Boulis and Jacobs 2010).

3 In 2015, 36% of students were age 20-22 and 46% of students were age 23-25 when they entered medical school (Matriculating Student Questionnaire, Association of American Medical Colleges).
realization. Furthermore, because each partner must simultaneously make a career move, the Couples Match mitigates concerns that women are less likely to instigate a household move than men. Thus, by focusing on medical students at their first major career decision, I compare partners with equal training and educational attainment with clearly defined career and childrearing preferences during a high-stakes and explicit within-couple bargaining decision.

This study design also allows for an explicit test of how respondent characteristics influence expectations. Evidence suggests that men and women are similarly influenced by gender norms, but that women are, in general, expected to conform to more caring and relationship-oriented roles. As a means of evaluating how well social attitudes reflect behaviors, it is illuminating to see how respondents who are themselves a part of a dual-medical couple evaluate the vignettes. And finally, particularly among people who express more gender egalitarian attitudes, we should expect people to be more likely to evaluate men’s and women’s individual resources symmetrically (Bielby and Bielby 1992).

Vignette experiments are an ideal means of identifying unequal treatment and measuring social norms, as any differences can be attributed solely to the experimental design. In other words, this design removes confounding factors such as average differences in occupations and childcare by gender. These studies have been used to investigate socially sensitive topics such as unequal treatment on gender and race (see, e.g., Abraham, Auspurg, and Hinz 2010; Auspurg and Hinz 2015; Auspurg et al. 2017). While these studies measure attitudes, and not specific behaviors of couples, couples
likely draw upon social expectations to make decisions. To the extent that attitudes are important predictors of behavior (Ajzen and Fishbein 2005; Cialdini and Trost 1998), the results of this study can provide important insight into how couples make migration decisions.

1.2 Methods

1.2.1 Sample

The sample consists of medical students from six accredited U.S. medical schools. Focusing on a sample population that is directly familiar with the Match process and institutional norms of the profession, and have similar economic resources to the couples they are evaluating, ensures that the results better predict behaviors (Grønhøj and Bech-Larsen 2010). Respondents in the sample are well positioned to understand the weight of individual resources on Match decisions, and thus effectively evaluate expectations of career prioritization within medical couples.

The schools span several regions (three in the Southeast, two in the Midwest, and one in the Northeast), and vary across national rank, research-intensity, public and private control, and community focus. Recruitment emails were distributed to students by their respective Assistant Dean for Student Affairs, and the survey was fielded between August 1, 2017, and October 4, 2017. To ensure familiarity with the subject matter and stakes at hand, only students in their 3rd and 4th years were eligible.

Table 1.1 displays information on respondent characteristics. Slightly over half of respondents were women (56%), and the majority were in their mid-twenties (86%) and

---

4 I am not aware of any dataset that provides data on couples’ Match decisions that identifies the gender of applicant. The organization that houses data on the Match does not allow their applicant data to be linked to gender (private communication with Research Director, National Resident Matching Program).
identified as straight (91%). Two-thirds of respondents identified as white (62%), followed by Asian, non-Hispanic (23%). The majority of respondents were in serious relationships (73%), and 30% were in a relationship with another medical student. Only 7% currently had children. The board exam score of the average respondent was in the 67th percentile, and 21% planned on pursuing a competitive specialty. With a score of four indicating the most gender egalitarian, respondents averaged 3.6 on the gender ideology scale (SD=0.5). Because survey questions regarding respondent demographics were placed after the experiment to avoid biasing the experiment, I do not have information on those respondents who did not complete the experiment. However, respondents looked very similar on demographics and academic characteristics as compared to the overall U.S. medical student population.

A total of 426 students completed the survey, 27% of the overall sample of eligible students. Respondents were asked two attention check questions to ensure they accurately recalled the experimental manipulation. Following the common practice among experimentalists, the sample was restricted to those respondents who passed the attention checks throughout the vignette experiment (n = 238). The demographics of this

---

5 Respondents in the sample were of similar ages, race/ethnicity breakdown, and marital status. The sample had a slightly larger percent female respondents (55.7 vs. 50.0). Source: AAMC Matriculating Student Questionnaire, 2014-2015; AAMC Medical School Year Two Questionnaire, 2015-2016; NRMP Charting Outcomes in the Match for U.S. Allopathic Seniors, 2016.

6 Compared to the sample population of the six medical schools, the sample had a larger percent female respondents (55.4 vs. 51.2), a larger percent white respondents (61.6 vs. 54.7), fewer Black respondents (4.3 vs. 7.7), and a larger percent foreign born (12.1 vs. 3.5). The proportion of Asian respondents was similar, as was students’ average Step 1 exam score. Source: AAMC Table B-6: Total Graduates by U.S. Medical School and Race/Ethnicity, 2016-2017; AAMC Table B-2.2: Total Graduates by U.S. Medical School and Sex, 2012-2013 through 2016-2017.

7 Respondents were asked two attention check questions: after the third vignette, they were asked, “In the vignette you just read, which member of the couple had the higher Step 1 score?” After the seventh vignette, they were asked, “In the vignette you just read, what are the couples’ childcare plans?”
sample were substantively identical on all observable demographics to the full sample (see Table 1.1 for comparison). Each respondent was presented with eight different vignettes, leading to a total of 1,877 vignettes used in the analysis.

1.2.2 Experimental Design

The vignette experiment presented respondents with several short descriptions of hypothetical couples who have chosen to Couples Match. In each vignette, the individual members of the couple have each created separate ranked-order-lists (ROLs) of their program preferences, a strict ordering based on the programs each felt would afford them the best career training and highest prestige in their field. This description, while hypothetical, mimics the official Couples Match instructions that advise each student to make their own list before jointly discussing their ROL.\(^8\) To model the conflict of interest and need for household bargaining, in each vignette the program location of each partner’s first choice is the other partner’s third choice, and they share a mutual second choice in the same city (see Figure 1.1 for an example of the full vignette text).

Respondents were then provided with four options for how the couple could resolve their location conflict and asked which they thought the couple would rank first: (1) the man’s first choice, (2) the woman’s first choice, (3) their mutual second choice, or (4) their separate first choices that would require them to live apart.

Each vignette was standardized to vary on five systematic factors that are considered in the literature be the most important for the decision-making process in order to isolate their impact on respondents’ judgments (Alexander and Becker 1978;[8](#fn8)

---

\(^8\) The National Resident Matching Program (NRMP) provides a worksheet that couples are recommended to use before joining lists, see Appendix C.
Atzmüller and Steiner 2010; Auspurg and Hinz 2015). These factors described: (1) & (2) the male and female partners’ academic qualifications, to indicate career potential and ability; (3) & (4) the male and female partners’ preferred specialty’s competitiveness, to indicate future potential earnings; and (5) the couples’ childbearing and childcare plans post-residency, to indicate the presence of children and intentions for a traditional or non-traditional gender division of labor. Gender was denoted through partners’ first names, which were selected to be highly gender-specific and not imply socioeconomic status or race/ethnicity. Thus, this design provides vignette men and women with the same employment opportunities and childrearing scenarios on average.

To standardize responses, the vignette couples all shared the same non-varying characteristics. These characteristics included: relationship status (all engaged to indicate relationship seriousness), plans to pursue academic medicine (which heightens the importance of one’s residency program for future career trajectory), and enrollment in a top tier medical school (to add credibility that students would successfully Match to their first-ranked program). In each vignette, the cities were all generic names to ensure responses were not influenced by city or program, and respondents were told that all

---

9 Names were generated from database of all people born in Florida, collected from survey data on a census of public school principals in the state. The names used are the most popular names of children born in the early-mid 1990s (the years that the majority of students who are currently enrolled in medical school were also born), that are at least 95% male or female, have a ratio of black:white of between 0.2 and 0.4 (Florida ratio is 0.3), had a variance of maternal education greater than average for common names. These names are: (male partners) Jonathan, Kevin, Eric, Brian, Jason, Jeffery, George, Joel; (female partners) Christina, Michelle, Kimberly, Andrea, Erica, Monica, Alicia, Angelica. I thank David Figlio for providing these names.

10 For example, I used city names such as “Metropolis City,” rather than “New York City.” This choice was informed by the results of the pilot study, in which actual city names were used. Despite ensuring that all cities used had more than two programs, respondents in pilot surveys indicated they were more likely to attach certain residency programs to cities and consider how well ranked the program was when answering.
programs are a two-hour flight apart (to add context for the decision to Match separately to each first-choice city).

The vignette factors were designed with explicit attention to the occupational context to ensure the descriptions were credible and instruments measured the intended underlying constructs. The examples and language used to describe each factor are detailed in Table 1.2, and the process for creating the factor measures is described below. First, each factor was created based on discussions with medical school administrators \((n = 4)\) and informational interviews conducted from May-September 2016 with couples \((n = 12)\) who had elected to Couples Match in recent years. Second, the plausibility of the vignettes was further evaluated in a small pilot study among physicians conducted in October 2016 \((n = 43)\). Third, to ensure that no one factor description influenced the results (such as, a bias against Plastic Surgeons or applicants with exceptionally high exam scores), several descriptions for each specialty and qualifications factor were randomly assigned across vignettes. Finally, each vignette level was specifically chosen to ensure feasible combinations of factors and maintain internal consistency—the highly competitive specialties were those that allow for flexible hours (so that it is plausible that one could pursue that specialty and be a primary caregiver), and the qualifications were sufficient to successfully Match to a given specialty.\(^{11}\)

These five factors, four with two levels and one with four levels (formally, a \(2^44^1\) design), led to 64 unique vignette combinations. Because the full universe was too large

\(^{11}\) Qualifications such as Step 1 exam scores are the lower-bound reported in National Resident Matching Program’s *Charting Outcomes in the Match for U.S. Allopathic Seniors 2016* “Chart 6: USMLE Step 1 Scores of U.S. Allopathic Seniors by Preferred Specialty and Match Status”. The questions. Other respondents in the pilot indicated that they took account of the city’s family friendliness if the vignette couple planned to have children, which also biased results.
to be judged by each respondent, the vignettes were partitioned into a sample of eight different decks of eight vignettes according to a confounded factorial design.\textsuperscript{12} Compared to a randomized or fractional design, this design is the only reduced design that produces orthogonal and balanced two-way interactions of all factor variables (Dülmer 2016). The decks were randomly allocated to respondents, which guaranteed that the total vignette universe was exhausted and affords higher power than a between-person design (Atzmüller and Steiner 2010; Kirk 2013). In addition, the vignette and question order were also randomized to control for order effects such as learning, fatigue, and censoring of responses (Auspurg and Hinz 2015).

Following the vignettes, respondents completed a traditional fixed-answer survey, which gathered information on respondents’ academic characteristics and demographics, their expectations or experiences with sacrificing work for family, and their gender ideologies. This allows for the parallel and supplementary assessment of how respondent-specific characteristics influenced their reactions to the vignettes, to identify the vignette factors and respondent characteristics that influenced respondents’ choices using multilevel techniques (Hox, Kreft, and Hermkens 1991; Wallander 2009).

\textit{1.2.3 Key Variables}

\textit{Outcome variables.} The primary outcome variable in this study was the respondent’s assessment of the hypothetical couple’s migration decision. To evaluate whether a couple was expected to give priority to one partner’s career over the other’s,

\textsuperscript{12} Vignette universe was partitioned using the SAS macro \texttt{Mktblock} (Auspurg and Hinz 2015), which achieved a D-efficiency score of 100, meaning that the design ensures that vignette dimensions and interaction terms are mutually uncorrelated, and provides minimal standard errors in regression estimations (Auspurg, Hinz, and Sauer 2017).
separate careers over the family, or to the family as a whole, respondents were asked which programs they predicted the couple would jointly rank first. This served to gauge social norms—beliefs and perceptions of what is typically done. In each case, the respondent was presented with four options for the couple’s first ranked choice: the man’s first choice (which is the woman’s third choice), the woman’s first choice (which is the man’s third choice), their mutual second choice, or their separate first choices in different locations (see Figure 1.1). I intentionally focus on the couples’ first ranked combination, both due to its symbolic significance and because students in top-tier medical schools have a high probability of matching to their top choice.\(^{13}\)

The man’s or woman’s career precedence is then operationalized as an outcome in which only that partner’s career preferences are maximized, i.e. when their top program preference is ranked first. In contrast, separate career precedence is operationalized as the case where the couple ranked the combination of their separate first choices first. Lastly, family precedence is operationalized when the hypothetical couple is expected to rank their mutual second choice first on their joint list. These mutually exclusive options exhaust all of the feasible negotiation strategies.

**Independent variables.** The primary independent variables are the five vignette dimensions (see Table 1.2). A partner’s resources were measured using the vignette male and female students’ academic qualifications and preferred specialty.

The individual partner’s academic qualifications were two dichotomous variables

\(^{13}\) For example, in 2017, over 90% of Duke medical students matched to their first choice (Source: private communication with Dr. Caroline Haynes, Associate Dean of Academic Affairs, Duke University School of Medicine).
(highly-qualified vs. less-qualified), based on (1) their board exam score, which signals aptitude, and (2) an important CV item, which signaled achievement. The board exam, USMLE Step 1, is the major residency placement exam for medical students. Highly-qualified partners were those who scored within the 91st-99th percentile, compared to less-qualified partners who scored within the 48th-67th percentile. The CV items included a description of their number of publications, honors in clinical rotations, conference presentations, or academic service. For example, highly-qualified applicants were those who had two first-author publications, while less-qualified applicants had one second-author publication. Taken together, this set of qualifications conveyed the student’s academic ability.

The specialty of the vignette man and woman were also dichotomous variables, based on their intended specialty’s competitiveness (highly-competitive vs. less-competitive). While there is no official measure of competitiveness, the most commonly used definition is based on the number of available residency positions per U.S. senior medical student. Highly-competitive specialties were those whose ratio was less than one. For example, Plastic Surgery and Dermatology were highly-competitive specialties, while Pediatrics and Internal Medicine were less-competitive specialties. Specialties in the survey were: (highly-competitive) Plastic Surgery, Otolaryngology, Dermatology; (less-competitive) Internal Medicine, Pediatrics, Psychiatry. Source: National Resident Matching Program’s Main Match Results 2017 “Table 13: Applicant Choices by Specialty.” In general, the highly-competitive specialties are predominantly male (Jagsi et al. 2014), and the highly-competitive specialties I have chosen for the study are all male-dominated. Dermatology, the highest proportion female, was 44.7 percent female in 2014 according to the AAMC’s 2014 Physician Specialty Data Book. More competitive specialties generally also have longer training periods—residency training is 3 years in Internal Medicine and Pediatrics, 4 years in Psychiatry and Dermatology, 5 years in Otolaryngology, and 6 years in Plastic Surgery.

---

14 Specialties in the survey were: (highly-competitive) Plastic Surgery, Otolaryngology, Dermatology; (less-competitive) Internal Medicine, Pediatrics, Psychiatry. Source: National Resident Matching Program’s Main Match Results 2017 “Table 13: Applicant Choices by Specialty.” In general, the highly-competitive specialties are predominantly male (Jagsi et al. 2014), and the highly-competitive specialties I have chosen for the study are all male-dominated. Dermatology, the highest proportion female, was 44.7 percent female in 2014 according to the AAMC’s 2014 Physician Specialty Data Book. More competitive specialties generally also have longer training periods—residency training is 3 years in Internal Medicine and Pediatrics, 4 years in Psychiatry and Dermatology, 5 years in Otolaryngology, and 6 years in Plastic Surgery.
Given the much higher reported income of physicians in highly-competitive specialties, this factor conveys each partner’s future earnings potential.

The couples’ *childbearing/childcare plans* post-residency was a categorical variable. The options were (1) egalitarian parenting responsibility, (2) woman primary caregiver, (3) man primary caregiver, or (4) no children. Specifically, couples who planned to have equal parenting responsibility were described as committing to splitting childcare equally and having their parents move nearby to provide additional support (something many couples I interviewed described as a common means of successfully achieving egalitarian desires). A primary caregiver arrangement was described as identifying one partner who would adjust their work hours as needed when the child was young. Childless couples were those who planned to never have children. Respondents were reminded multiple times, both in the standardized information before the experiment and within each vignette, that these childrearing plans were to be realized post-residency, not during residency. This implies that the physical demands of pregnancy and childbirth, and the need to take time off during residency for childrearing, should be less relevant to the residency decision in the Match.  

*Respondent characteristics.* The relevant respondent variables for the analysis were the respondent’s gender, whether the respondent was in a relationship with another medical student, and gender ideology. Respondent gender was a dichotomous variable

---


16 This is also quite common for medical students, as the minority of physicians have children during residency (see, e.g., Turner et al. 2012; Wasserman 2018).
(male vs. female), based on how respondents self-identified. Respondents in a dual-medical couple (yes vs. no) were those who indicated they were currently in a relationship with another medical student. The gender ideology scale was composed from a battery of six questions with a randomized order. Respondents indicated on a scale of (1)-(4) whether they strongly agreed to strongly disagreed with the following statements: “A working mother can establish just as warm and secure a relationship with her children as a mother who does not work,” ”A preschool child is likely to suffer if their mother works,” ”It is much better for everyone involved if the man is the breadwinner and the woman takes care of the home and family”, ”Couples who are unable to share childcare equally will likely end up with the mother taking on a greater share of the childcare responsibility,” “It is more important for a wife to help her husband’s career than to have one herself,” and “It is not good if the man stays at home and cares for the children and the woman goes out to work” (alpha = .97). The variables were recoded such that a score of 4 indicated a greater agreement with an egalitarian ideology. I then constructed a continuous gender ideology measure calculated from respondents’ mean value across items.

1.2.4 Analytic Strategy

I estimated models for career precedence with multinomial logit regression (MNL) using the four first-ranked combinations as the outcome variable:

\[ Y_i = \beta_0 + \beta_1 manspecialty_i + \beta_2 womanspecialty_i + \beta_3 manqual_i + \beta_4 womanqual_i + \mu_i + \epsilon_i \]

---

17 When asked about their gender identity, respondents were given the options (1) Man, (2) Woman, (3) Prefer to self-describe. Only two respondents indicated a non-binary option.

where \( Y_{ij} \) is the outcome (How will the couple resolve their conflicting preferences?) of vignette \( i \) for respondent \( j \), the betas \( (\beta_1, ..., \beta_4) \) describe the effect coefficients on the vignette level (L1). In addition to the random error component on the vignette level, \( \varepsilon_{ij} \), because respondents evaluated more than one vignette there is also a respondent-level error component, \( \mu_j \).

Since respondents evaluated eight vignettes, each deck provided respondents with every possible combination of men’s and women’s specialty and qualifications levels. However, based on the experimental design literature and pilot results, it was infeasible to show each respondent the 16 vignettes necessary to fully interact each resource combination with childrearing plans. Instead, I split the model by the four childrearing factors to ensure I maintained three-way interactions of the vignette factors.

In some specifications of the model, I added cross-level interactions to evaluate subgroup differences among respondents:

\[
Y_{ij} = \beta_0 + \beta_1 \text{manspecialty}_{ij} + \beta_2 \text{womanspecialty}_{ij} + \beta_3 \text{manqual}_{ij} + \beta_4 \text{womanqual}_{ij} + \gamma_1 R_j (\beta_1 \text{manspecialty}_{ij} + \beta_2 \text{womanspecialty}_{ij} + \beta_3 \text{manqual}_{ij} + \beta_4 \text{womanqual}_{ij}) + \mu_j + \varepsilon_{ij}
\]

where gamma represents the effect on the respondent level (L2). By interacting L2 respondent variables with L1 vignette factors, I can test the extent to which attitudes towards household career precedence are dependent on personal characteristics. I focus on the gender of the respondent, whether they are in a dual-medical couple, and their egalitarian gender ideology, as detailed in the Key Variables section.

The random assignment of vignette variables used in this study design allowed for a causal interpretation of the effects of vignette variables on the outcome. In all models,
robust standard errors were clustered by respondent to address the nesting of vignettes within respondents. I also follow the experimental design convention of controlling for the display order of vignettes, to account for any learning or anchoring effects. In interpreting the results, I focus on average marginal effects, which indicate the effect of each of the vignette factors on the probability of the outcome variable.

1.3 Results

1.3.1 Baseline Results

Figure 1.2 describes the overall patterns of responses. When aggregating across different combinations of individual resources, respondents were overall most likely to think the couple would give the family precedence (47%) and least likely to think the couple would choose separate career precedence (14%). Respondents were slightly more likely to think the couple would give the woman’s career precedence (20%), compared to the man’s career precedence (19%); however that difference was not statistically significant.

Next, I present the results split by childrearing plans. Respondents were most likely to think the partners would give the family precedence across childrearing scenarios. This outcome was most common when the couple was planning to split their childcare equally (54%), compared to when the couple was not planning to have children (44%). While, overall, respondents were least likely to think the couples would choose separate career precedence, the exception was among couples who did not plan to have children—this outcome was the second most common outcome (21%), again after family precedence (44%).

32
When the division of childcare was equal or the couple was not planning to have children, respondents were about as likely to think the couple would give the woman or man precedence (17% vs. 19% equal childcare, 19% vs. 17% no children). In contrast, when one partner planned to be the primary caregiver, respondents were more likely to think the couple would give the other partner’s career precedence. When the vignette woman planned to be the primary caregiver post-residency, 15% of respondents thought they would give the woman’s career precedence, compared to 25% who thought they would give the man’s career precedence. Roughly symmetrically, when the vignette man planned to be the primary caregiver post-residency, 29% of respondents thought they would give the woman’s career precedence, compared to 14% who thought they would give the man’s career precedence.

In summary, across childrearing scenarios, respondents were most likely to think the vignette couple would give the family precedence. Respondents were relatively more likely to give one partner’s career precedence over the other partner’s career when childcare responsibility was unequal. When the couple did not plan to have children, respondents were more likely to think the couple would give their separate careers precedence than when the couple planned to have children. These results suggest that, when aggregating across different combinations of couples’ resources, respondents react to the childrearing plans of men and women in couples in symmetric ways. I next delve deeper into the individual resources of the vignette couple to determine whether they are equally predictive of career precedence within the couple.
1.3.2 Interaction Effects of Vignette Factors

To measure the symmetric nature of men’s and women’s resources in determining household migration decisions, I next analyze the factors that influence this decision. Specifically, I test whether respondents perceive men’s and women’s earnings potential and academic ability to be equally determinative of career precedence. I focus on the results of each model by the vignette couples’ childcare plans (Table 1.3).

Equal childcare. When the vignette couple was described as planning to share childcare equally, results show that resources do appear to be evaluated symmetrically. The earnings potential and educational ability of the man and woman were highly predictive of whether respondents thought the couple would give that partner career precedence in significance and magnitude. For example, when the man was pursuing a competitive specialty, it increased the probability the couple was expected to give the man’s career precedence by 11.1 percentage points, and decreased the probability the couple would give the woman’s career precedence by 13.4 percentage points, compared to when he was pursuing a less-competitive specialty. Similarly, when the woman was pursuing a competitive specialty, it increased the probability the couple was expected to give the woman’s career precedence by 15.1 percentage points, and decreased the probability the couple would give the man’s career precedence by 8.3 percentage points, compared to when she was pursuing a less-competitive specialty. The vignette man’s and woman’s specialty were not significant predictors of separate career precedence or family precedence.
A similar pattern was found for qualifications. Both the man’s and woman’s high qualifications were associated with a higher likelihood of their respective career precedence (16.7 and 14.5 percentage points), and a lower likelihood of their partner’s career precedence (-14.2 and -19.8 percentage points), compared to when they were less qualified. In addition, the woman’s qualifications were associated with a higher probability (7.1 percentage points) that the couple would give their separate careers precedence, compared to when she was less qualified. The man’s qualifications were not significant predictors of separate career precedence or family precedence, and the woman’s qualifications were not predictive of giving the family precedence.

Therefore, men’s and women’s resources were both highly predictive of their expected career precedence, and in the case of the woman’s qualifications, higher resources made an individual particularly likely to have their preferred residency program ranked first. These results provide support for symmetric household bargaining models—in the absence of domestic responsibilities that fall on one member of the couple, couples are expected to prioritize the career of the high resource partner.

Woman primary caregiver. In cases where the woman planned to be the primary caregiver when the couple had children, the man’s and woman’s earnings potential were both predictive of their career precedence. In particular, when the man planned to pursue a competitive specialty, respondents expected the couple to be significantly more likely to rank the man’s first choice program first, being 11.8 percentage points more likely to give the man’s career precedence and 8.7 percentage points more likely to think the couple would give their separate careers precedence, compared to when he was not
planning to pursue a competitive specialty. Furthermore, the man’s specialty competitiveness was also associated with a lower likelihood (-13.2 percentage points) that the couple would give the woman’s career precedence. His specialty competitiveness was not predictive of family precedence. The woman’s specialty competitiveness was associated with a higher likelihood (15.4 percentage points) of her career precedence, but was not similarly associated with a significantly lower likelihood of his career precedence or separate career precedence. Her specialty competitiveness was associated with a 10.5 percentage point lower probability of family precedence, compared to when she was not pursuing a competitive specialty. Thus, when the woman planned to be the primary caregiver, both men’s and women’s earnings potentials were associated with their career precedence. However, his high earnings potential was also associated with a lower likelihood of his partner’s career precedence, while this was not the case for her high earnings potential.

When the woman planned to be the primary caregiver, her educational ability was no longer associated with her career precedence, while the man’s educational ability was still predictive of his career precedence. The man’s qualifications were associated with a 9.9 percentage point higher likelihood of his career precedence, compared to when he was less qualified. When the woman was highly-qualified the probability that the couple would give her career precedence was small in magnitude (3.9 percentage points) and no longer significant at conventional levels. Her qualifications were associated only with a 14.2 percentage point lower likelihood of his career precedence. That is, in the case when
the woman would be the primary caregiver, her earnings potential was highly predictive of her career precedence, but her academic ability was not.

**Man primary caregiver.** When the man was described as planning to be the primary caregiver, his earnings potential and educational ability continued to be positively and significantly associated with his career precedence, while the woman’s earnings potential was no longer associated with her career precedence. The man’s pursuit of a competitive specialty was associated with a 18.5 percentage point higher likelihood of his career precedence, and a 16.9 percentage point lower likelihood of the woman’s career precedence, compared to when he pursued a less-competitive specialty. The woman’s specialty was not a significant predictor of her career precedence at conventional levels. The vignette man’s and woman’s specialty were also not significant predictors of separate career precedence or family precedence.

For a man planning to be the primary caregiver, his high qualifications were strongly associated with the likelihood that he would receive career precedence and his partner would not (13.9 and -9.8 percentage points, respectively). Her high qualifications were also predictive of expectations that she would receive career precedence and her partner would not (16.1 and -13.8 percentage points, respectively). The vignette man’s and woman’s qualifications were not significant predictors of separate career precedence or family precedence. Results from this model suggest that, unlike when the woman planned to be the primary caregiver, men who planned to be the primary caregiver were not expected to be any less likely to be given career precedence. Instead, women with
high earnings potential whose partner planned to be the primary caregiver were the ones who were less likely to be expected to have career precedence.

_No children._ Finally, turning to the vignette couples who did not plan to have children, respondents again were more likely to evaluate men’s and women’s resources symmetrically. Each partner’s earnings potential and educational ability were associated with a higher probability that that partner would be given career precedence. When the man was pursuing a competitive specialty, respondents expected the couple to be more likely to give the man’s career precedence and less likely to give the woman’s career precedence (9.8 and -15.5 percentage points, respectively), compared to when he was pursuing a less-competitive specialty. On the other hand, while the woman’s specialty competitiveness was associated with a 15.3 percentage point higher likelihood of her career precedence, this factor was not associated with a significantly lower likelihood of his career precedence. The vignette man’s and woman’s specialty were not significant predictors of separate career precedence or family precedence.

The man’s and woman’s educational ability were both strongly associated with a higher likelihood of their own career precedence and a lower likelihood of their partner’s career precedence. When the man was highly qualified, respondents thought the couple would be 15.3 percentage points more likely to give him career precedence and 13.2 percentage points less likely to give her career precedence, compared to when he was less qualified. Similarly, when the woman was highly qualified, respondents expected the couple to be more likely to give the woman’s career precedence and less likely to give the man’s career precedence (10.3 and -16.5 percentage points, respectively), compared to
when she was less qualified. The vignette man’s and woman’s qualifications were not significant predictors of separate career precedence or family precedence. Thus, in couples who did not anticipate having childcare responsibilities, respondents were similarly likely to think the couple would give a partner career precedence when he or she had high resources. But respondents did not think couples would be less likely to give the man’s career precedence dependent on the woman’s earnings potential.

1.3.3 Interaction Effects of Respondent Characteristics

To determine whether the results were influenced by respondent characteristics, I next describe interactions of respondent-level variables with the vignette characteristics. First, I interacted respondent gender with the vignette factors (Table 1.4). The gender of the respondent did not influence evaluations when the vignette couple was described as planning to split childcare equally. I also did not find any differences in the likelihood of separate career precedence outcomes across childrearing scenario by male and female respondents.

When the vignette woman was described as the primary caregiver, female respondents were significantly more likely to think the couple would give the family precedence (18.8 percentage points) and less likely to think the couple would give the man’s career precedence (-17.1 percentage points) when he was pursuing a competitive specialty, compared to male respondents. When the vignette man was the primary caregiver, female respondents thought the couple would be more likely to give the family precedence (20.4 percentage points) when the man was highly qualified. As for couples who did not plan to have children, female respondents were significantly more likely to
think the couple would give the woman’s career precedence (7.3 percentage points) and less likely to think the couple would give the family precedence (-1.7 percentage points) when the man was highly qualified. Overall, male and female respondents only diverged in their evaluations of the effect of men’s resources on the couples’ decision. When the couple planned to have an unequal distribution of childcare, female respondents were more likely than male respondents to think the couple would give the family precedence.

To evaluate whether dual-medical couples evaluated the vignette couples’ resources differently than medical students who are not themselves partnered with another medical student, I also included interactions for respondents who indicated being in a relationship with another medical student (Table 1.5). Presumably, we should expect these couples would be the most aware of what couples typically do when making Match decisions. How dual-medical coupled respondents evaluate these vignettes potentially also provides greater insight into behaviors as well.

When the vignette couple was described as planning to split childcare equally, dual-medical respondents were less likely than non-medical coupled respondents to think the couple would give the family precedence (-26.5 percentage points) when the woman was pursuing a competitive specialty, and more likely to think the couple would give the man’s career precedence (16.7 percentage points) when he was highly qualified. When the woman planned to be the primary caregiver, dual-medical respondents thought the couple would be more likely to give the woman’s career precedence (16.2 percentage points) when she was highly qualified, compared to respondents who were not in a relationship with a medical student. For vignette couples where the man planned to be the
primary caregiver, dual-medical coupled respondents thought the couple would be less likely than other respondents to give the woman’s career precedence (-23.2 percentage points) when she was pursuing a competitive specialty. And in the case where the couple did not plan to have children, when the woman was pursuing a competitive specialty, dual-medical respondents thought the couple would be less likely to give the woman’s career precedence (-20.0 percentage points) and more likely to give the family precedence (31.5 percentage points) than respondents who were not in a relationship with another medical student. Additionally, dual-medical respondents evaluated men’s qualifications as more predictive of family precedence (24.1 percentage points), and women’s qualifications as less predictive of her career precedence (-20.0 percentage points) and more predictive of family precedence (19.0 percentage points) than other respondents who were not a part of dual-medical couples. Thus, when the vignette couple was described as having a non-traditional childrearing arrangement (i.e., man primary caregiver or no children), dual-medical couples thought the couple would be less likely to give the woman’s career precedence than other respondents. However, dual-medical coupled respondents, compared to respondents who were not in a dual-medical couple, were more likely to select the woman’s career precedence outcome when she was the primary caregiver and highly-qualified.

Finally, I examined whether the egalitarian gender ideology of respondents influenced their evaluation of individual resources. Because egalitarian gender ideology is a continuous measure, I evaluated the factors at various levels of the variable. I focus here on the cases where the domestic responsibilities were described as falling on one
vignette partner (Figure 1.3). We would expect that, among more gender egalitarian respondents, the predictive power of a given factor on the career precedence of that partner should increase. Instead, the results show that more gender egalitarian respondents evaluated the vignette partner’s resources similarly, such that the predictive power of each factor converged among more egalitarian respondents. In other words, more egalitarian respondents were less likely to evaluate the factors as predictive of a man’s or woman’s career precedence than less egalitarian respondents. One exception was the predictive power of each factor on the man’s career precedence when he was described as the primary caregiver. The gender ideology of respondents did not substantively change the way that the vignette men’s and women’s resources were associated with the man’s career precedence. Thus, more egalitarian respondents appear to be less influenced by individual factors, except when determining the man’s career precedence when he will be the primary caregiver.

1.3.4 Specification Checks

A debate in the household bargaining literature centers around whether absolute or relative resources are a more relevant determinant of household decisions. While the original theory focused on relative resources, the effect of women’s resources compared to their husbands’ on household decisions, later work argued that it was more relevant to consider the independent relationship between women’s own resources and outcomes (Gupta 2007). Thus, I focus in the main analysis on absolute resources of each vignette partner. To test how the results compare to a relative resources framework, I constructed two categorical variables for relative educational ability and earnings potential. Within
these variables, the categories are (1) neither or both, (2) woman only, and (3) man only. Results for each model show very similar patterns to the main results (results available upon request). There are two exceptions. First, when the vignette man planned to be the primary caregiver, the woman’s relatively more competitive specialty was strongly associated with her career precedence, compared to when neither or both partners were pursuing competitive specialties. Second, when the couple did not plan to have children, the man’s relatively more competitive specialty was no longer significantly associated with his career precedence, compared to when neither or both partners were pursuing competitive specialties.

To test the sensitivity of the results to the multinomial logistic model assumptions, I also estimate the preferred specification using the linear probability model. I estimate simple linear probability models for each of the four first-ranked combinations, where the dependent variable is coded 1 if that outcome was chosen and coded 0 if any of the other three outcomes were chosen. Across the four childrearing scenarios, the factor effects retain the general magnitudes and significance levels (results available upon request). Thus, the results using OLS were very consistent with those of the MNL specification.

As respondents were randomly assigned to evaluate a deck, the research design enables the estimation of the effect of the vignette factors without including control variables in the analytic models (Mutz 2011). Thus, all L1 models do not adjust for respondent characteristics. I also check that results are robust to respondent variables, including age, race/ethnicity, foreign born status, region of birth, and medical school.
Results were consistent in significance and magnitude with the main results in Table 1.3 (results available upon request).

1.4 Discussion

Results showed generally symmetric patterns, and career precedence was highly influenced by childcare. The earnings potential and educational ability of the man and woman were highly predictive of whether respondents thought the couple would give that partner’s career precedence, particularly for the models restricted to cases of equal childcare (either shared or none). These results provide support for symmetric household bargaining models, and suggest that if people are given full information about childrearing intentions, respondents are not as likely to penalize women. Furthermore, these egalitarian results reinforce other research that show a marked increase in egalitarian desires among young men and women (Ferree 2010; Gerson 2010). When men and women are provided with feasible options for an egalitarian division of childcare, the majority opt for this type of relationship arrangement (Pedulla and Thébaud 2015). The results of this study complement such findings by demonstrating that respondents did expect the couple to evaluate resources in a gender-neutral way when the couple planned to split their childcare equally.

While the overall results demonstrated that respondents evaluated the vignettes symmetrically, findings may suggest that respondents interpreted the resources of men and women differently when domestic responsibilities fell on one member of the couple. When the vignette woman was described as planning to be the primary caregiver, it was only when she could expect high future earnings that respondents were more likely to
think the couple would give her career precedence. There are at least two possible interpretations of this pattern. First, given the lower proportion of women in such specialties, it may be the case that respondents interpreted these vignette partners to be exceptionally devoted to their work. Alternatively, the social psychology literature shows that successful women who are planning to make career sacrifices for their career (and thus maintaining feminine roles) may be more likely to be protected against backlash (Foschi 2000; Rudman and Glick 2001). It is possible that woman’s qualifications were not significantly predictive of her career precedence because it is less remarkable when women excel academically (Voyer and Voyer 2014). Because women are assumed to be good students (and assumed to be primary caregivers), these descriptions did not impact their precedence in any meaningful way. Despite this, respondents were still significantly less likely to think the couple would give the man’s career precedence when she was highly qualified, compared to when she was less qualified.

When the man was described as the primary caregiver, respondents were more likely to think the couple would give the man’s career precedence when he was described as having high earnings potential or educational ability. While the woman’s earnings potential was positively related to her career precedence, it did not meet conventional levels of statistical significance, and only marginally decreased the likelihood of his career precedence. The predictive power of the man’s specialty on his career precedence was significantly greater than the predictive power of the woman’s specialty on her career precedence in this childrearing scenario. These patterns are consistent with other
research that has resoundingly found that men appear to be unaffected by children, compared to women (Correll et al. 2007; Hodges and Budig 2010).

There are several potential underlying mechanisms behind the results found when the man was the primary caregiver. First, respondents may not have believed that men would be as likely to follow through on this plan once the couple had children, or that respondents interpreted the planned hours adjustment differently for men and women. While cultural norms around intensive parenting put pressure on mothers, respondents may have thought that men would not as greatly adjust their hours. Second, respondents may have expected men’s partners to give these men a “good man” bump—rewarding them for doing childcare tasks that are typically not expected of them (Damaske et al. 2014). Men who are perceived as warm and kind have been found to receive favorable reactions, so long as they remain ambitious and competent (Prentice and Carranza 2002). Third, respondents may believe that the couple would compensate the man for a loss of status associated with being in a non-traditional childcare arrangement (Sallee 2012). This may explain why women’s earnings potential was not predictive of her career precedence, and is consistent with other research that found women who earn more than their male partners to be more likely to make career sacrifices (Bertrand et al. 2015; Bittman et al. 2003; Brines 1994).¹⁹

Lastly, among couples who did not anticipate having childcare responsibilities, I found that respondents were similarly likely to think the couple would give career

¹⁹ An alternative perspective is taken by Killewald and Gough (2010) who argue against women’s compensatory actions (i.e. compensatory gender display). The authors found that high-earning wives do less housework than low-earning wives, even when they earn more than 50% of their family’s total earnings. However, housework is only one way of evaluating compensatory actions, and other career sacrifices may be more insightful, particularly among high-skilled couples.
precedence to the partner with high resources. However, similar to the case when the man planned to be the primary caregiver, respondents did not think couples would be less likely to give the man’s career precedence dependent on the woman’s earnings potential. Interviews with childless women show that these women are particularly invested in their careers (Blair-Loy 2003), and this perception of a career-committed woman was likely emphasized by her pursuit of a competitive specialty. These results may be interpreted as simultaneously rewarding women for their high earnings potential, but compensating their partners for a fertility choice that may be assumed to be driven by the woman.

Notably, dual-medical students in the sample were more likely than students not coupled with another medical student to think the couple would give the family precedence in this childrearing scenario, suggesting that they may view this childrearing decision as more of a mutual compromise.

Thus, by specifying relevant contextual factors, respondents appear to be less likely to apply a gender lens to their views on career precedence. Even when a woman’s individual resources were not significantly associated with her career precedence, if either partner had high resources (specialty or qualifications), the couple had a higher likelihood of that partner’s career precedence and a lower likelihood of the other partner’s career precedence. This was true across each childrearing scenario, and for both male and female partners. Experimental vignette studies allow for a richer analysis of the nuanced options that men and women can face in the labor market and at home. Recent work on social attitudes of parents has also found that respondents’ views depend heavily on the circumstances they think couples face. Jacobs and Gerson (2016) examined views
of mother’s and father’s employment decisions, and found that the financial and relational circumstances of the parent mattered significantly more than the gender of the parent. By causally varying the factors in the vignette, this study also shows that gender bias can be mitigated by full information on the couple.

The vignettes provide men and women with the same occupational characteristics and childrearing plans, on average, but this equal distribution is still not representative of the overall population. For example, in this sample, male respondents were significantly more likely to be pursuing a competitive specialty than female respondents (41% vs. 30%), had higher Step 1 exam scores (72nd percentile vs. 55th percentile), and were more likely to be members of the national honor society AOA (8% vs. 5%). Expected childcare patterns were also telling. Among the overall sample, male and female respondents were most likely to think they would share childcare equally with their partner (59% and 64% of men and women) or the woman would be the primary caregiver (38% and 16% of men and women). Among dual-medical couples, male respondents were more likely than those not coupled with another medical student to think they would share childcare equally with their partner (74%), and female respondents were more likely than their peers who were not coupled with another medical student to think they would be the primary caregiver (38%). This disconnect is particularly informative, and suggests that men and women may have different expectations of the feasibility of egalitarian childcare arrangements.

Indeed, qualitative evidence on dual-medical couples may provide some purchase into differences in career outcomes among men and women found in observational
household data. Lehrman (2018b) found that individual resources and childcare decisions are often determined by the other partner’s career, particularly for female medical students. While some women evoked their partner’s career when describing their specialty decision, none of the men mentioned considering their partner. Women’s willingness to accommodate their partners’ career preferences was also apparent in how they described creating their ROL. When the man was pursuing a competitive specialty, the couple more often prioritized the man’s preferences, while this was not true for women pursuing competitive specialties. Childcare similarly influenced the decision: couples who expected to have an egalitarian division of childcare more often had an egalitarian ROL. When the woman planned to be the primary caregiver, the couple gave the man’s career precedence, and none of the couples mentioned that the man would be the primary caregiver. Couples who had an egalitarian ROL that weighed each partner’s preferences equally tended to be those who adopted gender-neutral strategies, such as using a third-party ranking system, or those where the man explicitly advocated for his partner’s career advancement. Taken together, these findings suggest that gender dynamics influence the pre-Match decisions that determine the distribution of resources and childcare.

1.5 Conclusion

The focus of this study was to evaluate expectations of the gender-neutral household bargaining framework through a career migration decision among couples at an early-career stage. Through an experimental vignette design, this survey addressed whether economic and childrearing factors differentially affect expectations about
couple-level investments in the career outcomes of men and women in couples, and whether people expect couples to draw upon gender roles to assign high-resource women to the secondary career role in the Match.

I constructed hypothetical scenarios to disentangle causal factors which are often confounded in reality, such as gender and employment characteristics, to permit the evaluation of rare situations including women in competitive fields or men being the primary caregiver (Alexander and Becker 1978). This study demonstrated that, given full information about men and women’s career and childrearing plans (such as, the woman’s plans to pursue a male-dominated occupation or the couple’s plans to have an egalitarian division of childcare), respondents evaluated the resources of hypothetical men and women symmetrically when determining career precedence.

While this study is the first to offer a causal analysis of early-stage household migration, several limitations should also be acknowledged. First, by design, experimental studies can isolate resources from gender norms. However, choices such as specialty and childrearing plans are likely partially determined by asymmetric expectations as well (England and Kilbourne 1990; Lehrman 2018b). Therefore, findings that men’s careers continued to be given priority are particularly concerning given the less than equal distribution of women in highly-competitive specialties or of men in primary caregiver roles. Second, to ensure respondents were familiar with the scenarios and occupational context described in the vignettes, the sample was restricted to medical students and may not be generalizable to all high-skilled men and women. Yet, I argue that the household dynamics involved, and the impact that this compromise can have on
each partner’s future career prospects, certainly extend to couples in other professions who face less visible but equally high-stakes joint career decisions. Women in other professional industries face labor markets that similarly continue to prize workers without domestic responsibilities, exhibit underlying occupational pay gaps and a scarcity of women at the upper echelons of the ladder, and pose challenges to balancing career and family goals (Acker 1990; Bertrand et al. 2010; England and Farkas 1986). Additionally, trends toward positive assortative mating have resulted in more dual-career couples, where women may have higher educational attainment or potential earnings than their partner (Schwartz and Mare 2005; Sweeney and Cancian 2004). Therefore, as dual-career couples become the norm and women continue to make economic gains, understanding such household dynamics is critical for facilitating egalitarian relationships.

This study found minimal evidence for the influence of social norms. However, given differences in resource evaluations within the primary caregiver scenarios, I cannot fully determine whether respondents were acknowledging the influence such gender norms have on how couples make decisions. While considering respondents’ gender ideology can help with interpretation, further research into how respondents evaluate these vignette partners can provide greater purchase for interpreting these findings. In particular, it would be illuminating to include personality evaluations most often examined in the social psychology and organizational behavior literature (see, e.g., Eagly and Karau 2002; Rudman and Glick 2001). For example, asking respondents to assess the vignette men’s and women’s communality or agency to better measure backlash and
compensatory evaluations. Such an approach would provide greater purchase for interpreting the findings in this study and providing a more effective policy approach.

This paper explores the role of family in shaping labor market outcomes during a household move, and whether such expectations lead to different outcomes by gender. Previous research demonstrates that migration increases the gender pay gap, and understanding labor market inequality requires consideration of the family as a potentially moderating factor (Cooke et al. 2009). The results show that there is substantial support for gender egalitarian outcomes when men and women equally care for children, and this support confirms a cultural shift that has outpaced institutional structures that would enable couples to enact such gender strategies (Jacobs and Gerson 2016). Since women are more likely to report being the primary caregiver, policy must facilitate a more equal childcare division if it is to promote gender equality in medicine and other human-capital intensive and highly-mobile professions. This work provides insight into the ways in which effective work-family policy and support for women’s career advancement (particularly in male-dominated occupations) can support medical couples when negotiating their career and family preferences. This study focuses on decision-making during a household move using a sample with insider knowledge, and may be adapted and extended to other groups of highly-educated professionals making joint career decisions.
1.6 Tables & Figures

Table 1.1: Respondent-level Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Full Sample</th>
<th>Restricted Sample</th>
<th>Statistically Different?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean/Proportion</td>
<td>N</td>
</tr>
<tr>
<td>Gender (=female)</td>
<td>426</td>
<td>55.4</td>
<td>228</td>
</tr>
<tr>
<td>Age category</td>
<td>424</td>
<td></td>
<td>228</td>
</tr>
<tr>
<td>Under 24</td>
<td></td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>24-26</td>
<td></td>
<td>62.3</td>
<td>62.7</td>
</tr>
<tr>
<td>27-29</td>
<td></td>
<td>23.8</td>
<td>22.8</td>
</tr>
<tr>
<td>30-32</td>
<td></td>
<td>8.0</td>
<td>8.3</td>
</tr>
<tr>
<td>Age 33+</td>
<td></td>
<td>2.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td>419</td>
<td></td>
<td>225</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td></td>
<td>61.6</td>
<td>67.6</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td></td>
<td>4.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Asian, non-Hispanic</td>
<td></td>
<td>23.2</td>
<td>22.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td>4.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>6.9</td>
<td>4.4</td>
</tr>
<tr>
<td>Foreign-born</td>
<td>422</td>
<td>12.1</td>
<td>228</td>
</tr>
<tr>
<td>Relationship status</td>
<td>430</td>
<td></td>
<td>228</td>
</tr>
<tr>
<td>Single or dating</td>
<td></td>
<td>27.4</td>
<td>26.8</td>
</tr>
<tr>
<td>Cohabiting or married</td>
<td></td>
<td>72.6</td>
<td>73.2</td>
</tr>
<tr>
<td>Currently have children</td>
<td>430</td>
<td>7.0</td>
<td>228</td>
</tr>
<tr>
<td>Mother work when &gt;6 years old?</td>
<td>425</td>
<td></td>
<td>228</td>
</tr>
<tr>
<td>Full-time</td>
<td></td>
<td>51.1</td>
<td>48.3</td>
</tr>
<tr>
<td>Part-time</td>
<td></td>
<td>22.4</td>
<td>22.4</td>
</tr>
<tr>
<td>Didn't work or don't know</td>
<td></td>
<td>26.6</td>
<td>29.4</td>
</tr>
<tr>
<td>In a dual-medical couple</td>
<td>312</td>
<td>30.0</td>
<td>228</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td>424</td>
<td></td>
<td>228</td>
</tr>
<tr>
<td>Heterosexual/straight</td>
<td></td>
<td>90.8</td>
<td>89.5</td>
</tr>
<tr>
<td>Gay/lesbian</td>
<td></td>
<td>5.2</td>
<td>6.1</td>
</tr>
<tr>
<td>Bisexual or other</td>
<td></td>
<td>4.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Step 1 score</td>
<td>318</td>
<td>238.5 (23.0)</td>
<td>167</td>
</tr>
<tr>
<td>Interest in competitive specialty</td>
<td>427</td>
<td>20.8</td>
<td>227</td>
</tr>
<tr>
<td>Egalitarian gender ideology (4=most egalitarian)</td>
<td>425</td>
<td>3.59 (.45)</td>
<td>228</td>
</tr>
</tbody>
</table>

*Note*: Numbers represent percentages unless otherwise indicated. Standard deviations are in parentheses. Variables that are statistically significantly different are those that differ between those who passed the attention checks and those who did not (p < .05).
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Level</th>
<th>Vignette Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Woman-Specialty</td>
<td>1 (average)</td>
<td>Christina is applying to… Internal Medicine/Pediatrics/Psychiatry Plastic Surgery/Otolaryngology/Dermatology …programs</td>
</tr>
<tr>
<td></td>
<td>2 (high)</td>
<td></td>
</tr>
<tr>
<td>2 Man-Specialty</td>
<td>1 (average)</td>
<td>Jonathan is applying to… Internal Medicine/Pediatrics/Psychiatry Plastic Surgery/Otolaryngology/Dermatology …programs</td>
</tr>
<tr>
<td></td>
<td>2 (high)</td>
<td></td>
</tr>
<tr>
<td>3 Woman-Qualifications</td>
<td>1 (average)</td>
<td>Christina has a… 230/235/240 Step 1 score and has one second-author publication/presented her research work at a regional conference/ has honors in most of her clinical rotations, including her specialty of choice/served on student government 255/260/265 Step 1 score and has two first-author publications/presented her research work at several national meetings/ has honors in all of her clinical rotations/served as class president</td>
</tr>
<tr>
<td></td>
<td>2 (high)</td>
<td></td>
</tr>
<tr>
<td>4 Man-Qualifications</td>
<td>1 (average)</td>
<td>Jonathan has a… 230/235/240 Step 1 score and has one second-author publication/presented his research work at a regional conference/ has honors in most of his clinical rotations, including his specialty of choice/served on student government 255/260/265 Step 1 score and has two first-author publications/presented his research work at several national meetings/has honors in all of his clinical rotations/served as class president</td>
</tr>
<tr>
<td></td>
<td>2 (high)</td>
<td></td>
</tr>
<tr>
<td>5 Childcare</td>
<td>1 (equal)</td>
<td>They have also talked about children together and… plan to have their first child after they both complete their residency. They have committed to split caretaking responsibilities equally when they have children, and their parents have offered to move nearby to provide childcare as needed.</td>
</tr>
<tr>
<td></td>
<td>2 (woman)</td>
<td>plan to have their first child after they both complete their residency. When they become parents, they both plan to continue working, but Christina will adjust her work hours as needed the first few years.</td>
</tr>
<tr>
<td></td>
<td>3 (man)</td>
<td>plan to have their first child after they both complete their residency. When they become parents, they both plan to continue working, but Jonathan will adjust his work hours as needed the first few years.</td>
</tr>
<tr>
<td></td>
<td>4 (neither)</td>
<td>have decided not to have children.</td>
</tr>
</tbody>
</table>

Note: The vignette text for each level of the specialty and qualifications measures was randomly varied to avoid repetitiveness. Each level’s options are indicated by a back-slash.
Erica & Jason (1/8)

Erica is applying to Dermatology programs. She has a 265 Step 1 score and has two first-author publications. Jason is applying to Internal Medicine programs. He has a 235 Step 1 score and has one second-author publication.

They plan to have their first child after they both complete their residency. When they become parents, they both plan to continue working, but Jason will adjust his work hours as needed the first few years.

Their individual lists are:

<table>
<thead>
<tr>
<th>Erica</th>
<th>Jason</th>
</tr>
</thead>
<tbody>
<tr>
<td>city-Hospital A</td>
<td></td>
</tr>
<tr>
<td>2. Horizon</td>
<td>2. Horizon city-Hospital Y</td>
</tr>
<tr>
<td>city-Hospital B</td>
<td></td>
</tr>
<tr>
<td>city-Hospital C</td>
<td></td>
</tr>
</tbody>
</table>

Given their individual lists, they have come up with the four options below for their first ranked choice on the couples match rank-order list (ROL).

Thinking about people you know in medical school, which combination do you think they will rank first?

1. [ ] 1. Metropolis city-Hospital A 3. Metropolis city-Hospital Z

Figure 1.1: Example Vignette (Woman Dominant)
Figure 1.2: What Respondents thought the Couple Would Do, by Couple’s Childcare Plans
Table 1.3: Association Between Vignette Dimensions and Predicted Prioritization Outcome, Average Marginal Effects

<table>
<thead>
<tr>
<th></th>
<th>Woman Career Precedence</th>
<th>Man Career Precedence</th>
<th>Family Precedence</th>
<th>Separate Career Precedence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equal Childcare (n=472)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man's Specialty Competitive</td>
<td>-0.13***</td>
<td>0.11***</td>
<td>-0.02</td>
<td>-0.04</td>
</tr>
<tr>
<td></td>
<td>(.033)</td>
<td>(.036)</td>
<td>(.043)</td>
<td>(.025)</td>
</tr>
<tr>
<td>Woman's Specialty Competitive</td>
<td>0.15***</td>
<td>-0.08***</td>
<td>-0.06</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(.033)</td>
<td>(.033)</td>
<td>(.044)</td>
<td>(.026)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>-0.14***</td>
<td>0.17***</td>
<td>-0.02</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(.032)</td>
<td>(.035)</td>
<td>(.044)</td>
<td>(.030)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>0.15***</td>
<td>-0.20***</td>
<td>-0.02</td>
<td>-0.07*</td>
</tr>
<tr>
<td></td>
<td>(.033)</td>
<td>(.039)</td>
<td>(.050)</td>
<td>(.032)</td>
</tr>
<tr>
<td><strong>Woman Primary Caregiver (n=467)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man's Specialty Competitive</td>
<td>-0.13***</td>
<td>0.12***</td>
<td>-0.07</td>
<td>0.09**</td>
</tr>
<tr>
<td></td>
<td>(.031)</td>
<td>(.041)</td>
<td>(.048)</td>
<td>(.032)</td>
</tr>
<tr>
<td>Woman's Specialty Competitive</td>
<td>0.15***</td>
<td>-0.08</td>
<td>-0.11*</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(.031)</td>
<td>(.043)</td>
<td>(.047)</td>
<td>(.032)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>-0.04</td>
<td>0.10**</td>
<td>-0.05</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>(.033)</td>
<td>(.036)</td>
<td>(.041)</td>
<td>(.031)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>0.03</td>
<td>-0.14***</td>
<td>0.09</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(.035)</td>
<td>(.047)</td>
<td>(.047)</td>
<td>(.036)</td>
</tr>
<tr>
<td><strong>Man Primary Caregiver (n=470)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man's Specialty Competitive</td>
<td>-0.17***</td>
<td>0.19***</td>
<td>-0.05</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(.048)</td>
<td>(.045)</td>
<td>(.045)</td>
<td>(.034)</td>
</tr>
<tr>
<td>Woman's Specialty Competitive</td>
<td>0.08</td>
<td>-0.03</td>
<td>-0.08</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(.043)</td>
<td>(.031)</td>
<td>(.049)</td>
<td>(.031)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>-0.10**</td>
<td>0.14***</td>
<td>-0.07</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>(.040)</td>
<td>(.034)</td>
<td>(.045)</td>
<td>(.032)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>0.16***</td>
<td>-0.14***</td>
<td>-0.06</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>(.051)</td>
<td>(.040)</td>
<td>(.057)</td>
<td>(.039)</td>
</tr>
<tr>
<td><strong>No Children (n=468)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man's Specialty Competitive</td>
<td>-0.16***</td>
<td>0.10**</td>
<td>0.05</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(.045)</td>
<td>(.043)</td>
<td>(.058)</td>
<td>(.048)</td>
</tr>
<tr>
<td>Woman's Specialty Competitive</td>
<td>0.15***</td>
<td>-0.03</td>
<td>-0.09</td>
<td>-0.04</td>
</tr>
<tr>
<td></td>
<td>(.043)</td>
<td>(.036)</td>
<td>(.045)</td>
<td>(.036)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>-0.13***</td>
<td>0.15***</td>
<td>-0.07</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>(.034)</td>
<td>(.035)</td>
<td>(.045)</td>
<td>(.038)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>0.10***</td>
<td>-0.17***</td>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>(.033)</td>
<td>(.036)</td>
<td>(.040)</td>
<td>(.034)</td>
</tr>
</tbody>
</table>

*** p<0.001, ** p<0.01, * p<0.05
Note: Standard errors clustered at respondent level and presented in parentheses. Models control for vignette display order. Restricted to sample to responded correctly to both attention checks.
Table 1.4: Interaction of Respondent Gender and Vignette Dimensions, Average Marginal Effects

<table>
<thead>
<tr>
<th>Marginal Differences in Evaluation by Respondent Gender</th>
<th>Woman Career Precedence</th>
<th>Man Career Precedence</th>
<th>Family Precedence</th>
<th>Separate Career Precedence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Difference between Women and Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equal Childcare (n = 472)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man’s Specialty Competitive</td>
<td>0.03</td>
<td>-0.07</td>
<td>-0.02</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>(.070)</td>
<td>(.068)</td>
<td>(.088)</td>
<td>(.052)</td>
</tr>
<tr>
<td>Woman’s Specialty Competitive</td>
<td>0.02</td>
<td>-0.05</td>
<td>0.04</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(.067)</td>
<td>(.069)</td>
<td>(.090)</td>
<td>(.054)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>-0.08</td>
<td>-0.02</td>
<td>0.08</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>(.063)</td>
<td>(.071)</td>
<td>(.089)</td>
<td>(.060)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>-0.003</td>
<td>0.04</td>
<td>-0.13</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>(.068)</td>
<td>(.066)</td>
<td>(.094)</td>
<td>(.063)</td>
</tr>
<tr>
<td><strong>Woman Primary Caregiver (n = 467)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man’s Specialty Competitive</td>
<td>0.03</td>
<td>-0.17*</td>
<td>0.19*</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(.060)</td>
<td>(.076)</td>
<td>(.091)</td>
<td>(.064)</td>
</tr>
<tr>
<td>Woman’s Specialty Competitive</td>
<td>-0.01</td>
<td>0.14</td>
<td>-0.11</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(.060)</td>
<td>(.078)</td>
<td>(.091)</td>
<td>(.064)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>-0.09</td>
<td>-0.03</td>
<td>0.11</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(.054)</td>
<td>(.071)</td>
<td>(.083)</td>
<td>(.062)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>-0.05</td>
<td>-0.03</td>
<td>0.10</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(.063)</td>
<td>(.077)</td>
<td>(.080)</td>
<td>(.066)</td>
</tr>
<tr>
<td><strong>Man Primary Caregiver (n = 470)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man’s Specialty Competitive</td>
<td>0.003</td>
<td>0.10</td>
<td>-0.10</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td>(.074)</td>
<td>(.062)</td>
<td>(.073)</td>
<td>(.051)</td>
</tr>
<tr>
<td>Woman’s Specialty Competitive</td>
<td>-0.02</td>
<td>0.05</td>
<td>-0.04</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(.086)</td>
<td>(.064)</td>
<td>(.099)</td>
<td>(.068)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>-0.13</td>
<td>-0.02</td>
<td>0.20*</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>(.079)</td>
<td>(.062)</td>
<td>(.092)</td>
<td>(.056)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>0.05</td>
<td>-0.04</td>
<td>-0.04</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(.082)</td>
<td>(.066)</td>
<td>(.085)</td>
<td>(.064)</td>
</tr>
<tr>
<td><strong>No Children (n = 468)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man’s Specialty Competitive</td>
<td>0.10</td>
<td>0.03</td>
<td>-0.16</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(.073)</td>
<td>(.078)</td>
<td>(.100)</td>
<td>(.084)</td>
</tr>
<tr>
<td>Woman’s Specialty Competitive</td>
<td>0.001</td>
<td>-0.01</td>
<td>0.13</td>
<td>-0.12</td>
</tr>
<tr>
<td></td>
<td>(.063)</td>
<td>(.071)</td>
<td>(.087)</td>
<td>(.072)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>0.18*</td>
<td>-0.02</td>
<td>-0.22*</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>(.071)</td>
<td>(.069)</td>
<td>(.090)</td>
<td>(.079)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>-0.07</td>
<td>0.08</td>
<td>0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(.054)</td>
<td>(.038)</td>
<td>(.066)</td>
<td>(.055)</td>
</tr>
</tbody>
</table>

*** p<0.001, ** p<0.01, * p<0.05

Note: Standard errors clustered at respondent level and presented in parentheses. Models control for...
Table 1.5: Interaction of Dual-Medical Couple Respondents and Vignette Dimensions, Average Marginal Effects

<table>
<thead>
<tr>
<th>Difference between Dual-Medical Couples and Other</th>
<th>Woman Career Precedence</th>
<th>Man Career Precedence</th>
<th>Family Precedence</th>
<th>Separate Career Precedence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal Childcare ( (n=472) )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man's Specialty Competitive</td>
<td>-0.001</td>
<td>-0.04</td>
<td>0.11</td>
<td>-0.07</td>
</tr>
<tr>
<td></td>
<td>(.086)</td>
<td>(.084)</td>
<td>(.112)</td>
<td>(.069)</td>
</tr>
<tr>
<td>Woman's Specialty Competitive</td>
<td>0.09</td>
<td>0.10</td>
<td>-0.27*</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>(.086)</td>
<td>(.082)</td>
<td>(.112)</td>
<td>(.073)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>-0.04</td>
<td>0.17*</td>
<td>-0.15</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(.083)</td>
<td>(.079)</td>
<td>(.114)</td>
<td>(.074)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>0.11</td>
<td>-0.02</td>
<td>-0.11</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(.094)</td>
<td>(.079)</td>
<td>(.130)</td>
<td>(.093)</td>
</tr>
<tr>
<td>Woman Primary Caregiver ( (n=467) )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man's Specialty Competitive</td>
<td>-0.06</td>
<td>0.10</td>
<td>0.02</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>(.073)</td>
<td>(.091)</td>
<td>(.119)</td>
<td>(.073)</td>
</tr>
<tr>
<td>Woman's Specialty Competitive</td>
<td>-0.01</td>
<td>-0.02</td>
<td>-0.01</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>(.064)</td>
<td>(.104)</td>
<td>(.113)</td>
<td>(.070)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>0.08</td>
<td>0.04</td>
<td>-0.05</td>
<td>-0.08</td>
</tr>
<tr>
<td></td>
<td>(.072)</td>
<td>(.086)</td>
<td>(.099)</td>
<td>(.068)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>0.16*</td>
<td>-0.16</td>
<td>0.09</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>(.068)</td>
<td>(.100)</td>
<td>(.096)</td>
<td>(.085)</td>
</tr>
<tr>
<td>Man Primary Caregiver ( (n=470) )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man's Specialty Competitive</td>
<td>0.02</td>
<td>0.05</td>
<td>-0.06</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(.095)</td>
<td>(.078)</td>
<td>(.098)</td>
<td>(.089)</td>
</tr>
<tr>
<td>Woman's Specialty Competitive</td>
<td>-0.23*</td>
<td>-0.06</td>
<td>0.21</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>(.107)</td>
<td>(.073)</td>
<td>(.114)</td>
<td>(.076)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>0.10</td>
<td>0.06</td>
<td>-0.13</td>
<td>-0.03</td>
</tr>
<tr>
<td></td>
<td>(.097)</td>
<td>(.078)</td>
<td>(.115)</td>
<td>(.067)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>0.01</td>
<td>-0.001</td>
<td>-0.09</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>(.108)</td>
<td>(.083)</td>
<td>(.109)</td>
<td>(.066)</td>
</tr>
<tr>
<td>No Children ( (n=468) )</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man's Specialty Competitive</td>
<td>0.17</td>
<td>-0.03</td>
<td>-0.12</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(.087)</td>
<td>(.092)</td>
<td>(.130)</td>
<td>(.107)</td>
</tr>
<tr>
<td>Woman's Specialty Competitive</td>
<td>-0.20*</td>
<td>-0.01</td>
<td>0.31**</td>
<td>-0.11</td>
</tr>
<tr>
<td></td>
<td>(.082)</td>
<td>(.094)</td>
<td>(.103)</td>
<td>(.086)</td>
</tr>
<tr>
<td>Man Highly Qualified</td>
<td>-0.05</td>
<td>-0.04</td>
<td>0.24*</td>
<td>-0.15</td>
</tr>
<tr>
<td></td>
<td>(.080)</td>
<td>(.093)</td>
<td>(.112)</td>
<td>(.089)</td>
</tr>
<tr>
<td>Woman Highly Qualified</td>
<td>-0.20*</td>
<td>0.06</td>
<td>0.19*</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>(.079)</td>
<td>(.076)</td>
<td>(.089)</td>
<td>(.073)</td>
</tr>
</tbody>
</table>

*** p<0.001, ** p<0.01, * p<0.05

Note: Standard errors clustered at respondent level and presented in parentheses. Models control for...
Figure 1.3: Interaction of Respondent Egalitarian Gender Ideology and Vignette Factors, Average Marginal Effects
2. “His” and “Hers”: Meeting the Economic Bar to Marriage

A primary explanation for disproportionately low rates of marriage among economically disadvantaged groups is that economically disadvantaged individuals perceive a so-called “economic bar” to marriage. This economic bar is defined as a set of multiple markers of economic success, including earnings, employment, and asset achievements, and is the litmus test by which economically disadvantaged couples determine whether their relationships are ready for marriage (Edin and Kefalas 2005; Gibson-Davis, Edin and McLanahan 2005). The existence of the bar has gained widespread acceptance and is often described in the literature on marriage among low-income couples as a primary barrier to marriage among that group (c.f., Carlson, McLanahan, & England, 2004; England, Wu, & Shafer, 2013; Manning, Brown, & Payne, 2014).

We argue that the bar’s salience for marriage entry among low-income couples may have been overstated in the prior literature. Very little evidence exists as to whether meeting the bar is actually correlated with marriage entry and several questions about the economic bar remain unanswered. For example, is attaining multiple types of economic success, as implied by the economic bar, necessary for marriage, or can marriage entry be predicted just as strongly by using only one measure of economic well-being, such as employment? Additionally, does the economic bar predict entry into cohabitation? If the economic bar were related to cohabitation, then the theoretical importance of the bar would be undercut, insofar as it has been conceived as applying only to marriage (Gibson-Davis, Edin, & McLanahan, 2005). Moreover, is meeting the economic bar associated with marriage, even if it is based on the mother’s economic contributions alone? The bar is
described as a couple-level measure (Edin & Kefalas, 2011; Rackin & Gibson-Davis, 2017), yet most of the literature on family formation among low-income parents stresses the importance of the man’s, rather than woman’s, economic well-being (Harknett & McLanahan, 2004; Smock, Manning, & Porter, 2005). Finally, does meeting the economic bar have positive associations with parents’ assessment of their romantic relationship? Associations between meeting the economic bar and relationship quality would be notable insofar as parental relationship quality is positively correlated with healthy parent-child interactions (Goldberg & Carlson, 2014).

Using three waves of data from Building Strong Families (BSF) project, an experimentally-evaluated relationship program among low-income parents (n=4,444), we present the most systematic examination of the economic bar to date. First, we address the bar’s salience and definition, by examining how meeting the bar is associated with four union types (marriage, cohabitation, dating, and not romantically involved), and by testing whether the bar predicts marriage over and above any one aspect of economic well-being. Second, we examine the importance of gender, by investigating whether a bar defined based on the man’s economic accomplishments has the same associations with marriage as does a bar defined based on the woman’s accomplishments. Third, we examine the spillover effects of the bar, by examining whether meeting the bar has positive associations with relationship quality.

In addressing these questions, we combine a well-established literature that evaluates the importance of men’s and women’s income for marriage entry (Oppenheimer, Kalmijn, & Lim, 1997; Sweeney, 2002; Xie, Raymo, Goyette, &
Thornton, 2003) with an emerging literature documenting the salience of wealth, home ownership, and job quality on marital transitions (Addo, 2014; Schneider, 2011; Schneider & Reich, 2014). Collectively, these studies suggest that multiple economic domains influence marriage decisions. To date, however, studies have largely analyzed economic well-being variables in isolation. Our study, in contrast, incorporates numerous dimensions of financial status and provides the first quantitative analysis of how a set of markers, as measured through the economic bar index, is associated with relationship status and quality.

2.1 Background

2.1.1 The Economic Bar to Marriage

A central proposition in understanding marriage patterns among low-income parents is the “economic bar to marriage.” This economic bar, consisting of a set of employment, earnings, and financial markers, acts as a barrier to marriage because couples believe that only those who have met the bar should marry (Edin & Kefalas, 2011; Gibson-Davis et al., 2005; Smock et al., 2005). Meeting the bar prior to marriage is considered important because economic standing is perceived to play a crucial role in marriage and that stress from unmet financial needs can tear relationships apart. Therefore, financial preparedness is an important hedge against an unstable marriage (Edin, Kefalas, & Reed, 2004).

Achieving the bar also plays a normative function, signaling to friends and family that the couple has achieved what is necessary for marriage and is worthy enough to take on the institution (Cherlin, 2004). In this regard, the existence of the bar is evidence of
the ongoing shift in the cultural framing of marriage (Cherlin, 2010). Marriage has become a capstone achievement, signaling that a couple has “arrived,” both financially and emotionally (Cherlin, 2004; Edin & Kefalas, 2011).

When low-income individuals describe the economic bar to marriage, they describe the importance of many factors, including employment, earnings, and asset accumulation. For employment, individuals indicate that parents should have “good” jobs, which are stable, reliable, and provide benefits (Edin & Kefalas, 2011; Gibson-Davis et al., 2005). The couple should also have sufficient earnings to avoid living paycheck to paycheck, and avoid public assistance receipt. Living paycheck to paycheck introduces stress into the relationship, and public assistance receipt indicates that the couple is not financially self-sufficient (Edin et al., 2004). Finally, the couple should have a sufficient level of assets, such that the couple can pay for a wedding or a down payment (Gibson-Davis, 2007).

By including numerous markers of economic well-being in the bar’s definition, respondents are implicitly merging two bodies of work on marriage determinants. Numerous studies have focused on how employment and earnings relate to marriage entry (Carlson et al., 2004; Oppenheimer, 2003; Sweeney, 2002; Wilson, 1987). Other work has considered job quality (as measured by occupation prestige, presence of benefits, union membership, or standardized work hours; Oppenheimer et al., 1997; Piotrowski, Kalleberg, & Rindfuss, 2015; Schneider & Reich, 2014), the avoidance of material hardship and debt (Addo, 2014; Gassman-Pines & Yoshikawa, 2006), and asset accumulation and home ownership (Gassman-Pines, Yoshikawa, & Nay, 2006;
Measures of job quality, wealth, and material hardship do not appear to diminish the importance of earnings and employment, but rather complement their effects (Oppenheimer et al., 1997; Schneider & Reich, 2014). The complementary nature of these factors is conceptually consistent with the multi-dimensional nature of the bar, and suggests that fitness for marriage is assessed based on a set of markers, rather than factors that operate in isolation.

Qualitative research has also demonstrated that low-income couples believe that this bar applies to marriage, but not cohabitation (Rackin & Gibson-Davis, 2017). Cohabiting is usually considered a less serious relationship step than marriage (Huang, Smock, Manning, & Bergstrom-Lynch, 2011; Sassler, 2004). Additionally, most cohabiting unions, particularly those among disadvantaged individuals, do not begin as a precursor to marriage, and very few transition to marriage (Lichter, Michelmore, Turner, & Sassler, 2016; Sassler & Miller, 2017). Cohabitation is conceptually and logistically distinct from marriage (Sassler & Miller, 2017), and as such, is not subject to the same economic litmus test (Manning et al., 2014; Sassler & McNally, 2003).

Despite the consensus about the importance of the economic bar, only a few studies have examined whether meeting the economic bar is actually associated with marriage. Gibson-Davis (2009; 2007), using both qualitative and quantitative data from the Fragile Families and Child Well-Being Study (“Fragile Families”), found that, consistent with expectations, meeting the economic bar was positively correlated with marriage entry among low-income couples. However, these studies used an economic bar
measure that included only two items (earnings growth and home ownership), and did not test whether the economic bar was associated with entry into cohabitation.

Notwithstanding the relative paucity of literature, the construct of the economic bar is gaining theoretical traction in the literature on family formation (England et al., 2013; Gassman-Pines et al., 2017; Manning et al., 2014; Schneider & Hastings, 2015). We argue that the bar’s importance in the literature may have outpaced our understanding of its function, and that replication and additional analyses are needed to understand how the economic bar is related to relationship status transitions.

2.1.2 Male vs. Female Economic Contributions

Whether men’s or women’s economic circumstances matter more for family formation decisions has long been debated. Men’s employment and earnings have been found to consistently relate to marriage entry (Oppenheimer, 2003; Smock et al., 2005; Xie et al., 2003); the evidence on women’s earnings is decidedly mixed (Lichter & Graefe, 2007; Sweeney, 2002). Theoretically, women’s earnings could have opposing effects on marriage entry. The independence effect suggests that women may be less likely to marry because they are better able to support themselves; the income effect suggests that higher earnings make women more attractive on the marriage market (Becker, 1981; Hannan, Tuma, & Groeneveld, 1978; Oppenheimer et al., 1997). Studies generally supported the income effect; low-income women holding steady jobs are more likely to marry than those who do not (McLaughlin & Lichter, 1997), and earnings are positively associated with marriage for young women in recent cohorts (Kuo & Raley, 2016). Men’s labor market attachment increases the likelihood of marriage, over and
above women’s, whereas women’s labor force participation may not have any effect on
marriage entry, accounting for men’s earnings (Gibson-Davis, 2009; Smock et al., 2005).

In contrast, in qualitative research, low-income individuals described the
economic bar as a couple-level indicator that does not necessarily prioritize the man’s
financial position over the woman’s (Edin & Kefalas, 2011; Gibson-Davis et al., 2005;
Rackin & Gibson-Davis, 2017). Both the man and the woman needed to contribute in
order to meet the bar. Having enough money for a down payment, for example, was
simply out of reach based on one partner’s earnings alone. Moreover, women reported
needing to be economically independent of their partners so that they would have a
fallback position should the relationship dissolve (Edin & Kefalas, 2011). The bar was
thus described something that required contributions from both men and women.

To summarize, the qualitative work that serves as the basis for the economic bar
suggests that the gender of the contributor should not matter, and that the important
determinant of marriage entry is the couple-level achievement of the bar. In contrast,
quantitative studies on marriage entry have generally found that couples appear to be
more responsive to men’s, rather than women’s, economic status when deciding on
marriage timing.

2.1.3 Relationship Quality

Qualitative research on the economic bar to marriage has found that couples
closely link achieving the economic bar and higher relationship quality (Edin & Kefalas,
2011). Individuals reported that achieving the economic bar would have positive spillover
effects on the tenor of their relationships, and would serve as an important hedge against future stress and conflict (Rackin & Gibson-Davis, 2017).

These findings echo long-standing research utilizing quantitative methods showing that economic strain decreases marital functioning (Liker & Elder, 1983). Day-to-day economic stress depletes the emotional reserves that couples have for each other, leading to increased stress and conflict and lower levels of support and affection (Conger & Elder, 1994; Conger et al., 1990). Economic pressure and hardship has been associated with relationship dissolution (Hardie & Lucas, 2010; Wu & Pollard, 2000) and relationship hostility (Masarik et al., 2016).

As financial stability also has implications for power dynamics within a couple (England & Farkas, 1986), the associations between economic well-being and relationship quality may be particularly important to women, especially those who are socioeconomically disadvantaged. Women in lower-income relationships may perceive that men who are contributing financially to the couple (and not just to men’s own financial interests) are more dedicated to, and invested in, the relationship. Having a joint bank account, for example, may signify that the man is “all in” in the relationship, and is not holding anything back (Addo & Sassler, 2010). Low-income men, relative to women, may be less sensitive to the “signal” of financial stability for relationship quality.

Associations between economic stability and parental relationship quality matter because the tenor of the parents’ relationship has spillover effects on the parent-child relationship (Goldberg & Carlson, 2014). Low-income parents with higher quality relationships can better support and nurture their children (Berger & McLanahan, 2015).
The potential indirect association between meeting the bar and parent-child relationships underscores the bar’s importance, above and beyond any associations it has with marital status.

2.1.4 Study Hypotheses

We hypothesize that meeting the bar will be positively correlated with marriage entry, but will not be associated with cohabitation. Meeting the bar should also be a stronger predictor of marriage entry than any one item by itself. Consistent with the quantitative evidence, we expect that men’s achievement of the bar will be a stronger predictor of marriage entry than women’s achievement of the bar. We also hypothesize that meeting the economic bar to marriage will lead to increases in relationship quality; these associations may be stronger for woman than for men. As having both members meet the bar is more difficult than having either parent meet the bar, we expect fewer couples to meet the both-parents bar. We also expect (but have little prior literature to guide our expectation) that couples in which both members individually meet the economic bar will be more likely to marry than couples in which the bar is measured across the couple.

2.2 Method

2.2.1 Data Source and Sample

Data comes from the Building Strong Families (BSF) evaluation. Funded by Administration for Children & Families as part of the Healthy Marriage Initiative, BSF was offered in eight sites in geographically diverse cities between July, 2005 and March, 2008. (for more information on the BSF program and evaluation, see Wood, Moore,
Clarkwest, Killewald, & Monahan, 2012). The BSF data is ideally suited to examine the economic bar to marriage as it contains a rich, longitudinal set of financial measures on a sample of low-income mothers and fathers as well as information on relationship quality and entry into marriage over time.¹

The sample was composed of couples eighteen and older who were romantically involved at the initial baseline survey, were expecting or had a newborn child (under three months of age), and were unmarried at the time of the child’s conception. An initial sample of 5,102 couples were recruited by approaching parents in prenatal clinics and hospital maternity wards, and referrals from WIC and other social services agencies serving low-income families (Dion, Avellar, & Clary, 2010). BSF couples were randomly assigned to the treatment condition (offered relationship-skills training) or to a control group (no services offered). Evaluations of the BSF program found no treatment effects of the program on marriage or relationship quality (Wood, McConnell, Moore, Clarkwest, & Hsueh, 2012). BSF participants were demographically similar to Fragile Families respondents (Dion et al., 2010).

Our sample consisted of couples who participated in the baseline survey and either the 15-month or 36-month follow-up survey, where participation was defined as at least one member of the couple being observed in at least one round. Couples who were married at baseline (n=320) and did not participate in either follow-up survey (n=338) were excluded. The final sample size was 4,444 couples. Slightly more than 87% of

¹ We did not use Fragile Families data because the study did not collect baseline, individual-level information on home ownership, bank accounts, or material hardship. Moreover, given that previous work on the economic bar used Fragile Families (Gibson-Davis 2007; 2009), it was important to analyze the bar using another data source.
couples had at least one member participate at 15 months, and 83% of couples had at least one member participate at 36 months.

We used multiple imputation to account for missing data across measures, a method that replaces missing data with a probable value based on other available information from the dataset. While levels of missingness on baseline data were less than 1%, levels of missingness were substantially higher at follow-ups (up to 23% for select father-reported variables and 11% for mother-reported variables). Though multiple imputation cannot completely account for bias due to missing data, it improves consistency and efficiency compared to other methods (Johnson & Young, 2011).

We imputed missing values using the chained equation method, generating 20 imputed datasets to impute missing data on all the categorical and continuous independent variables included in our dataset. Following the recommended practice of including all measures that are used in analytic models (White, Royston, & Wood, 2011), the imputation model included the variables used to construct the economic bar, the baseline covariates (detailed below), and treatment status and program site. Variables that were measured at both waves were each included. We conducted multiple checks on the stability of the imputation model and analyses and found the imputed data patterns to be highly consistent with the original dataset.

Our analysis sample includes a small number of couples for whom outcomes were not observed at 15 or 36 months. Of the 4,444 couples, 315 couples had neither parent participate at 15 months (at least one member of these couples was observed at 36 months) and 480 couples had neither parent participate at 36 months (at least one member
of these couples were observed at 15 months). Because the literature on multiple imputation offers conflicting advice as to whether cases that are observed in one round but not the other should be dropped (Young & Johnson, 2015), we elected to keep couples who participated in either wave in order to maximize sample size. Supplementary analyses found virtually no substantive differences in the 15- and 36-month results when the 315 and 480, respectively, couples were dropped (although estimates were slightly less precise).

At baseline, nearly three-quarters of the sample reported living together all or most of the time (see Table 2.1), and the majority of couples (69% of mothers and 74% of fathers) believed that they would marry each other. Relationship quality scores (measured on a 1-4 scale, described below) were relatively high (greater than 3) for both mothers and fathers. The sample was relatively disadvantaged, insofar as only 7% of mothers and 24% of fathers reported annual earnings greater than $25,000. About 40% of the sample did not have their high school diploma or GED. Nearly one-quarter of fathers report not being employed, and three-quarters of mothers reported receiving Medicaid or SCHIP. The majority of parents identified as Black, non-Hispanic and most couples already had one child together. Couples were in their mid-20s, with fathers being slightly older than mothers.

---

2 The survey did not ask respondents about their highest level of education competed. Given the sample involved, we assume that respondents who answered in the negative had less than a high school education.
2.2.2 Measures

*Relationship status.* At both 15 and 36 months, relationship status was defined using four mutually exclusive binary categories: married; cohabiting; dating; and broken up. Respondents who reported being married were treated as currently married. Cohabiting and dating couples reported being romantically involved; cohabiting couples reported living with their partner “all” or “most” of the time, whereas dating couples reported living with their partner “some” or “none” of the time. Broken up couples reported not being romantically involved with each other. Each measure required affirmative responses from both members of the couple for the outcome to be considered true. In cases of conflicting responses, the less-serious relationship status was used (e.g., we coded a couple as cohabiting if one members said they were married but the other member said they were cohabiting). If only one member of the couple was observed, that person’s report was used.

*Relationship quality.* Maternal and paternal relationship quality at 15 and 36 months was measured by the six-item Support and Affection scale (alphas for both mothers and fathers at both waves were .93 or greater). Items included “partner knows and understands me” and “partner respects me,” using a 1 (*never*) to 4 (*often*) response scale. Responses were averaged across the six items to form a single score. Relationship quality measures could conceivably differ for the mother and the father, so this measure was not combined into a couple-level measure.³

³ The Support and Affection scale was the only BSF relationship quality scale that avoided the problem of truncations bias, as it was asked of all couples and not just those still romantically involved. See Moore et al. 2012 for details on BSF truncation bias.
The economic bar to marriage index. The economic bar to marriage, measured at 15 months, was a seven-item index capturing the set of available economic factors, ranging from 0 (met none of the criteria) to 7 (met all of the criteria). All items have been explicitly identified in qualitative studies as constituting the bar (Edin & Kefalas, 2011; Gibson-Davis, 2009; Gibson-Davis et al., 2005) or have been shown in quantitative work to be associated with marriage entry (Addo, 2014; Schneider & Reich, 2014). We combined each of the factors described below into a single index, unit weighting each factor. Unit weighting performs as well as, if not better than, other strategies for creating indices from combine multiple components (Graefe, 2015).

Health insurance measured the presence of private insurance for either the parent or the child. A bank account and home ownership indicated the presence of those items for the parent. Earnings growth reflected higher reported earnings at the 15-month follow-up survey than at baseline. Steady employment was defined as having worked at least 30 hours per week over the past month. Avoidance of welfare receipt was indicated by parents who reported that they had not received Temporary Aid to Needy Families (TANF) or Food Stamps (now known as SNAP) in the past month (for both steady employment and welfare receipt, month was the only time frame referenced in the 15-month survey). Lack of material hardship, measured over the past 12 months, was based on responses to three items: if respondents had not been able to pay their rent or

---

4 The baseline survey collected categorical earnings over the prior 12 months, while the 15-month survey asked total earnings in the past month. We constructed an annual earnings approximation by multiplying reported monthly earnings by the number of months employed. To approximate earnings growth, the baseline categorical variable was recoded to be the upper-bound of each category (e.g., an earnings category of $1-4,999 became $4,999). Earnings growth occurred if a respondent’s constructed annual earnings at the 15-month survey exceeded the upper-bound of the baseline earnings category.
mortgage; if they had their utilities shut off; or if they had been evicted. Parents without material hardship were those who answered no to all three questions.

We constructed four definitions of the bar, based on who in the couple contributed the items. The either-parent bar was the summation of items for either the mother or the father (e.g., if either the mother or the father had earnings growth, the couple was scored “1”). The mother-only (father-only) bar was the summation of only the mother’s (father’s) items. The both-parents bar was the summation of items that both members of the couple had.

An example clarifies these bar constructions. In the case where both mother and father had earnings growth, then that couple was scored a “1” for earnings growth in all four bar definitions. If neither member of the couple had earnings growth, then the couple was scored “0”. If mother had earnings growth but not the father, then the couple scored “1” on the either-parent bar, “1” on the mother-only bar, and “0” on the father-only bar and on the both-parents bar. If the father had earnings growth but not the mother, then the couple scored “1” on the either-parent bar, “1” on the father-only bar, and “0” on the mother-only bar and a “0” on the both-parents bar.

We defined meeting the bar as having an economic bar index score of at least four. Previous literature (Gibson-Davis, 2009) beyond indicating that meeting the economic bar implies exceeding a threshold, does not specify where that threshold should fall. Couples may evaluate their fitness for marriage based on a subjective sense of whether they have achieved the bar, rather than achieving a specific number of items. Even though four is an admittedly arbitrary cut-point, it is a reasonable threshold, and
signifies that couples had achieved the majority of items on the index. Following others (Watson & McLanahan, 2011), we performed robustness checks on our cut-off to evaluate its performance as a meaningful threshold (detailed below).

Descriptively, 67% of couples met the either-parent bar, relative to only 14% of couples who met the both-parents bar (see Table 2.2). Nearly half of couples met the father-only bar, whereas about one-third of couples met the mother-only bar. Across indices, the most common items that couples achieved were the absence of material hardship and no public assistance. The least likely item to be achieved was home ownership. Fathers, relative to mothers, were more likely to be employed (65% vs. 37%), have earnings growth (39% versus 26%), have private health insurance (45% vs. 38%), and avoid public assistance receipt (63% vs. 46%). Gender differences in other items were minimal.

**Baseline covariates.** Baseline covariates consisted of demographic, relationship structure and quality, and mental health characteristics. Demographic characteristics were mother’s race and ethnicity (non-Hispanic white, non-Hispanic Black, Hispanic, or other race or ethnicity besides Hispanic); whether the father’s race/ethnicity differed from the mother’s race/ethnicity; mother’s and father’s age; and whether the mother and father have a high school diploma. Economic characteristics included employed (yes/no), and whether the mother received any of the following public assistance in the past year: TANF, SNAP, or Medicaid. The relationship structure characteristics were if the couple were cohabiting full-time or most of the time, the number of children the couple had

---

5 To test the sensitivity of results to home ownership in the either-parent bar, we also constructed a version of the either-parent bar that excluded home ownership. Results were consistent with those presented below.
together, the number of children each partner had with someone else, and if the mother was pregnant (as opposed to having already had the child). Baseline relationship quality was measured by a seven-item scale (alpha=.71 for the mother and .80 for the father). Parents were asked to rate statements such as partner “shows love and affection towards you” and “will not cheat on you,” on a 1 (strongly agree) to 4 (strongly disagree) scale. Mental health was measured through a six-item scale used to assess depression (mother alpha=.71, father alpha=.70).  

2.2.3 Analytic Strategy

Using multinomial logistic and linear regression, respectively, we modeled relationship status and quality at 15 and 36 months as a function of the economic bar at 15 months, baseline covariates and program site. Treatment status was also included as a covariate, even though evaluations of BSF found no treatment effects (Wood, McConnell, et al., 2012). These models were used to generate predicted values of relationship status and quality for those who did and did not meet the bar (predicted values generated with covariates held constant). Results for the multinomial logistic regressions used in the predicted probabilities of relationship status are presented in Appendix B; the linear regression models used to generate predicted relationship quality

---

6 We regressed meeting the bar at 15 months on baseline covariates (Appendix A). Associations across bar definitions were generally as expected, with education and employment positively related, and mother’s receipt of public assistance and having a child with another partner negatively related.

7 We measured outcomes at both 15 and 36 months to guard against couples who were married by 15 months reporting on their economic well-being after they married. In supplementary models for the 36 month outcomes where couples who were married at 15 months were excluded, estimates were underpowered, but substantively similar to our main results.

8 These models present the association at 15 months between meeting the bar and relationship status, where cohabitation was the omitted category. The RRR of 1.75, for example, indicates that, after adjusting for covariates, couples who met the bar were associated with a 75% increase in the likelihood of marrying rather than cohabiting.
scores are presented in Table 2.3. All models were weighted using weights developed by BSF evaluators (Wood, Moore, et al., 2012). Analyses were run separately for each bar definition.

In select cases, we compared the estimates associated with meeting one bar to the estimates associated with meeting a different bar. A comparison of bar definitions for relationship quality was straightforward, as linear regression coefficients can easily be compared across models. In contrast, the multinomial logistic regression coefficients used to estimate relationship status cannot be directly compared across models (Karlson, Holm, & Breen, 2012; Mood, 2010). We addressed this problem by using linear probability models to estimate the association between meeting the bar and one relationship category (i.e., using a binary indicator of marriage). Coefficients from linear probability models can be compared using standard techniques.

2.3 Results

2.3.1 Relationship Status and the Economic Bar

The first set of results (Figure 2.1) presents, for parents who met and did not meet the either-parent bar at 15 months, the predicted probabilities of their relationship status at 15 and 36 months. Apart from associations with the bar, these relationship results are consistent with other work on low-income parents (Carlson et al., 2004; McLanahan, 2011), insofar as relatively few couples were married at either time point, with relatively high fractions of couples dissolving their relationships.
At both time points, using the either-parent definition of the bar, couples who met the bar were significantly more likely to marry than couples who did not meet the bar. At 15 months, meeting the bar was associated with a 40% increase in the likelihood of marrying (13.4 vs. 9.1%); at 36 months, meeting the bar was associated with a 33% increase (17.2 vs. 12.8%). At both time points, meeting the bar was also associated with a decrease in the probability of cohabiting. Given that the relationship categories were mutually exclusive, the decrease in cohabitation, when coupled with the increase in marriage, suggests that that the bar increased the likelihood that cohabiting couples moved into marriage. The bar had null or minimal associations with the other two relationship categories; regardless of whether parents met the bar, about 40% of couples at 15 months, and 55% of couples at 36 months, were broken up or dating.

Analyses utilizing linear probability models to facilitate cross-model comparisons indicated that meeting the both-parents bar was associated with larger increases in marriage than meeting the either-parent bar (results not presented but available upon request). At both 15 and 36 months, the share of couples who met the both-parents bar and were married was higher than the share of couple who met the either-parent bar and were married (difference between the either- and both-parents bars association with marriage was statistically significant ($p < .05$) at both time points).

---

9 Consistent with the BSF evaluation (Woods et al., 2012a), at 15 and 36 months, across all bar definitions, treatment status was not significantly associated with the outcomes. The only exception to these null results was that treatment status (in all bar models) was associated an increased likelihood of breaking up at 36 months ($p < .10$).
2.3.2 Male vs. Female Contributions to the Economic Bar

Figures 2.2A and 2.2B show the association between meeting the bar and relationship status by the gender of the parent who met the bar (e.g., the mother-only vs. father-only bar). The mother-only and father-only bar had similar positive associations with marriage entry. At 15 months, in the mother-only bar definition, the predicted probability of marriage for couples who met the bar was 15.4%, a statistically significant higher estimate than the 10.6% of couples who did not meet the bar and married. For the father-only bar, the predicted probability of marriage was 15% for those who met the bar and 8.9% for those who did not (\(p<.05\) for difference between two). Linear probability models indicated that association between meeting the mother-only bar and marriage was not statistically different from the association between meeting the father-only bar and marriage.

The father-only and mother-only bars differed somewhat in their associations with cohabitation at 15 months. Meeting the father-only bar, but not meeting the mother-only bar, was associated with a significant decrease in cohabitation. In linear probability models, the difference between father-only and mother-only bars’ association with cohabitation was marginally significant (\(p < .10\)). Keeping in mind the increase in marriage, the decrease in cohabitation for the father-only bar suggests that meeting the father-only bar encouraged cohabiting couples to marry.

At 36 months, the pattern of results for marriage entry mirrored those at 15 months, insofar as the share of couples who were married were similar between the mother-only (18.5%) and father-only (19%) bars. For each bar, couples who met the bar
were significantly more likely to marry than couples who did not \((p < .05)\). In a linear probability model where marriage was the binary dependent variable, the magnitude of meeting the father-only bar on marriage entry was larger than meeting the mother-only bar \((p < .05)\).

Meeting either the mother- or father-only bars had small, and generally non-significant, associations with the non-marital relationship categories at 36 months. Meeting the mother-only bar was associated with a small but negative effect on cohabitation, whereas meeting the father-only bar was associated with a small but positive effect on cohabitation. Neither of these effects reached statistical significance at conventional levels, and linear probability models indicated no statistically significant difference between father-only and mother-only bars’ association with cohabitation. Both the mother- and father-only bars had very modest negative effects on dating or being broken up (the only association that was statistically significant at conventional levels was for the father-only bar and dating). When considered with the positive associations on marriage, results indicate that movement into marriage for those meeting the mother-only bar came from couples who were broken up or dating, whereas movement into marriage for those meeting the father-only bar came from couples who were cohabiting, broken up, or dating.

2.3.3 Relationship Quality and the Economic Bar

Thus far, results suggest that all four versions of the economic bar were associated with increased odds of marriage, with minimal differences in the odds of marriage between the father-only and mother-only bar. We next evaluated how meeting the
economic bar was related to self-reported relationship quality at both 15 and 36 months (Table 2.3).

Across bar definitions, the both-parents bar was consistently and positively associated with relationship quality. Meeting the both-parents bar was associated with statistically significant increases in maternal and paternal relationship quality at 15 months (.16 SD for mothers, .10 SD for fathers), and increases in maternal relationship quality at 36 months (.16 SD). In contrast, the either-parent bar was not statistically significantly related to either gender’s relationship quality at either 15 or 36 months, with quite small (e.g., .01) effect sizes.\(^\text{10}\)

When considered by the gender of the parent, results indicated that when mothers contributed to the economic bar, they reported significantly higher relationship quality. In the mother-only bar, at 15 months, mothers in couples who met the bar reported relationship quality that was .06 SD higher than the relationship quality scores of mothers who had not met the bar. At 36 months, that difference was .08 SD.\(^\text{11}\)

In contrast, meeting the bar had only weak associations with father’s relationship quality. Meeting the mother-only, father-only, or either-parent bar was not associated with paternal relationship quality. The results for father’s relationship quality did not differ at conventional levels of statistical significance from those of mother’s.

Nevertheless, results are suggestive that mother’s, but not father’s, relationship quality

\(^{10}\) At 15 and 36 months, the effect sizes of meeting the both-parents bar were statistically larger than the effect sizes of meeting the either-parent bar for maternal relationship quality. Paternal relationship quality effect sizes differed only at 15 months.

\(^{11}\) At 15 and 36 months, mothers’ mean relationship quality score was 3.05 (SD = .79) and 2.81 (SD = .86), respectively. Fathers’ mean relationship quality score at the two time points was 3.23 (SD = .71) was 3.03 (SD = .78), respectively.
was more likely to improve in response to the bar, and that may be particularly the case if the mother herself contributed to the bar.

2.3.4 Robustness Checks

In supplementary analyses, we tested how each of the seven individual components of the index related to the transition to marriage. We used a logistic regression model to predict marriage entry, controlling for the same set of covariates used above, and including each index item into seven successive models.\(^{12}\) Results are presented in Figure 2.3, which shows the odds ratios (OR) of marriage for meeting the either-parent bar (the bar labeled “all items”) and then odds ratios for each of the items. Bars that are colored in indicate that the item was significantly associated with marriage at \(p<.10\); ORs that are underlined indicate a coefficient significantly different from that of the either-parent bar.

Relatively few of the individual index items were by themselves statistically significantly related to marriage entry. At 15 months, having a bank account, avoiding public assistance receipt, having health insurance, and home ownership were statistically significantly related to marriage; at 36 months, only bank account and avoiding public assistance were. Notably, these items (with the exception of bank account) did not produce statistically larger ORs than the OR of meeting the either-parent bar. Having a bank account may be strongly predictive of marriage because of its close correlation with the other bar items (for example, an individual would need a bank account to buy a house, it facilitates receiving earnings, etc.).

\(^{12}\) We conducted similar analyses for the other three definitions of the bar (results not presented, but available upon request). Those results were substantively the same as the results for the either-parent bar.
Importantly, consistent with expectations, couples in which either-parent had experienced earnings growth were no more likely to marry than those without earnings growth. The association between the economic bar and marriage was significantly larger than the association between earnings growth and marriage ($p < .05$).

We also constructed the economic bar index seven times, with each successive iteration dropping one of the seven items (i.e., the first time the bar was constructed, health insurance was excluded; the second time, health insurance was included, but earnings growth was excluded). At 15 and 36 months, each of these seven alternative bars were all significantly related to marriage. Thus, the economic bar construct does not appear to be driven by any one item.

Finally, we tested the robustness of having four items as the cutoff point for bar achievement. If four items was the appropriate cut point, then we would expect there to be a “jump” in marriage probabilities from having three to having four items. Additionally, when compared to the marriage probabilities associated with having four items, marriage probabilities associated with having zero, one, two, or three items should be smaller and statistically significantly different.\(^\text{13}\)

We began our test by computing the predicted probability of marriage at 15 months for couples at each value of the bar (see Table 2.4). Couples who reported either zero or one item were collapsed because very few couples reported zero items. We then

---

\(^{13}\) We do not have any a priori expectations about the relative size of the marriage probabilities associated with achieving more than four items. The marriage probabilities associated with achieving five, six, or seven items could be similar in size to the marriage probabilities associated with achieving 4 items, or marriage probabilities could continue to increase once four items are achieved. Either scenario – additional items beyond a threshold do not increase marriage likelihood or, conditional on achieving a threshold, additional items increase marriage likelihood – are conceptually consistent with the bar.
compared whether the predicted probability of marriage when the couple reported 0/1, 2, 3, 5, 6, or 7 items was statistically different than the predicted probability when the couple reported 4 items. This analysis was repeated for each version of the bar. We also redid this analysis using three or five as the reference category (results available upon request).

Results for three of the four bars were consistent with expectations. In the either-parent bar, the predicted probabilities of marriage for those with the zero/one, two, and three items were similar (8.6%, 8.8%, and 9.2%, respectively) but increased by 3.6 percentage points for those with four items (12.6%). Additionally, the predicted probability of marriage for those with the zero/one, two, and three items was statistically different from the predicted probability for those with four items (and in supplementary tests, the zero/one, two, and three categories did not differ from each other).

The father-only and both-parents bar exhibited a similar pattern of results (though the difference between the three and four item categories in the both-parents bar were not statistically significant at conventional levels). For the mother-only bar definition, results were less convincing. Though the zero/one and two item probabilities were smaller and statistically significantly different from the four item probability, the increase in predicted probabilities between three and four items was small (only 1.9 percentage points) and the two categories did not differ significantly from each other. Supplementary analyses for this bar, however, in which three or five items served as the omitted category did not suggest that those two cut-offs were statistically more robust than the four item threshold, insofar as the predicted probabilities of all three item categories (three, four, or five) were
statistically indistinguishable from each other. Results were thus less supportive of a clear cut-off point for the mother-only bar, but suggest that a four-item cut-off is a reasonable threshold for the other definitions of the bar.

2.4 Discussion

This study examined the economic bar to marriage, a commonly referenced, yet arguably understudied, concept in the literature on marriage among low-income couples. Our results suggest that the enthusiasm for the “marriage bar” is warranted, insofar as meeting the bar was positively associated with entry into marriage. Importantly, the bar’s associations with marriage could not be accounted for by changes in earnings or employment, underscoring the bar’s legitimacy as distinct from individual key economic indicators. Additionally, meeting the bar did not make couples more likely to cohabit (in some definitions, the bar was associated with decreases in cohabitation), consistent with the idea that the economic bar pertains only to marriage entry (Gibson-Davis et al., 2005). Positive associations with marriage were robust to different definitions of the bar and different index items used in bar composition. In short, the economic bar passed our theoretical and empirical tests, and performed as an important predictor of marriage entry among low-income couples.

One of our key contributions was to examine the gender of the parent who achieved the economic bar and our findings add nuance in this area. We found evidence of the importance of both mothers’ and fathers’ economic contributions in marriage transitions. Low-income couples have described the economic bar as a couple-level indicator that is not unique to either the male or female (Edin & Kefalas, 2011; Rackin &
Gibson-Davis, 2017). Consistent with those findings, at 15 months, relative to couples who did not meet the bar, couples who met either the mother-only or the father-only bar were significantly more likely to be married rather than cohabiting. Yet the magnitude of association with marriage entry was significantly larger for the father-only than the mother-only bar, and at 36 months, only the father-only bar remained significantly related to marriage. Thus, like others (Smock et al., 2005) our findings suggest that father’s economic contributions may be more important than mother’s in determining marriage entry. Nevertheless, consistent with the bar’s theoretical underpinnings, the bar’s association with marriage was not driven solely by the father’s contributions.

Achieving the economic bar was positively associated with mothers’ reports of relationship quality. Meeting the bar was associated with small increases in relationship quality in the two versions of the bar in which, by definition, the mother had to have contributed. For the two versions of the bar in which the mother did not necessarily need to contribute, meeting the bar was not associated with relationship quality. Thus, in contexts where the mother reported making positive economic gains, she also reported feeling more support and affection in her relationship; when those gains were not present, a mother reported no difference in the tenor of the relationship. The associations with maternal relationship quality were small, and when compared to father’s, were not statistically significantly different at conventional levels. Nevertheless, the findings highlight the importance of achieving the economic bar for maternal relationship quality.

Our study has limitations. Results are descriptive, not causal, and may be biased by unobserved factors. Data limitations meant that we could not include other important
components of economic well-being, such as a couple’s asset levels, and our three-item measure of material hardship may be insufficient to measure economic hardship more generally. We could only evaluate one dimension of relationship quality (support and affection), while other important aspects (e.g., conflict or violence) were unobserved. Finally, the sample was voluntary participants in a relationships-skills intervention program. Results cannot be generalized to all low-income couples with a non-marital conception.

Our findings raise additional issues for future research. Our seven-item scale may reflect the presence of some underlying, unobserved propensity. This unobserved factor may be economic in nature, but it also could be something unrelated to economic circumstances, such as self-efficacy. It is also possible that the economic bar, like indices of adverse childhood experiences (e.g., Felitti et al., 1998) or cumulative risk (e.g., Evans, Li, & Whipple, 2013), represents the accumulation of related but distinct factors rather than representing an underlying construct. Our data do not permit us to disentangle these issues, but we encourage future research in this area.

Though not our study’s focus, we also found that very few couples moved into marriage. Even maintaining a romantic tie was difficult: by 36 months, the modal relationship category was being broken up. Our results are consistent with Fragile Families relationship trajectories (McLanahan, 2011), but differ from that sample insofar as all BSF couples were romantically involved at baseline. Thus, even in a sample where everyone has had a child in the context of a romantic relationship, nearly 25% will be broken up within 15 months, and over 40% within three years. The fragility of parental
relationships highlights the challenges policy makers face in encouraging union formation among low-income couples.

The encouraging news, for those wishing to promote union formation among low-income parents, is that meeting the economic bar was associated with marriage entry. We also provide encouraging results for scholars whose enthusiasm for the bar may have outpaced the evidence for its existence. Our quantitative data confirms the existence of this qualitatively-derived concept, suggesting that couple-level economic progress may play a role in marriage formation.
2.5 Tables & Figures

Table 2.1: Baseline Characteristics of Couples (n=4,444)

<table>
<thead>
<tr>
<th>Category</th>
<th>Mother</th>
<th>Father</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohabiting a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All of the time</td>
<td>61.6</td>
<td></td>
</tr>
<tr>
<td>Most of the time</td>
<td>11.0</td>
<td></td>
</tr>
<tr>
<td>Some of the time</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>14.7</td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, Non-Hispanic</td>
<td>17.2</td>
<td>14.0</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>56.2</td>
<td>60.2</td>
</tr>
<tr>
<td>Hispanic</td>
<td>23.5</td>
<td>23.0</td>
</tr>
<tr>
<td>Other, Non-Hispanic</td>
<td>3.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Age (mean)</td>
<td>24.81 (4.72)</td>
<td>27.11 (6.10)</td>
</tr>
<tr>
<td>Educational attainment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school diploma</td>
<td>51.6</td>
<td>47.5</td>
</tr>
<tr>
<td>GED</td>
<td>8.39</td>
<td>13.2</td>
</tr>
<tr>
<td>Other b</td>
<td>40.0</td>
<td>39.3</td>
</tr>
<tr>
<td>Employed</td>
<td>32.8</td>
<td>73.6</td>
</tr>
<tr>
<td>Annual earnings of employed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>22.3</td>
<td>8.1</td>
</tr>
<tr>
<td>&lt; $5,000</td>
<td>34.9</td>
<td>18.9</td>
</tr>
<tr>
<td>$5,000-9,999</td>
<td>18.2</td>
<td>16.8</td>
</tr>
<tr>
<td>$10,000-19,9999</td>
<td>18.0</td>
<td>32.0</td>
</tr>
<tr>
<td>$20,000+</td>
<td>6.6</td>
<td>24.2</td>
</tr>
<tr>
<td>Public assistance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash welfare/TANF</td>
<td>8.9</td>
<td>2.7</td>
</tr>
<tr>
<td>Food Stamps</td>
<td>43.3</td>
<td>18.5</td>
</tr>
<tr>
<td>Medicaid/SCHIP</td>
<td>72.8</td>
<td>31.6</td>
</tr>
<tr>
<td>Able to borrow from others</td>
<td>87.0</td>
<td>88.8</td>
</tr>
<tr>
<td>Attends religious services</td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Never</td>
<td>24.4</td>
<td>30.1</td>
</tr>
<tr>
<td>A few times a year</td>
<td>34.3</td>
<td>35.5</td>
</tr>
<tr>
<td>A few times a month</td>
<td>23.2</td>
<td>20.6</td>
</tr>
<tr>
<td>Once a week or more</td>
<td>18.1</td>
<td>0.1</td>
</tr>
<tr>
<td>English as primary language</td>
<td>87.0</td>
<td>86.1</td>
</tr>
<tr>
<td>Depression score</td>
<td>2.01 (.74)</td>
<td>1.91 (.72)</td>
</tr>
<tr>
<td>Number of children together</td>
<td>1.35 (.72)</td>
<td></td>
</tr>
<tr>
<td>Children with another partner</td>
<td>33.3</td>
<td>30.2</td>
</tr>
<tr>
<td>Time known each other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 year or less</td>
<td>33.3</td>
<td>34.5</td>
</tr>
<tr>
<td>1-3 years</td>
<td>18.3</td>
<td>18.1</td>
</tr>
<tr>
<td>3+ years</td>
<td>48.3</td>
<td>47.3</td>
</tr>
<tr>
<td>Mother pregnant</td>
<td>61.0</td>
<td></td>
</tr>
<tr>
<td>Relationship quality score</td>
<td>3.24 (.48)</td>
<td>3.32 (.46)</td>
</tr>
<tr>
<td>Good chance will marry each other</td>
<td>69.2</td>
<td>73.9</td>
</tr>
</tbody>
</table>

Notes: Numbers represent percentages unless otherwise indicated. Standard deviations are in parentheses. Sample is couples where at least one member of couple responded to the 15 month follow-up survey.

a Couple-level variable. b Includes those who answered either "none" or "other" to question. c Taken from mother's report.
Table 2.2. Economic Bar to Marriage Index (n=4,444)

<table>
<thead>
<tr>
<th>Percentage of couples who met bar</th>
<th>Either-parent</th>
<th>Mother-only</th>
<th>Father-only</th>
<th>Both-parents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>67%</td>
<td>28%</td>
<td>48%</td>
<td>14%</td>
</tr>
<tr>
<td>Economic Bar Index</td>
<td>4.13</td>
<td>2.56</td>
<td>3.42</td>
<td>1.84</td>
</tr>
<tr>
<td></td>
<td>(1.5)</td>
<td>(1.6)</td>
<td>(1.6)</td>
<td>(1.4)</td>
</tr>
<tr>
<td>Components</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private health insurance</td>
<td>0.54</td>
<td>0.28</td>
<td>0.45</td>
<td>0.19</td>
</tr>
<tr>
<td>Earnings growth</td>
<td>0.55</td>
<td>0.26</td>
<td>0.39</td>
<td>0.11</td>
</tr>
<tr>
<td>Home ownership</td>
<td>0.15</td>
<td>0.09</td>
<td>0.12</td>
<td>0.06</td>
</tr>
<tr>
<td>Bank account</td>
<td>0.61</td>
<td>0.46</td>
<td>0.52</td>
<td>0.37</td>
</tr>
<tr>
<td>Employment</td>
<td>0.77</td>
<td>0.37</td>
<td>0.65</td>
<td>0.24</td>
</tr>
<tr>
<td>No material hardship</td>
<td>0.82</td>
<td>0.64</td>
<td>0.66</td>
<td>0.48</td>
</tr>
<tr>
<td>No public assistance receipt</td>
<td>0.69</td>
<td>0.46</td>
<td>0.63</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Either-parent: either parent can contribute items. Mother-only: only mother can contribute items.
Father-only: only fathers can contribute items. Both-parents: both parents have to contribute item.
Notes: All measures are calculated on a 0/1 scale, and weighted by the couples’ response weight.
Data labels that are underlined differ from each other by cut-off score (p < .05).
Note: Results control for demographics, economic factors, and relationship characteristics of parents.

Figure 2.1: Predicted Probabilities of Relationship Status at 15 and 36 months, Meeting the Economic Bar, Either- Parent Definition (n=4,444)
Figure 2.2A. Predicted Probabilities of Relationship Status at 15 months, Meeting the Bar and Contributor's Gender (n=4,444)

Figure 2.2B. Predicted Probabilities of Relationship Status at 36 months, Meeting the Bar and Contributor's Gender (n=4,444)
Table 2.3: Impact of Economic Bar on Relationship Quality ($n=4,444$)

<table>
<thead>
<tr>
<th>Version of the bar:</th>
<th>15 month</th>
<th></th>
<th>36 month</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Mother</strong></td>
<td><strong>Father</strong></td>
<td><strong>Mother</strong></td>
<td><strong>Father</strong></td>
</tr>
<tr>
<td>Either-parent</td>
<td>-0.00 ($0.03$)</td>
<td>-0.01 ($0.03$)</td>
<td>0.01 ($0.03$)</td>
<td>-0.01 ($0.03$)</td>
</tr>
<tr>
<td>Mother-only</td>
<td>0.05† ($0.03$)</td>
<td>-0.00 ($0.03$)</td>
<td>0.07* ($0.03$)</td>
<td>0.00 ($0.03$)</td>
</tr>
<tr>
<td>Father-only</td>
<td>0.03 ($0.03$)</td>
<td>0.04 ($0.02$)</td>
<td>0.06† ($0.03$)</td>
<td>0.03 ($0.03$)</td>
</tr>
<tr>
<td>Both-parents</td>
<td>0.13*** ($0.03$)</td>
<td>0.07* ($0.03$)</td>
<td>0.14*** ($0.04$)</td>
<td>0.06 ($0.04$)</td>
</tr>
</tbody>
</table>

Notes: Standard errors in parentheses. Results control for demographics, economic factors, and relationship characteristics of parents.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$. 

15 month 36 month
Notes: Coefficients represent odds ratios. Solid color bars indicate statistically significant relative risk ratios (p < .05). Data labels that are underlined differ from either-parent economic bar cut-off (p < .05). Models control for demographics, economic factors, and relationship characteristics of parents.

Figure 2.3: Likelihood of Marriage, Comparison of All Bar Items to Individual Bar Items, 15 and 36 months (n=4,444)
Table 2.4: Comparison of Association Between Marriage and Individual Items At 15 Months ($n=4,444$)

<table>
<thead>
<tr>
<th>Either-parent</th>
<th>Number of items</th>
<th>Predicted value</th>
<th>Comparison to 4 items</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/1</td>
<td>0.086</td>
<td>-0.042†</td>
<td>203</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.088</td>
<td>-0.040*</td>
<td>481</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.092</td>
<td>-0.036**</td>
<td>820</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.128</td>
<td>--</td>
<td>732</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.111</td>
<td>-0.017</td>
<td>1,020</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.149</td>
<td>0.021</td>
<td>164</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0.243</td>
<td>0.116**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mother-only</th>
<th>Number of items</th>
<th>Predicted value</th>
<th>Comparison to 4 items</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/1</td>
<td>0.095</td>
<td>-0.058**</td>
<td>1,310</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.094</td>
<td>-0.058**</td>
<td>1,047</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.134</td>
<td>-0.019</td>
<td>867</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.153</td>
<td>--</td>
<td>637</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.153</td>
<td>0.000</td>
<td>384</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.144</td>
<td>-0.009</td>
<td>177</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0.362</td>
<td>0.210*</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Father-only</th>
<th>Number of items</th>
<th>Predicted value</th>
<th>Comparison to 4 items</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/1</td>
<td>0.061</td>
<td>-0.073***</td>
<td>537</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.083</td>
<td>-0.051**</td>
<td>769</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.104</td>
<td>-0.030†</td>
<td>1,031</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.134</td>
<td>--</td>
<td>950</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.134</td>
<td>0.000</td>
<td>710</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.198</td>
<td>0.064*</td>
<td>360</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0.284</td>
<td>0.150**</td>
<td>87</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Both-parent</th>
<th>Number of items</th>
<th>Predicted value</th>
<th>Comparison to 4 items</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/1</td>
<td>0.079</td>
<td>-0.114***</td>
<td>2108</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.120</td>
<td>-0.073***</td>
<td>1032</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.152</td>
<td>-0.040</td>
<td>678</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.193</td>
<td>--</td>
<td>391</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.237</td>
<td>0.045</td>
<td>175</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.219</td>
<td>0.027</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0.574</td>
<td>0.381†</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Predicted values from multinomial regression models. Results control for demographics, economic factors, and relationship and characteristics of parents. Coefficients in comparison column represent difference in predicted probabilities from having 4 items. Standard errors for the difference are in parentheses. 
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$. 

97
3. Early-Stage Career Decisions and Work-Family Strategies Among Medical Couples

Much of the recent changes in the realms of work and family have come from women, while men’s career paths and the culture of paid work have largely remained unchanged (Moen & Yu, 2000). While workplace policies have made some adaptations to facilitate dual-career households, and men now engage in more domestic work than past generations, the expectation remains that women will adapt and accommodate their work for the family (Becker & Moen, 1999; Gerson, 2010; Hochschild, 1989). Research on work-family balance often reflects this individual-level approach of two competing roles (career vs. family), where the individual in question and the strategies taken typically focus exclusively on the woman (Moen & Yu, 2000). However, evaluating couple-level decisions provides a more comprehensive picture of the ways that men and women navigate their individual career goals in relation to both their family goals as well as their partners’ goals.

To better understand how men and women in professional couples negotiate and balance their dual career and family goals, I use dyadic qualitative interviews with men and women in mixed-gender couples \((n=34)\) to examine the underlying decision-making process. Interviews are particularly well-suited for studying household decisions, due to the complex and private nature of couples’ negotiations and the often implicit way many couples make decisions (Silverman, 2011; Tichenor, 2005). I extend previous work by offering an inductive analysis of qualitative data gathered from in-depth, semi-structured interviews with a group of dual-career couples who illustrate this process quite well: medical student couples jointly applying for residency programs.
With these data, I evaluate whether there are systematic gender differences in how individuals approach joint early-stage career decisions and, if so, how individuals within a couple explain the process that led to this decision. More specifically, I ask: how do men and women in couples make career decisions, particularly when their individual decisions will directly impact their partner’s career? I interview each member of the dyad separately, which provides richer insight into the internal processes and negotiations that underlie observed career outcomes, by providing comparison both within and across couples. I explore the gender strategies couples evoke through discussions with partners regarding their decision-making process, questioning whether women more often explicitly consider their significant other and family goals when making individual career decisions. Furthermore, I triangulate the interview data with data on their personal preferences and ultimate residency application rankings, to evaluate whether the man’s and woman’s preferences were equally weighted, or instead one partner’s preferences were prioritized.

By speaking with students at an important career decision-making juncture, these data shed light on whether and to what extent individuals make career compromises for their partner, and how this may influence individual career outcomes. If women are making relatively greater career compromises in anticipation of joint career decisions than their partners, these decisions may be limiting their career potential. Indeed, I find that women more often than men reported considering their partner when making career decisions on their specialty and academic path. When applying for residency, couples most often either prioritized the man’s program preferences or took an egalitarian
approach. In couples where the man advocated for his partner’s career goals, the couples typically took an egalitarian approach. In contrast, in cases where the man was less outwardly supportive of his female partner’s ambitions, couples typically defaulted to prioritizing the man’s career when deciding their residency placement list. In general, women more often adapted their preferences for their partner, and focused on their relationship (rather than their individual career goals) to a greater extent than men. Similarly, regarding future work-family decisions, women were often the only ones to have practically considered how they would navigate childcare. This paper provides couple-level insights into the ways in which men and women describe making career decisions, and the gender strategies they evoke.

3.1 The Case: Medical Couples

The process of applying to residency serves as an ideal case study for understanding joint career negotiations. The physician career trajectory is quite explicit and deliberate, and couples must make many salient career decisions prior to submitting their joint application to “Match” to a residency program. Each of these decisions—which specialty to pursue, whether to take an additional research year, and how to navigate conflicting residency program preferences—may involve some level of compromise for their partner. To capture this multitude of important decisions pre-Match, I conducted interviews with students during their application process to better understand how men and women navigate work and family goals.

Focusing on medical student couples applying for residency offers several advantages. First, these couples have equal educational attainment, training, and similar
earnings potential, and are observed during their first major career decisions. This allows for a comparison of the career paths of partners on a more equal playing field than typically possible in research on dual-career households. Furthermore, couples have an explicit visualization of their individual and joint career preferences through a ranked list, and this group’s desires for highly-specialized careers with a specific and premeditated job search process and high likelihood of geographic relocation further make career negotiations overt. Finally, studying this privileged group enables me to better discern variation in negotiation processes by gender. These couples have the economic and social resources to better navigate structural and cultural barriers within the labor force, and their decision is less likely to be based on external factors (e.g., the availability of jobs they are qualified for, costs of moving, etc.) than lower-skilled couples.

3.1.1 Dual-Medical Couples

Since women were first admitted to medical school, the proportion of medical couples has risen: 34% of female physicians and 18% of male physicians under age thirty-five are married to physicians (Boulis & Jacobs, 2010). However, female physicians married to physicians are more likely to report domestic responsibilities that impeded their career advancement and cite work-life balance as an important reason for their specialty choice, compared to both male physicians married to physicians and to female physicians married to non-physicians (Garibaldi, Popkave, & Bylsma, 2005; Novielli, Hojat, Park, Gonnella, & Veloski, 2001; Tesch, Osborne, Simpson, Murray, & Spiro, 1992). In addition, the pay gap is especially pronounced for women in medical couples, who in 2000 earned 60% (55% for parents) of what their husbands earned.
(Boulis & Jacobs, 2010), and the median value of their income as a percentage of their partner’s income has declined over time (Hinze, 2004). Regarding hours worked and childcare, recent research shows that, among dual-physician couples, weekly hours worked by women with children were significantly lower than for women without children, whereas similar differences were not observed for men, and that this pattern remained consistent from 2000-2015 (Ly, Seabury, & Jena, 2017).

To understand this disparity in professional achievement among men and women in medical couples, it is important to evaluate how men and women make early-stage career decisions. This is particularly salient as the number of medical students who form couples early in their training rises. Many of these early decisions have an important and cumulative effect on the opportunities available to male and female physicians. Here, I outline the various decisions and the ways in which such decisions influence future negotiations and impact a student’s career outcomes.

3.1.2 The “Couples Match”

All medical students who intend to become physicians must Match to a residency program, and where they Match for their training has significant implications for their future career success. Through an official process known as “Couples Match,” medical student couples may opt to link their ranked lists of preferred residency programs. Each partner submits their rank-ordered-list (ROL) of residency programs, and the matching

---

1 To my knowledge, no more recent study has measured earnings of dual-physician couples.
2 Residency placement matters for meeting one’s career goals. As described by Olson et al. (2011), “For example, for students wishing to do research, they will be interested in knowing how this academic pursuit will be fostered during their time at that program…For someone interested in purely clinical medicine, the breadth and depth of both required and elective rotations will be most important. International health experiences, teaching opportunities, location of the program, or anything else an applicant considers important will be a factor in deciding on programs.”
algorithm treats the two lists as a unit, matching the couple to the highest pair of program choices where both partners obtain a Match. This process requires applicants to each translate their individual preferences into a joint ranking.

The option to Couples Match was introduced in 1984, through the National Resident Matching Program (NRMP). The NRMP is the private organization that places medical students into residency training programs by optimizing the rank-ordered choices of applicants and residency program directors. In 1987, the earliest available data shows that 347 couples participated. In almost every subsequent year, the number of couples electing to Match together has increased: in 2018, 1,165 couples Matched together. While the process has become increasingly popular, there is little available data or agreed upon information on best practices for couples.

At its core, Couples Match allows students to better control their joint outcome. Beyond this, couples can employ any number of strategies to translate their personal preferences into a joint ranking to submit. The Couples Match is agnostic to the strategy couples employ; individuals can decide how far is too far or at what point on their list to live apart. Some couples may want to ensure they Match to the same city for every ranked choice, while others may choose to rank their top choice first (even if they are in different locations) and then rank programs in the same location further down their list. Couples can also decide when to “break their list,” or at what point they prioritize living apart at their separate preferred locations in lieu of geographic proximity at a less preferred location.
3.1.3 Pre-Match Decisions

While some students enter medical school with a clear idea of the specialty they want to pursue, most students intentionally keep an open mind. In medical school, students spend their third year in clinical rotations to learn more about the different specialties. It is in this penultimate year that most students decide which specialty they are most interested in training in during residency. This year also happens to be when many couples make the decision to Couples Match.

In general, matching to a more-competitive specialty is challenging. Competitive specialties are those that have a small number of resident slots per year, or are only offered in specific hospitals, and tend to be surgical (e.g., Thoracic Surgery, Obstetrics and Gynecology, Orthopedic Surgery, Otolaryngology) or have attractive lifestyles with flexible hours and high pay (e.g., Dermatology, Radiology, Anesthesiology). For example, there were 60 available positions in Vascular Surgery in 2018, compared to 7,542 available positions in Internal Medicine. More-competitive specialties tend to have longer residency training periods and higher lifetime earnings as well (Nicholson, 2002).

When one member of the couple is pursuing a competitive specialty, each partner often must apply to more programs, be more open to ranking programs that they would not otherwise be interested in, decline interviews at places their significant other cannot interview, and/or accept a likelihood of living apart for several years. Furthermore, it can

---

3 Most matriculating medical students report being “Undecided” on their specialty. Source: American Association of Medical Colleges’ Matriculating Student Questionnaire 2017 (https://www.aamc.org/download/485324/data/msq2017report.pdf). This was also supported by the interview data.

also make it more difficult for the couple to successfully Match (i.e., to go “unmatched”).
Thus, the Match process may be much more difficult when one or both partners is
pursuing a competitive specialty with limited residency options. If an applicant does not
Match, he or she has the option to either Match to whichever specialty and program has
available spots, or exit medicine entirely.

Electing to Couples Match may require applicants to compromise on their
specialty preferences to ensure a successful Match. There have been many potential
explanations given for why, despite gender parity in medical school enrollment, women
remain substantially underrepresented in many competitive specialties (e.g., Jagsi,
Griffith, DeCastro, & Ubel, 2014). One unexplored mechanism may be their partner,
particularly given that over one-third of female physicians partner with male physicians.
If women are more likely than men to consider their partner’s career opportunities when
deciding on their specialty, they may be less likely to prioritize their own career interests
than men. The specialty decision has important implications for lifetime earnings, with
substantial differences particularly between more- and less-competitive specialties, and
high switching costs mean that few physicians switch specialties once they have
completed residency training (Nicholson, 2002).

Another significant consideration students make is whether to take an additional
year of research during medical school. Students, particularly those who intend to pursue
research-intensive and/or competitive specialties, often elect to take an extra research
year between their third and fourth years of medical school to make themselves more
competitive applicants for residency. However, a central feature of the Couples Match is
that the students must be in the same academic year. Thus, taking a year for research is also a personal career decision that can directly influence one’s partner’s career. How men and women in medical couples describe their decision to (not) take a research year is also illustrative of the various career decisions people make with implications for their future career goals.

3.2 Methods

3.2.1 Recruitment

I interviewed 34 medical students (17 couples) from medical schools across the United States (see Table 3.1 for overview of sample).⁵ These students were recruited from an original survey of medical students in six U.S. medical schools conducted in October 2017.⁶ The schools span several regions (three in the Southeast, two in the Midwest, and one in the Northeast), and vary across national rank, research-intensity, public and private control, and community focus. Any student who was in their final year (MS4) was asked if they would be willing to participate in a follow-up study. In December 2017, I reached out to respondents who indicated they were in a relationship with another MS4 medical student (married, cohabiting, or dating). I asked respondents if they and their partner would be willing to participate in a follow-up interview about the application process.⁷

---

⁵ I recruited 36 medical students. One couple broke up before submitting their ROL, and were not included in the sample.
⁶ Please see Lehrman (2018a) for more detailed information about the survey design, recruitment, and sample.
⁷ Recruitment email text: “Earlier this year, you completed a survey on the Match, and expressed interest in participating in a follow-up interview about the application process. We are particularly interested in the experience of Couples Match applicants, and hope to interview you and your significant other before Match Day.”
In many ways, the sample reflected the overall medical student population. Regarding relative specialty competitiveness, in two couples neither partner was pursuing a competitive specialty, in two couples only the woman was pursuing a competitive specialty, in seven couples only the man was pursuing a competitive specialty, and in six couples both partners were pursuing competitive specialties. The distribution of applicants pursing competitive specialties was higher than the overall medical student population (47% of the women and 76% of men), but the patterns by gender were consistent. The average age of the respondents was 27, with the youngest student having gone straight from undergraduate to medical school and the oldest student taking five years in between to work. The majority of respondents were white (59%), followed by Asian American (26%), African American (12%), and one Hispanic respondent.\(^8\) By the nature of the process of Couples Match, the majority of respondents were in serious relationships. Of the 17 couples, four were dating, seven were cohabiting, five were cohabiting and engaged, and one was cohabiting and married. They had been together an average of three years. All couples were childless, and given sample restrictions, this study focuses on mixed-gender couples. Partners did not need to be in the same medical school as their significant other to participate, but all couples were at the same medical school.

\(^8\) While there is no official measure of competitiveness, the most commonly used definition is based on the number of available residency positions per U.S. senior medical student. Highly-competitive specialties were those whose ratio was less than one. Source: National Resident Matching Program’s Main Match Results 2017 “Table 13: Applicant Choices by Specialty.”

\(^9\) This racial/ethnic distribution reflects the overall U.S. medical student population. Among all U.S. medical students, the sample had slightly fewer White respondents (compared to 65% of the overall population), more Asian respondents (compared to 23% of the overall population), and more African American respondents (compared to 6% of the overall population). Source: 2018 All Schools Summary Report, Medical School Graduation Questionnaire, American Association of Medical Colleges, [https://www.aamc.org/download/490454/data/2018gqallschoolssummaryreport.pdf](https://www.aamc.org/download/490454/data/2018gqallschoolssummaryreport.pdf).
The interviews were conducted with each member of the couple separately, and within as short a time frame as possible. Given the joint nature of these decisions, it is critical to collect information from both members of the couple to compare each person’s perceptions and interpretation of the process (Hertz, 1995). I interviewed both partners separately to assess differences in work and family desires across individuals. Because the goal of the research was to identify the narratives partners used to convey their decision-making process, interviewing them together would have biased the results. To avoid cross-partner contamination, interviews were conducted back-to-back if possible. If not possible, I asked the first interviewed partner to refrain from discussing the interview until their partner had also been interviewed.

Interviews were conducted between February-March 2018, after students had completed their program interviews but before receiving their residency results on March 12, 2018. This short time window was intentional; I wanted to interview couples after they had created their personal preferences rankings based on their interviews, but pre-Match Day, to avoid choice-supportive bias, i.e., ex-post rationalization once their residency program outcome had been determined.

3.2.2 Interviews and Materials

Data were in the form of (1) interview transcripts, and (2) copies of their personal preference lists and joint submitted lists. Once students consented to being interviewed, I set up an interview date and requested that students fill out their personal preference lists (see Appendix A for official worksheet). This allowed us to walk through how they
translated their personal lists into their joint list for submission during the interview.  

The semi-structured interviews were based on a general interview guide (see Appendix B for guide). I first asked questions about their personal career goals, such as the decision to become a doctor and their preferred specialty, as well as their future career goals. Next, I asked about their partner, and the joint decisions they have made or anticipate having together. I also solicited information about their decision to Couples Match, the interview process, and ultimate translation of their individual preferences into their joint list. Finally, I asked about future expectations for their career, intended fertility, and (if applicable) childcare plans. Since each interview roughly followed this interview guide, I was able to compare narratives within and between couples.

The underlying theme I looked for in these discussions was the extent to which individuals considered their partner when making individual career decisions. For example, whether one or both partners chose a less-competitive specialty to increase their likelihood of both successfully matching or in anticipation of future work-family conflict. To operationalize compromise from the perspective of each applicant, I asked the students to talk through the process of translating their residency preferences into a joint application. I solicited detailed information on the strategies couples employed when creating their applications, such as creating individual lists first, or prioritizing

---

10 Respondents were instructed to fill out their personal preference rankings without considering their partner. This follows the general advice Couples Match applicants receive, and all but two couples in the sample said they had followed this practice. For the other two couples, I asked them to create such a list for the interview. Because I cannot be certain that their personal rankings do not still take their partner’s preferences into account, I also cross-reference these lists with what they describe to be their personal preferences after their interviews and before creating their joint list. In practically every case, their recollection mirrored their personal ranking. If anything, their personal ranking was the preferred data point, as some respondents initially forgot about programs in the interview, only to remember them later.
geographic proximity or program reputation. Lastly, I learned more about their plans to coordinate family and career goals, such as further fellowship training or childcare plans.

Whenever possible, I conducted interviews either in person or face-to-face virtually through videoconferencing. Local participants chose whether they preferred to meet on campus, at a local coffee shop, or at their own homes. If respondents lived outside of North Carolina’s Research Triangle area, I conducted interviews virtually. Only two interviews were conducted over the phone, at the request of the respondent. Interviews lasted 76 minutes on average, with the shortest interview lasting 43 minutes and the longest lasting 97 minutes. I audiotaped and took notes during all interviews.

3.2.3 Data Analysis

I used NVivo 12, a qualitative data analysis program, to organize and code interview transcripts. My methods are informed by grounded theory, which emphasizes the importance of theory building rather than theory testing. My research questions guided the questions I asked during the interviews; however, I do not use data to confirm or reject any established hypotheses. Instead, I drew inferences from the data and develop theories based on participants’ responses. In this way, I allow the data to speak for themselves instead of attempting to put responses into a larger theoretical framework.

The data analysis consisted of several stages. Initial analysis took place after each interview, where I used memos to note first impressions of the interview, observations about the “feel” of the interview (language, rapport), and general attention to the overall research question and salient themes that emerged. After the interviews were completed, I began a flexible coding process for all transcripts. Prior to coding, I developed a
codebook of pre-set codes based on the research questions, including narratives of compromise and career precedence. I focused on the specific career decisions that each student must make—specialty, research year, applying to residency—to determine the point at which they began to consider their significant other. I also focused on differences by gender, through comparisons within and across couples. This comparison provided insight into whether partners agreed, and under what circumstances their responses differed.

When reading transcripts, I identified patterns across interviews. I established patterns that developed using the predetermined codes, while creating emergent codes as well. Codes that emerged involved the common narratives that many respondents used to describe how they formed their joint ROL. I then developed ways of categorizing the data within each code, checking them against the data and refining the codes. After the identification of relevant themes, I focused on collecting examples of those themes and examining them in order to find patterns of commonalities and differences. Finally, I compared and contrasted cases to gain a more holistic understanding of underlying mechanisms. Specifically, I sought to compare students who made career sacrifices for their partner and those who did not, with a focus on the student’s gender. Because I am interested in the strategies couples use, I present the results at the couple-level, and compare across dyads to draw out emergent themes.

Each couple served as a case in the analysis. I read each partner’s transcript in tandem with the other partner’s transcript. Reviewing each partner’s transcript in tandem allowed me to explore the interrelationships between partners’ responses. Before reading
each individual transcript, I reviewed the couple’s ROLs to contextualize whose program preferences were prioritized. To determine this, I compared their personal preference rankings with their submitted list. If the couple’s submitted list closely resembled one partner’s personal rankings, I considered that partner’s career to be prioritized. If either partner’s personal ranking dominated their submitted list, such that neither partner received their top choices or there was a relatively equal exchange of their top choices, I considered the couple to have an egalitarian list. All names have been replaced with pseudonyms and potentially identifying information removed.

3.3 Findings

“I think that the keyword in the Couple's Match process is ‘compromise’...Compromise is the key word and it's a lot of it.” – Robert

“If you meet someone halfway, you just both end up not getting what you want...If you try to meet someone 50-50, you just both get a mutually dissatisfying scenario.” – James

The decision to Couples Match is one that no couple in the sample took lightly. Linking one’s residency placement to another person was a significant choice for respondents, all of whom had worked very hard to get to their final year of medical school.

Because I am interested in the decision-making process, and the point at which individuals consider their partner, I report the results of the analysis in the chronological order in which couples make various career-based decisions. I first explore one of the earliest decisions medical student couples can make: medical specialty. I provide evidence that some students considered their partner when determining their specialty, either considering the future family life they wanted or more immediately their Match
success, to illustrate an example of an individual-level career decision prior to the Match. Next, I analyze students’ decision to take or not take an additional research year, and their reasons for doing so. Finally, I expand upon the ways couples negotiated their residency program rankings and how they explained career prioritization in the Match.

3.3.1 Deciding on a Specialty

Which specialty to pursue is a critical decision in a student’s career trajectory (Olson, Oatts, Fields, & Huot, 2011). For medical couples, a student’s specialty decision is an individual choice with indirect implications for the other partner’s career. Specialties can either be more- or less- competitive and this can impact one’s joint Match process.

The choice of specialty serves as a strong test of whether individuals acknowledge their partner as a relevant factor when making this personal career decision, and whether this differs by gender. Because the specialty decision was one that respondents made many months prior to being interviewed, it can be challenging to get unbiased retrospective answers about the factors that they considered when choosing their specialty. However, I aimed to avoid this problem by asking them to walk me through their process of deciding on their specialty, from entering medical school up until their ROL submission. I find that while most respondents felt their specialty decision was their own, five female respondents (29%) and none of the male respondents explicitly mentioned their significant other and the Couples Match as factors in their decision. I focus first on the cases where men and women claim the decision was not based on their
partner, next describing the couples where the women acknowledged considering their partner.

Among the twelve couples in which neither member took their partner into consideration, students either did not mention their partner at all in their decision, or mentioned their partner was influential as a source of support. In four couples, neither partner mentioned the other when asked about deciding upon a specialty. For three of them, they entered medical school with a solid sense of what they wanted to specialize in. For example, Tim and Jennifer (pursuing Neurological Surgery and Psychiatry, respectively) said they independently decided upon their specialties. Said Jamie, “[Tim] was very set on Neurosurgery from the beginning and I was very set on Psychiatry,” and Tim did not mention Jamie when describing his path to determining his specialty. One couple, Ethan and Kathryn (Radiology and Emergency Medicine, respectively), in fact broke up during their third year. By the time they reunited they had both decided on their specialty without input from the other partner. When asked whether she and Ethan discussed their specialties, Kathryn said:

I don't think so, 'cause I had decided on EM while we were broken up, and then he had decided on Radiology while we were broken up. And we just got back together and he was like, ‘I'm gonna go into Radiology.’ And I said, ‘Great, I'm going into EM.’ ‘Great.’ That was kind of the extent of that. – Kathryn

Therefore, in four couples in the sample, neither partner felt that their partner influenced their choice, or was influenced by their choice.

For eight other couples, one or both partners mentioned that their partner helped them make their specialty decision by providing a supportive ear. For example, Tyler and
Amanda (pursuing Pediatrics and General Surgery, respectively) each discussed how their partner helped them to more clearly see which specialty made them happiest. When asked if they influenced each other when making their specialty decision, Amanda said:

> I think so. It's always good to have a partner who's supportive of what you're deciding to do and just having somebody kind of reinforce like, ‘Yes, I definitely see you in that career.’ And just basically saying, ‘If you're doing so well in Surgery, you're clearly capable of being a surgeon.’ Very supportive of me doing that. And I like to think that he felt very supported by me. We probably did influence each other, but I feel like it's more of a support and kind of being a third party and seeing how that person felt during that rotation and being like... ‘I remember when you were not very happy during this rotation. I remember when you were happy during this rotation.’ And just kind of being there to remind them of that. – Amanda

Thus, the way that Amanda interpreted influence was in a positive way that encouraged her choices. Tyler was initially considering Surgery, and said although it would have been more challenging to Match together, “[Amanda] never made it a primary influencing factor,” and he soon discovered he enjoyed Pediatrics much more.

Within these eight couples, the female partners were much more often (5/8) the ones who discussed supporting their partner. For example, Noah and Kelly (pursuing Radiology and Obstetrics and Gynecology, respectively) each talked about their own personal path to their specialty. Noah said, “I kinda lucked into [Radiology].” He discussed his circuitous route to choosing his specialty, and why it interested him. He did not mention his partner, Kelly, when making this decision, and when asked whether the Couples Match ever factored into his specialty decision, he simply said, “No.” In contrast, his partner Kelly said,

> We both said, ‘We want to choose specialties that we wanna do.’ And we were there to talk to each other about it and help each other to reach what
we wanted to do, but we weren't gonna try to sway each other into one or the other. – Kelly

Kelly talked about her passion for Ob-Gyn, but also acknowledged the important role they each playing in assisting with their personal decisions. Brian and Margaret (pursuing Anesthesiology and Internal Medicine, respectively) also exemplify a similar approach to deciding on their specialties. Margaret entered medical school with a clear idea of what she wanted to specialize in; her ultimate career goal was to pursue oncology research and Internal Medicine was the clear path forward. In contrast, her partner, Brian, chose Anesthesiology after he was exposed to it during his clinical rotations, and was attracted to it being “hands on and fast paced,” as well as the “work-life balance it offers.” When asked whether they considered their partner when making their specialty decisions, they each said:

I always wanted to do Medicine, so it wasn't really a discussion. For him, I think earlier on, he didn't know what he wanted to do and we would talk about that sometimes and his frustrations about not being sure what he wanted. I don't think I influenced his decision and all, but we definitely talked about it. He talked about his experience going through that and finding Anesthesiology and feeling like it was a really good fit. – Margaret

I don't think that our specialty choices or anything like that had anything to do with... I don't think either of us took the other into consideration. – Brian

Thus, these couples said they did not take the other into consideration when making their specialty. Instead, they described a love of the specialty to be the most important consideration when deciding on their specialty. But, they did influence each other by offering support, and the partner who was more often the one to describe offering support was the woman.
Finally, among the remaining five couples, the male partner did not mention their partner was an influencing factor, while the female partner explicitly acknowledged considering their relationship when deciding upon their specialty. These women brought up a few themes: (1) the challenge it would pose for Couples Match, (2) their future family life, and (3) their partner’s opinion.

Women in two couples brought up the challenge their initial specialty interest would pose for the Couples Match. Jane was initially considering a more competitive specialty (General Surgery), and described her decision to pursue Pediatrics thusly:

So I think that was always part of the decision-making process is the practical point of going into Surgery would be much harder...we also knew that it'd be tough going into Couples Match and still wanting to be at one of the top programs. – Jane

Thus, Jane decided to pursue a less-competitive specialty to facilitate an easier Match for her and her partner David, who was also pursuing a less-competitive specialty. In contradiction, David did not perceive Jane to have taken his career or the Couples Match into consideration. David said, “[Couples Match] didn't affect our decisions, no…We've been very fortunate that we've rather circumstantially decided to both pick pretty non-competitive specialties.”

Similarly, Dawn considered the Couples Match with her partner, Henry (pursuing General Surgery), when deciding upon her specialty. Dawn was seriously considering Urology, a specialty that does not participate in the Couples Match process, but instead matches on an earlier schedule than other specialties. But, she decided against Urology in order to increase the chance that she and Henry would Match together. Dawn explained how this factored into her decision to pursue General Surgery instead, “So I would find
out and then he would basically have to decide if he wanted to follow me there even if there was no good institution for him. So I think that also made General Surgery a little more appealing just to be able to control it a little bit more.” Thus, although Dawn had a strong research background in Urology, she ultimately chose a different, albeit still competitive, specialty after considering her partner Henry’s strong preference for a competitive specialty. In contrast, Henry explained Dawn’s decision differently: “Then she decided to do Surgery instead of Urology because it was similar but not the same that there's more stuff that she enjoyed in Surgery than Urology.” In his telling, the decision was based entirely on her interests.

Another distinct theme emerged with Grace, who explicitly mentioned considering her future family goals when deciding to pursue her specialty. She based her decision to pursue Pediatrics instead of Orthopedic Surgery in part on her relationship and her future with her partner Jack, who was pursuing a competitive specialty (Neurological Surgery). Grace explains,

I could have matched somewhere, but it would have made it really hard for Jack and I to Match together because Ortho is just so competitive…I feel like if I were a single person, and I wasn't in a relationship, I guess, maybe, I would have been more absorbed into myself, been like I'm just gonna take a risk. Maybe, do Orthopedic Surgery, maybe take an extra year, do more research or something. But being in a relationship with someone, having a pet that I love, and wanting to spend time with someone I love, I think all those things are what bring me more happiness in life, rather than doing a specialty I think is really cool. I think having time to share with people and animals that I love are just a little more important to me, and I feel like I can still feel really fulfilled and help so many people through Pediatrics, which just has a better lifestyle for the most part. – Grace
Grace attributes her specialty choice (and other individual career decisions such as not taking an extra research year) to her vested interest in her relationship. She notes that she selected Pediatrics due in part to the lifestyle it affords, which will allow her to spend more time with her family. Again, Jack described her decision somewhat differently: “She was going between Orthopedics and Pediatrics for a while, but she realized she liked working with children more. We were both just really supportive of each other.” Again, this couple had different narratives for whether they considered their partner when making their specialty decision: the woman described it in terms of intentionally considering her relationship, while her partner attributed her decision to her relative enjoyment of the two specialties.

Lastly, in two cases, female respondents described their partner’s apprehension at their consideration of more competitive specialties. In both cases, their partner also planned to pursue a competitive specialty, and these women described situations where the man appeared to discourage her interests in order to promote his own interests. When Molly was considering Dermatology, she said regarding her partner Nate, “He was afraid that we wouldn't be able to Match, if I was Dermatology and he was Otolaryngology. I think he was afraid that he'd have to compromise and go to a worse school if I was doing Dermatology, but ultimately it didn't matter. I decided on Medicine.” However, when I asked Nate, who said he decided on Otolaryngology early on in medical school, whether he and Molly considered each other when deciding their specialty, he said,

Nope. I think one of the tenets that we had is that if you're gonna do something, you need to love it and you're gonna do it for more hours than you're gonna be home per day. And if you're unhappy doing what you're
doing at work, you're not gonna be happy hanging out with the other person. So even if it's hard, just go for it. – Nate

He said that he thought Molly would be happier in Internal Medicine, and did not think his partner entered his own specialty decision at all.

Kayla decided to pursue Dermatology, but described the pushback she received from her partner James, who was pursuing General Surgery. When she settled on Dermatology, she recalled, “James also wasn't the biggest fan of it either, just because Dermatology is fairly competitive to get into, and with the Couples Match it's difficult because if I only got so many interviews, then that would also limit where he was able to go.” Ultimately, Kayla also applied to Internal Medicine programs, and explained that she added this secondary specialty as a backup to ensure she was not limiting James’ opportunities to Match to his preferred highly-competitive specialty. James instead described her decision to apply to both Internal Medicine and Dermatology as one of indecisiveness. He said: “Well, one it was tough because she was sort of less decisive on what she wanted to do. She applied to a couple of different things.” Thus, this suggests that women may perceive that her partner is averse to having to make compromises due to her specialty, while men may perceive their partner’s subsequent choice to compromise on her specialty as more of a fortunate coincidence.

To summarize, within the couples, 17 men and 12 women described their specialty decision as a personal choice that was not impacted by their partner’s career. These students described the process of deciding on a specialty as finding the specialty that made them happiest. Among these men and women, the women were much more likely than were the men to acknowledge their partner in terms of the support they
provided them. There was a clear gender difference among those who did explicitly admit to considering their partner and future family plans: all of the respondents who described that were women, while all of the men in the sample chose their specialty without explicit consideration of their partner’s specialty. Furthermore, when women described considering their partner’s career in making their own specialty choice, this decision appeared to be on the women themselves, and the men were unaware or unwilling to admit their role. Of course, it is also possible that men did consider their partner, but did not feel comfortable disclosing this, or were not conscious of the way their partner’s career affected their path.

3.3.2 Taking a Research Year

Once a student has decided on their intended specialty during their third year, the next question for many becomes whether to take an elective extra year before their final year for research or a Master’s degree. A research year provides students with a chance to strengthen their residency applications with additional publications. While not necessary, particularly for those students who are already conducting research during medical school, it can be helpful for students who plan to pursue a more-competitive specialty and/or seek an academic career. Electing to pursue a Master’s degree can also help facilitate future career goals; for example, pursuing an MPP if a student wants to focus on policymaking or advocacy work within medicine. However, because students can only Couples Match if they are both in the same academic year, their partner may also enter into the decision. Therefore, either (1) one partner can take an extra year to help facilitate Couples Match if the couple are initially in different academic years, or (2) both partners
can take an extra year to continue to be in the same academic year. Taking an extra year is always beneficial for that applicant’s career prospects, due to the time it affords for research or additional training.

Five of the men in the sample took additional research years, and all felt it was advantageous for their career goals. Two of the men, Ben and Nate, took an extra year of research when their partners (Rose and Molly, respectively) took leaves of absence for mental health reasons. Said Nate,

> We decided actually to take a year off together. She was a little beat up from third year. I think she overworked herself a bit…And I knew that I wanted to do ENT, and so I would need to do research for us to have an easy Match…It was nice.— Nate

Taking an extra year of research allowed the men to stay on the same academic course as their partner and facilitate matching together, with the added benefit of improving their residency applications and increasing the likelihood of their own Match success. Nate’s partner Molly (pursuing Internal Medicine) said that Nate encouraged her to take an additional year both for her mental health, but also because he was already planning to take a research year. She said, “He was going to take a research year between third and fourth year all along. I was not. So we weren't going to Couples Match up until I took this extra year.” Thus, for these two couples, this additional year was helpful for both partners: for the woman’s mental health, and the man’s career. The extent to which the woman’s leave of absence was also done to accommodate the man’s career is more difficult to assess.

Three men took research years because their partners were a year below them in medical school. However, although taking an extra research year allowed them to
coordinate their final years for the Match, they said that their significant other was not a major part of the decision. For example, when asked whether his relationship factored into the research year decision, Robert said, “Honestly, I would say it didn't. I think the year out was for me, it had been something that I was thinking about since the first day of medical school.” His partner Rebecca agreed; when asked if Robert’s decision to take a year off was in part due to Couples Match she said,

   I don't think so. I think it was a separate decision. And I think he's really interested in research... I think that regardless of me, that's something that he would have really enjoyed and that he really did wanna do. And similarly, I didn't make a decision... My decision to not do a year out was in... I wouldn't have wanted to do a year out regardless of whether or not he was in the picture. So it makes it nice and I'm happy that that worked out that way, but I don't think that either of those decisions were specific to the relationship. – Rebecca

For Robert and Rebecca, who were pursuing General Surgery and Pediatrics, respectively, it was more important for Robert’s application to have a prolific research portfolio. It happened to be fortuitous that Robert was also a year ahead of Rebecca. In contrast, for Tyler and Amanda, Amanda was the partner who was pursuing the more-competitive specialty (Pediatrics and General Surgery, respectively). However, in this case Tyler was also a year ahead of Amanda. Regarding taking a research year, Tyler said “I thought it was beneficial. I think there are a lot of pros to it and not a whole a lot of cons.” But when I asked whether he thought his partner Amanda had ever considered taking a research year given the rewards, he said,

   To be honest with you I don't think I ever really asked her that question. But if she genuinely really wanted to, I suppose I would feel bad also not letting her do that, although we would be going into that understanding this would disrupt the whole thing. It would force us into long distance and make couples matching probably impossible and all that. – Tyler
Amanda did not mention ever considering a research year in her interview, but it is difficult to say whether her partner was a factor in this decision or not.

The narrative the four male partners used, that the decision was “for me,” contrasts starkly with the ways the women in the sample describe the decision. Margaret and Grace were both in the same year in medical school as their significant other, and the decision to take an extra year would have interfered with their plan to Couples Match. Margaret, who from an early age knew she wanted a very research-intensive, academic career in oncology, decided not to take an extra year. She said she considered taking additional research years, and when I asked her why she didn’t, said it was “Partially so that [she and Brian] could Couples Match” and that she “didn’t want to screw up the whole Couples Match.” Similarly, Grace, who had been considering more competitive surgical specialties, ultimately decided against taking a research year because of how it would complicate her Match with Jack:

And so I looked at all the Surgery gap years, but then I was nervous about not being able to Couples Match with him as well, so that was something that kind of made me decide like I'm definitely not gonna do a research year, I don't feel like risking not being in the same city or area as him. – Grace

Thus, the restrictions involved with the Couples Match adversely impacted these women’s decisions to pursue an extra research year. Interestingly, they did not mention ever discussing the option with their partners, Brian and Jack, who were both pursuing competitive specialties and perhaps could have benefitted from an additional year as well. Brian was likely averse to taking an additional research year because he was not
interested in an academic career, whereas Jack was already in a research lab and likely
did not need the additional year to devote to research.

Therefore, no woman in the sample decided to take an extra research year, and for
those who mentioned considering it, they cited their relationship as a key factor in
deciding against it. In each case, this extra year would have made it such that they could
no longer Couples Match. Five men in the sample did decide to take an extra year, and
this decision fortuitously facilitated their ability to Couples Match, and they felt that they
would have taken the additional time regardless of their partner. However, it is difficult to
draw conclusions because the majority of the sample did not take a research year, and
many students were already conducting research within their traditional medical school
trajectory. Moreover, the age gap between the men and women in the sample make it
more difficult to draw a clear comparison by gender; if the man took an extra year it
would facilitate Couples Match, whereas if the woman did it would hinder Couples
Match. There was no similar case in the sample of a woman who was a year above her
partner in medical school.

3.3.3 **Translating Personal Preferences into Joint Rankings**

Once students decided upon their specialty, they spent the early Fall of their
fourth year applying to and interviewing with various residency programs. Couples are
advised to construct their own personal preference rankings of programs, and then come
together to translate these individual rankings into a joint submitted ROL for the Match.
A large portion of the interview was focused on how individuals went about this process,
and how they described this process.
The three potential outcomes of the negotiation process were: (1) an egalitarian ROL, (2) the man’s preferences prioritized, or (3) the woman’s preferences prioritized. I categorized couples into one of these three outcomes based on their personal rankings, which I then compared to their submitted ROL to determine whose personal preferences were prioritized in the joint list. Table 3.2 shows the outcome of each couple’s submitted ROL, by the competitiveness of each partner’s specialty. Seven couples submitted an egalitarian ROL, ten couples prioritized the man’s program preferences, and one couple prioritized the woman’s program preferences.

The patterns reflected in Table 3.2 suggest that gender dynamics influenced these negotiations. When the man was pursuing a competitive specialty (man only and both competitive), more of these couples prioritized the man’s career (8/12). In contrast, couples where the male partner was not pursuing a competitive specialty (woman only and neither competitive) more often had an egalitarian ROL (3/4). The only case in which the woman’s career was prioritized was when both partners were pursuing a competitive specialty. To understand how couples describe the process of negotiating their individual lists and perceive the outcome, I focus in this section on the narratives and strategies used by men and women.

*Egalitarian.* The seven couples who had an egalitarian ROL were those who acknowledged from the onset that geographic proximity was more important to them than any one program. For example, Matt and Gina (pursuing Orthopedic Surgery and Obstetrics and Gynecology, respectively) were clear before starting the interview process that they valued living in the same place above all else. Said Matt,
But what we said was, we're married and we intend to start a family, so we're just not willing to live apart. We will have one of us not Match, so we can live in the same place rather than live in separate places and try to do long distance as residents for five years. – Matt

Matt was clear that they would prefer one person not Match to a residency program (which might result in that person having to completely reevaluate their career goals) than live apart. In particular, Matt was the one who ended up being more likely to go unmatched based on how they ranked their program options. After exhausting all their residency program combinations, the couple ranked all of Gina’s program options combined with Matt going unmatched, before then ranking all of Matt’s program options with Gina going unmatched. Gina described their priorities similarly:

I think, from the very beginning, we both went in with an attitude of, ‘We would be pumped to successfully Couples Match, period.’ And then, next tier we’d be like, ‘We would love to be at programs that are good in our respective specialties, if possible.’ But most importantly, we wanna end up in the same place. – Gina

Gina also put the highest priority on them living together, and acknowledged that both matching or being at “good programs” was less important to them. Similarly, Tyler and Amanda (pursuing Pediatrics and General Surgery, respectively) knew that being together was the most important factor for them. When describing how they translated their individual preferences into the joint ranking, Tyler said,

We're making sure that we're gonna be at the same program, even if it's not either of our favorite program. We'd still rather be together than split up and be at favorite programs. And that was just a decision we made. – Tyler

Tyler also made it clear that this decision was not without personal career sacrifices.

Amanda also discussed that they took care to rank their list such that they first exhausted all their programs where they would be together, and then from there ranking programs
“that are kind of in proximity, if you don't end up at the same place.” Thus, even when Tyler and Amanda broke their list, they still elected to rank programs that were relatively closer together rather than go with their favorite programs in disparate locations. While other couples mentioned that they cared about living together, these egalitarian couples were willing to make clear career sacrifices to do so.

Of these seven egalitarian couples, four mentioned using a third-party ranking system to create their list. Adam and Emma (pursuing Pediatrics and Internal Medicine, respectively) used an online user-written tool that took the individual ranked lists of each partner and then created a joint ranking based on the average of their individual ranks that also took into account geographic proximity. The closest program with the lowest average ranking was the one that became their joint top choice. Adam describes the process thusly:

Whatever the average came out to be, we just said, ‘Well, this is gonna be our list.’ We asked each other if there were any changes we wanted to be made or if there were any programs we absolutely didn't wanna go to, and that wasn't the case, and we just...To me, it feels like it's unbiased, right? – Adam

Robert and Rebecca (pursuing General Surgery and Pediatrics, respectively) took a similar but manual approach, creating average rankings and evaluating the list. Rebecca added up their individual rankings and sorted their joint list based on that average. While they considered changing some of the ordering, her partner Robert, in reference to their strategy, said,

It's not like I couldn't push back but it's like there's so many good programs on our list that number one, number two, at the end of it starts to become a little bit, not abstract, but it just doesn't matter as much. I think
that you're going to get good training at any of these programs. If your partner is going to be unhappy, then why force it? – Robert

Robert understood that this process would require them to each make concessions. He said, “I think that the keyword in the Couple's Match process is ‘compromise’…Compromise is the key word and it's a lot of it.” By outsourcing the ranking process, no one person’s preferences overly dominated the joint list, and each made compromises for the other partner. These four couples produced joint ROLs that were highly egalitarian, in that each partner’s preferences were equally weighed.

Particularly in the cases where the man was pursuing a competitive specialty (man only or both competitive), an overarching theme was the extent to which these male partners advocated for his partner and the importance of ensuring an equitable ROL. Couples in which the man did so adopted purposeful strategies, such as prioritizing proximity and utilizing third-party rankings, in order to facilitate an egalitarian ROL. Across these two strategies that resulted in an egalitarian list, the men in this group explicitly advocated for their significant other’s career goals, and were willing to make sacrifices on par with those of their female partner.

Henry spoke of considering “the net benefit for the two of us” throughout the process with his partner Dawn, who were both pursuing General Surgery programs. When I asked him to elaborate on what that meant for him, he said he wanted to pick programs “to make sure that we could both achieve [our career] goals” by matching to their respective fellowships and being productive academics. Similarly, Matt said regarding their process of constructing his and Gina’s list, “we both had the other person's goals and situation in mind more than our own.” This explicit consideration of
the other person’s goals facilitated an egalitarian list where each person’s personal preferences were weighed equally. Thus, these couples all expressed putting a priority on valuing each of their personal preference lists.

*Man Prioritized.* Nine couples ended up with a joint ROL that prioritized the man’s program preferences over the woman’s. In contrast to the narrative used by men and women with egalitarian lists, overall the couples who prioritized the man’s preferences were more likely to evoke relationship-focused (women) and career-focused (men) narratives. For the four couples where the man’s specialty or career goals were more competitive than the woman’s, the couple described this as the practical approach. For the five other couples, the women made significant career concessions for their partner’s preferences.

Female partners’ relationship-focused narratives were most explicitly evoked among the four women who were pursuing less-competitive specialties than their partner (recall that in two of these couples, the woman had already chosen a less-competitive specialty explicitly in order to accommodate their partner). As less-competitive specialties are those that have a greater number of available positions than more-competitive specialties, they felt it was reasonable to expect that the partner with the more-competitive specialty should determine their submitted ROL. For example, Elizabeth explains,

All the Medicine programs are great. There's a lot of discrepancies in the programs that he's looking at, and so I think he does need to be a little bit more discerning in where he puts number one because the programs do differ in how long they are. How much research they do? What kind of patients they see? How many faculty members they have? And those are real factors that could impact the quality of your training. And so in that
sense, I think he should be the one making some of those discerning
decisions, when I'm just like, ‘Any of these 10 are fine.’ Then he should
be the one looking at it. – Elizabeth

Thus, Elizabeth felt that she would receive good training at any of her program options.
Indeed, for Elizabeth and Michael, her top preference was a hospital without a Vascular
Surgery program, Michael’s specialty choice. As such, for him to pursue his career goals,
she was willing to forgo her top choice because she did not feel that it was huge sacrifice
given her other options. Michael also reflected that they “had an easier time deciding how
our rank list is going to go” due to her flexibility. Because Elizabeth ranked her options
based on what her partner’s options would be, their joint list was much easier to create.
Notably, Elizabeth mentioned that Michael was anxious that he was “squashing all her
hopes and dreams” by more heavily weighing his preferences, and that she had to
reassure him that this was not the case.

Similarly, Jennifer prioritized her partner Tim’s preferences more than her own,
due to the relative competitiveness of their specialties (Psychiatry and Neurological
Surgery, respectively). She said, “It could have been different if I was going into
something more competitive but, fortunately, it worked out that we're going into one of
the most competitive and one of the least competitive specialties. So, I could probably
follow him to wherever he gets a spot, and we always sorta knew that.” Jennifer noted
that because of the relative differences in their specialties, she and Tim both
acknowledged that his interests would be prioritized in their list. Tim corroborated this,
saying, “she was like, ‘I would be absolutely happy with any of those.’ So she pretty
much was just like you just decide what you want.” He also reflected that the process
would have been “really hard” if “you are dating somebody who also wants to go into a competitive field.” As with Elizabeth and Michael, Tim said,

I think I’ve probably spent more time talking about it with her than she’s wanted to talk about it. [chuckle] Literally, I’ve repeatedly ask her over and over and over, yeah. [chuckle] It's like, I don't think she's actually happy with, to the point where she's gotten frustrated and been telling me that essentially any of the top five that she'd be really happy to end up there. – Tim

In these cases, the male partner was an advocate for the women’s preferences as well. But drawing upon a relationship-focused narrative, they rejected this and described the man’s prioritization in practical terms—because there are fewer available positions for the man’s program, the couple should default to his preferences.

Thus, for four couples, the woman characterized her program options as more interchangeable or less important than her partner’s options; they discussed this feature of their programs as the justification for why their partner’s preferences were prioritized. It is also worth noting, as shown earlier, that two of these women (Grace and Molly) had attributed their specialty decisions to their partner. This suggests that these women’s concern for their partner’s interests and a perceived lesser importance of their own interests led them be more willing to compromise on their program rankings to acquiesce to their partner.

One couple where the man was pursuing a more-competitive specialty than the woman, Brian and Margaret (Anesthesiology and Internal Medicine, respectively), serve as an illustrative exception to the other four couples in this relative specialty category. Although Brian acknowledged that his partner Margaret was “a little more limited and the brand name of the place she goes to is very important [for her career goals in
oncology research]” than he was, his preferences were still prioritized in the submitted joint ROL. He was most interested in living in an enjoyable location. Because her top choice programs were not in his ideal location, they ultimately ranked lower on their joint list. Margaret used a relationship-focused narrative to explain this outcome: “I think I was more willing to compromise slightly than Brian was…I was more willing to budge because more of these places are acceptable to me than are to him.” When I asked her whether how she felt the ROL decision would impact her future career goals, she said:

I think that the top four places that we listed together would probably be the same if I was by myself. Maybe I'd rearrange the order, but they're all so close to being even it's not like I compromised in making that order. I don't, for the most part ... I mean I guess ... yeah, I don't know. I don't know (laughter). I don't know. – Margaret

Margaret’s uncomfortable laugh and uncertainty appear to belie her initial position that her compromise was insignificant.

The other four couples who prioritized the man’s top choices were those where the woman was pursuing a competitive specialty, and these women more unequivocally described the concession as a significant compromise. James’s partner Kayla was particularly interested in combined Medicine-Dermatology programs. However, James’s top choice did not offer this program. Kayla described this conflict thusly:

And there were places on his list that didn't work out well for me in terms of doing Medicine-Dermatology. And he very much fought for his places he wanted to go based on, ‘Well this would be a great surgical program for me, and you could be a Dermatologist anywhere. Like at the end of the day you're still a Dermatologist,’ and I would say, ‘At the end of the day, you're still a Surgeon.’ He was like, ‘No, no, no, no. It's different.’ And I'm just like, ‘But how is it different? In everything you have programs that are known for being really good at something, and you have other ones that may not be as good, so I don't understand how it could be different for me versus for you.’ And I still haven't gotten the best answer
to that, but all that I'm told is, ‘It's different when you're a Surgeon.’ – Kayla

While Kayla had to concede her preferred training in a combination Medicine-Dermatology program, which she was interested in because of the opportunities it would afford her career, James was less willing to compromise on his program. This contrasts to the way that Elizabeth conceded her top program because it did not have a Vascular Surgery option for Michael. The way James spoke about compromise provides some explanation: “If you meet someone halfway, you just both end up not getting what you want...If you try to meet someone 50-50, you just both get a mutually dissatisfying scenario.” For him, underlying this is an implication that his partner will instead be the one to make concessions, and they will likely Match to a program that limits his partner’s ability to meet her career goals.\footnote{While applicants can never be assured that they will successfully Match to a certain program, there are certain norms and practices that provide applicants with some insider knowledge about their chances. For example, when applicants rank their home institution first, often they are given some indication of whether they are “ranked to Match” (a program ranking that applicant to Match) by the Program Directors they have developed relationships with. In other cases, Program Directors may contact applicants and convey their interest in the applicant prior to Match Day.}

Similarly, Rose also made significant career concessions for her partner Ben (pursuing Pediatrics and Obstetrics and Gynecology, respectively). Rose ranked her top program very low on their list due to Ben’s preferences. In addition, she said she “put some programs that are really, absolutely not as competitive or good higher up.” Besides these programs being less reputable, a particular point of contention was that Rose’s only program option in Ben’s preferred program location was a small community program. Therefore, they ranked these programs much higher on their ROL than she would have otherwise wanted. Although she is interested in pursuing a competitive fellowship
program post-residency, she thinks “would be much more difficult, if not might not happen” if she matches to this community program. Therefore, Rose not only deprioritized her preferences, but also highly ranked programs that would perhaps make it infeasible to meet her career goals.

Just as the female partners in the previous section who prioritized their partner’s preferences described their options as interchangeable, the male partners whose preferences were prioritized also offered a similar narrative. However, the meaning behind these exchanges was different. James was adamant that the program decision did not matter to him. He said,

Really, a lot of these places are equal and it doesn't matter…It's just something that's stressful you know? And it's really so stupid because all these programs are so good, it really doesn't matter at all, but for whatever reason you just get into a head like, you have to go to certain places, and if you don't…– James

Thus, James asserted that he would receive excellent training at any of his options. Similarly, regarding his program options, Ben said, "it's not gonna necessarily... This isn't a make or break in anything I do, going forward after residency. And so that kind of helps.” Brian, too, whose partner Margaret made career concessions for his program preferences, was also clear that he had many good options. Said Brian, “as far as clinical training goes for the programs that are considered all of the top say 30 programs, top 25 or top 30 programs, they're all considered really good and you can get really good training at any of them…That was very reassuring to me, so I didn't necessarily have a number one.” Although these men all described having many good options, this was not
used as a reason why they deferred to their partner’s career preferences. Instead, they each provided a career-focused narrative that did not consider their partner.

While these men declared that all their options would provide them with excellent training, this did not indicate a willingness to compromise on their program rankings. Instead, these men framed the similarity of their options to assure themselves that they would be in the best possible place for their career regardless of what happened. Instead of indicating that their preferences should have less weight, this narrative may have been a way for the male partners to prepare for an ex-post rationalization that the outcome of the Match would be ideal for their career, in case they did not get their top residency choice.

Compared to the couples who submitted an egalitarian ROL, the male partners of the nine couples who prioritized the man’s program preferences took a more career-focused approach. While some men expressed apprehension regarding the outcome, they did not advocate for an equal weighting of each partner’s preferences. Rather, they looked to their partner to reassure them. These male partners did they perceive mutual compromise to be a necessary and central condition of the Couples Match process.

*Woman Prioritized.* One couple, Noah and Kelly (pursuing Radiology and Obstetrics and Gynecology, respectively), prioritized the woman’s program preferences. For this couple, the relationship- and career-focused roles were swapped. While they were both pursuing competitive specialties, Kelly said that she “had a very clear number one,” while Noah felt his program options “were pretty similar. I'm not the most picky, and I think that I'll be happy pretty much anywhere.” Additionally, they differed in their
feelings about each other’s top choice. Noah didn’t particularly like the location of Kelly’s top choice, whereas Noah’s top choice had a poor reputation for Kelly’s specialty. Said Noah about this, “Her reservations with it was more of an actual, program-specific issue, not necessarily like me, where I was harping on the geography of [her top choice program].” Thus, Noah “was willing to bite the bullet and sacrifice.”

Noah saw the career concessions Kelly would have to make for his preferences as more significant than his geographical preferences, and unlike the male partners in the previous section who mentioned that their program options were similar, deferred to Kelly.

Notably, although Noah said he would be happy at any place on his list, he also said about the decision to defer to Kelly, “I don't wanna say I regret it, but I definitely still have reservations.” Kelly, in contrast to the men whose careers were prioritized, also reflected that she “still sometimes feels guilty” about the way they ranked their programs. The ways in which Noah described the outcome, in which he felt apprehension despite saying he would be happy anywhere, contrast with the women who defaulted to their partner. Only the women who admitted making significant career concessions indicated any disappointment with the outcome. And their male partners did not indicate feeling much guilt about such an outcome. Thus, Noah and Kelly represent the only couple where the man deferred to his partner’s preferences. Yet, in contrast to the ways in which the women with interchangeable preferences described this decision as an easy sacrifice, both partners described the decision as a significant sacrifice for Noah.
3.3.4 Future Childcare Plans

While the focus of the interviews was how students navigated recent career decisions in the context of their relationships, the interviews also touched on future family plans as well. Few students had a clear plan in place for when they would have children; in fact, some were still not sure whether they wanted children. More so, none of the students were entirely certain how they would handle childcare. However, a few themes emerged that provide interesting context for their ROL outcomes.

Couples who produced egalitarian ROLs tended to (1) either plan to not have any children, or (2) if they were planning to have children, the female partner had thought a lot more about childcare than the male partner. Two couples were unsure whether they wanted to have children. Said Henry about the decision for him and Dawn, “we haven't completely ruled it out, but we're kind of leaning towards probably not… I don't want to be an absent father or anything like that.” Dawn also expressed having little desire to have children, saying that while things could change, “the plan is to not have children at this point.” Similarly, Tyler said of the decision for him and Amanda, “we’re still kind of out on that one.” Thus, these two couples whose preferences were weighed equally (and where the woman is pursuing a competitive specialty in General Surgery) were not planning to have children at the time of the interview.

The other five egalitarian couples each expressed a desire to have children, but whereas the man admitted he had not considered childcare plans in any serious way, the woman often had a clearer idea of how childcare would be carried out. For example, when I asked Adam how he and Emma (pursuing Pediatrics and Internal Medicine,
respectively) would handle childcare, he said “I feel like we can probably just work it out in some way, but we'll definitely end up having kids.” When pushed on whether they had discussed it at all, he said, “I don't think we're at that point yet, we haven't really talked about it.” This contrasts with Emma’s answer, which reveal that she is has given this plan much more thought:

My mom has decided that she's going to move either to my sister or near my sister or me, depending on who has kids first. [chuckle] Yes. So we'll see what happens with that. But I think Adam’s parents will also probably move closer to wherever him or his sister ends up to help with childcare, or whatever we might need. Yeah, I don't think we want them moving in, [chuckle] but that's part of the picture that we've sort of recognized. – Emma

This comparison shows that, while Adam feels assured that it will work out “in some way,” Emma has done much more of the practical work of thinking about the way.

Similarly, Rebecca had considered childcare plans much more than her partner Robert. She had strongly considered how living near her parents would help, and that “it would be really good as we’re starting our lives to have my family really close,” while Robert mentioned the possibility of her parents helping but said, “I think that's a conversation that will happen when we get a little bit closer.” These childcare discussions suggest that, even for couples who had an egalitarian ROL, only the woman had considered any tangible childcare plans.

Among the couples who prioritized the man’s preferences, two patterns emerged: (1) the women were also more likely to recognize that they would be the primary caregiver, or (2) the couple diverged in their childcare expectations. For example, Kayla discussed how she wants family to come first in her life. She said,
For me, family is first. So I've always viewed having a family and understanding that he's a part of that family, I've always viewed that as first, and career being second. For me, like, of course you want career to facilitate the life that you want to live, but I don't live for my career. – Kayla

Kayla, whose career in Dermatology offers a more flexible lifestyle than her partner James’ career in Thoracic Surgery, acknowledges that it is good that they have different priorities. She continued,

I know that he wants to have a family, and I don't want him to miss out on those things, and I think that it's probably good that I have [family] as a priority. Where I feel like if I was just as career focused [as him], there would be things at the end of the day where we would have missed out on. – Kayla

Her prioritization of her family, coupled with her relationship-focused narrative of providing a family life that make them both happy, provide greater context for the career concessions that Kayla made for James. Tellingly, James did not have much to say about childcare. Another example is Tim and Jennifer. When asked about future childcare, Jennifer said, “I think it would be more me, just because of the Psychiatry schedule being more of a nine to five job, and we'd probably also end up hiring someone early on so that both of us can keep doing our jobs.” Thus, Jennifer reasoned that her relatively less-demanding schedule made it more likely that she would be the primary caregiver, rather than her partner Tim (pursuing Neurological Surgery). Notably, the four women who were pursuing less-competitive specialties than their partner, and cited this reason for why they deferred to their partner’s preferences, were also those who said they would likely be the primary caregiver. As we saw above, Grace cited family as one of the reasons why she chose a less-competitive specialty as well.
Among the couples who prioritized the man’s preferences, two couples had divergent opinions about childcare. Nate and Molly (pursuing Otolaryngology and Internal Medicine, respectively) disagreed about their future division of childcare. Nate said,

It's also assumed that she'll probably take some time off or at least downscale a little bit. That's sort of what she wants. I'd be happy either way. I'd be more than happy to pay for a nanny to live in and help with childcare or if she wants to take time off, I'd support her on that as well. I don’t have any plans to do that. – Nate

In other words, Nate’s support will not come in the form of sharing domestic care; he expects and believes Molly wants to reduce her labor force participation for childrearing. In contrast, Molly said, “It's not going to fall on me, or fall on him; it's going to be an equal, shared thing. I think it just is up in the air in terms of how much extra help we'll get in the house.” While Nate intends not to share childcare, Molly is adamant that it will be shared equally. Another example, Ben and Rose (pursuing Pediatrics and Obstetrics and Gynecology, respectively) also expressed different plans for future childcare. While Ben spoke of how some programs had “really awesome benefits package, like paid maternity and paternity leaves,” but otherwise had not considered childcare, Rose said they would both cut back their hours:

Maybe we would both try to work .8 as opposed to full time. Or like .7 or something. I think each of us has to give a little. I don’t think either of us can be gung ho, full time, doing eight different things and having a million different roles, and still have the family life that we want to have. – Rose

Thus, here too, the woman appears to have considered the practical concessions that children require more than her partner.
Because there is only one couple who prioritized the woman’s preferences, it is more difficult to draw conclusions about how childcare influenced the decision of Noah and Kelly (pursuing Radiology and Obstetrics and Gynecology). Because they were both pursuing competitive specialties, there is perhaps no clear caregiver. In addition, their relationship status was relatively less far along than other couples; while they planned to cohabit and marry someday, they were currently dating. Perhaps due to this stage of their relationship, they both said they had not discussed childcare.

In summary, while children and childcare were far off considerations for these couples, the way they responded to questions about these decisions differed by gender. This may be due to social pressures that women face to be the primary caregiver, and persistent messages to women that they should plan for children well in advance of their intended childrearing. To the extent that these considerations are more at the forefront of women’s minds, this may provide an explanation for why women were less likely advocate for their own priority in the Match.

3.4 Discussion

This study sought to identify how men and women in couples make career decisions, particularly when their individual decisions will directly impact their partner’s career. I find that more women than men reported that they considered their partner to be an important factor when making individual career decisions such as specialty or forfeiting extra research years. When applying for residency, couples, with one exception, either prioritized the man’s program preferences or took an egalitarian approach. Which of these two outcomes occurred appeared to depend on the extent to
which the man advocated for his partner’s career goals, and whether the woman was the only one who expressed having substitutable program options.

Men and women both asserted that they had “no bad choices” and would be happy at any of their options. However, when a woman felt this way she always prioritized the man’s preferences. In contrast, when a man felt this way, his preferences were either prioritized or equally considered with his partner’s preferences. Thus, substitutability indicated different things for men and women in the sample. For women, it was a justification for prioritizing their partner, whereas for men it seemed to be more to justify the outcome of the Match in case they did not get their top residency choice.

In *Opting Out?*, Pamela Stone evokes a telling quote from Jane Austen: “Man has the advantage of choice, women only the power of refusal” (Stone, 2007). Stone interviews professional women who have exited the labor force to understand the choices they made and how they understand them. She found that women’s deference to their husbands, through absolving him of domestic responsibilities and privileging his career, was a pervasive feature of women’s stories. On the topic of choice, Stone highlighted that the women often said the same two things over and over when discussing their husbands’ role in their decision to quit their jobs: “he’s supportive” and “it’s your choice.” Stone interpreted this ostensible deference as the appearance of egalitarianism, but effective signal that these men were unwilling to make sacrifices to support their wives’ careers as equal to their own.

I found a similar underlying theme in my discussions with couples. When a man had an abundance of similarly good options, often his preferences were still prioritized or
ranked highly. In contrast, when a woman said she would be happy at any of her options, the couple always deferred to the man’s preferences. The idea that men’s professed indifference leads women to make career sacrifices is also found by Wong in her qualitative study of professional couples’ moving decisions. Wong found that, among a subset of couples, the male partner withdrew from the decision making to give the woman the freedom to make an individual choice. However, this hands-off approach was more often a means of shirking responsibility, and the women ended up negotiating their careers in ways that complemented their partner’s careers (Wong, 2017). Indeed, the way that men reported supporting their partner’s preferences reflected this dynamic: egalitarian men were willing to forgo their top choices for the net benefit of the couple, whereas (some) prioritized men were aware of the sacrifices they were asking of their partner, and sought reassurance.

A woman’s ability to pursue her career ambitions is greater if she has a truly supportive partner, one who deliberately compromises or carves out effective strategies (Hertz, 1986). Among the medical couples in this study, couples who adopted purposeful strategies that deprioritized maximizing an individual’s career outcomes more often produced an egalitarian ROL. Such strategies, including prioritizing geographic proximity and utilizing third-party rankings, were effective when they were couple-level strategies. They required explicit, deliberate, and equal compromise by both members of the couple. Without such strategies, the woman’s preferences were deprioritized, or she felt guilty for having asked her partner to make career sacrifices.
The ROL is an explicit decision that involves both members of the couple to actively discussing their individual preferences; this might be why we see more equal compromise than we see on “personal” decisions such as specialty and research. These decisions do not have the same overt couple-level focus as the Match. Thus, women may be more likely to make these sacrifices on their own. By doing so, their partners remain unaware, or can reasonably act unaware, of the ways in which they influenced this decision.

Another potential explanation for why the men more often expressed that these earlier, “personal” decisions were not influenced by their partner could be a gendered expectation that men put their career first, and don’t let their family influence such personal career decisions (Blair-Loy, 2003). The ways in which men and women evoked relationship-focused and career-focused strategies, respectively, suggest that women are socialized to consider their relationship (and, for dual-career couples, this includes their partner’s career) when making decisions, while men are socialized to consider only their career.

Indeed, the patterns observed in couples’ recent career decisions may foreshadow how they will address future couple-level decisions. Regarding the couples’ childcare plans, the male partners more often took a backseat approach to considering the practical aspects of how they would navigate this important future decision. In contrast, only the women had considered any tangible childcare plans. This raises the possibility that the female partners may be more likely to be the ones to adapt and accommodate their partners at this significant and impending work-family juncture. However, if couples
utilize the effective strategies applied here to clearly and explicitly advocate for a mutual compromise, they may be able to continue to have an egalitarian partnership.

Experimental evidence on couples’ relocation decisions suggests that when couples have a clear plan either to split childcare equally or plan to not have children, they are perceived as more likely to have egalitarian career outcomes in which both partners compromise and prioritize geographic proximity. Furthermore, just as in this sample the couples in which the woman plans to be the primary caregiver also prioritize the man’s career in the ROL, a similar pattern emerges in how a hypothetical couple is expected to rank their preferences (Lehrman, 2018a). Thus, the findings of this study and experimental evidence suggest that setting clear egalitarian goals for joint career outcomes and explicit plans for shared childcare can help facilitate egalitarian outcomes for dual-career couples.

Dual-career couples’ negotiations of work and family suggests that often the work of balancing careers and maintaining relationships explicitly or implicitly falls on women. This is particularly true when the demands of one partner’s career crosses over to affect the other partner’s career (Stone, 2007). This “crossover” is directly observed in the Match, whereby each partner ties their residency outcome to their partner. Unless men explicitly advocate for their partner’s career goals and take an active approach to creating a joint list that considers their partner, a truly egalitarian outcome is unlikely.

3.5 Conclusion

This paper examined the joint career decisions that medical student couples make as a means of understanding how individuals consider their relationship when making
career decisions. Through semi-structured interviews carried out separately with each member of a couple, I explored important career decisions pre-Match. Dyadic interviews allow me to evaluate gender strategies at play within and across couples, to better understand the gender strategies they evoke.

The Couples Match offers an interesting lens into the gender dynamics at play within a joint career decision. As one respondent, Elizabeth, observed,

I think the question of men versus women and who's holding the power in these decisions is always interesting…it's very interesting thinking about how this is a concrete moment when a lot of those themes are coming to the surface. – Elizabeth

Indeed, the decision-making process required by the Couples Match sheds light on how men and women engage and negotiate their dual career interests. The minority of respondents, and only women, explicitly considered their partner and future family plans when choosing their medical specialty. While there is no available data on whether women who Couples Match are less likely than their peers to pursue competitive specialties, this suggests a potential contributing factor for the underrepresentation of women in highly-competitive specialties. Furthermore, in comparing couples’ personal preferences with their submitted list, I found that, with one exception, only the women in the sample made significant sacrifices on their career goals for their partner.

These students, who have spent a great deal of time and effort working towards their professional goals, all acknowledged the impact couples matching might have. Some viewed the decision as one they welcomed with open arms, as just another example of the necessary compromise that relationships require. Others resisted the notion that couples matching meant they had to give up any part of their career goals, while still
others recognized (particularly in retrospect) how much they were potentially giving up for their significant others.

It is also necessary to highlight several limitations. While this sample contains a diversity of experiences, there are still some voices that I am not capturing. First, by recruiting students who are currently in a relationship with another medical student, I miss the perspectives of single people. In particular, I cannot observe any single students who may have delayed or ended relationships in anticipation of the Match. This may affect the results, by focusing on respondents who are more relatively more relationship-oriented or hold more traditional views of the family. Second, because this is a study of the experience of Couples Match applicants, and I solicited couples, it is possible that only those who are in “good” relationships responded to my request. Given that relationships that are more compromise-based tend to be more sustainable, it is likely that respondents are those who are more likely to consider their partner. Third, while I was able to interview couples with a mixed set of qualifications and specialties (such as, female Surgeons coupled with male Pediatricians), I was not able to obtain an even distribution of competiveness by gender. However, the sample reflects the general medical population, in which there are considerably fewer women in highly-competitive specialties then men (Jagsi et al., 2014). Fourth, I was unable to speak with any couples who currently have children. While this is also very common for medical students at that stage, I could only ask about planned childrearing. Finally, given sample constraints, I cannot speak to the experiences of same-sex or non-binary couples.
It is particularly important to look at early-career decisions when seeking to understand the roots of disparities in achievement and career advancement among men and women in medicine. By interviewing couples at this early-career juncture, this work provides insight into how early-career decisions affect the gender gap among professional equals and can contribute to policy to mitigate this gap. Specifically, at the couple level, effective strategies were those where each partner set clear expectations for what they hoped to get out of their training program and their future careers before discussing their joint decision. At the institutional-level, the lack of data on Couples Match leads the process and the advice couples receive to be mixed and sometimes contradictory. Because all the couples formed early on in medical school, speaking to couples before the Match is insufficient. Instead, advising these students in determining their specialty and research plans is also important, insofar as this study suggests that women’s decisions on these margins may be more impacted by their relationship than are men’s.

Focusing on highly-skilled and highly-mobile medical student couples offers an innovative case study for studying joint career migration, and is also relevant for understanding how medical students in relationships with each other make career decisions that influence their significant other’s career.
### 3.6 Tables & Figures

<table>
<thead>
<tr>
<th>Couple ID</th>
<th>Name</th>
<th>Relationship Status</th>
<th>Specialty</th>
<th>Whose Specialty Competitive?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Brian</td>
<td>Dating</td>
<td>Anesthesiology</td>
<td>Man</td>
</tr>
<tr>
<td>1</td>
<td>Margaret</td>
<td></td>
<td>Internal Medicine</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Michael</td>
<td>Dating</td>
<td>Vascular Surgery</td>
<td>Man</td>
</tr>
<tr>
<td>2</td>
<td>Elizabeth</td>
<td></td>
<td>Internal Medicine</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Ethan</td>
<td>Dating</td>
<td>Radiology-Diagnostic</td>
<td>Both</td>
</tr>
<tr>
<td>3</td>
<td>Kathryn</td>
<td></td>
<td>Emergency Medicine</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Noah</td>
<td>Dating</td>
<td>Radiology-Diagnostic</td>
<td>Both</td>
</tr>
<tr>
<td>4</td>
<td>Kelly</td>
<td></td>
<td>Obstetrics and Gynecology</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Adam</td>
<td>Cohabiting</td>
<td>Pediatrics</td>
<td>Neither</td>
</tr>
<tr>
<td>5</td>
<td>Emma</td>
<td></td>
<td>Internal Medicine</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Chris</td>
<td>Cohabiting</td>
<td>Orthopedic Surgery</td>
<td>Both</td>
</tr>
<tr>
<td>6</td>
<td>Mary</td>
<td></td>
<td>Obstetrics and Gynecology</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Henry</td>
<td>Cohabiting</td>
<td>General Surgery</td>
<td>Both</td>
</tr>
<tr>
<td>7</td>
<td>Dawn</td>
<td></td>
<td>General Surgery</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>David</td>
<td>Cohabiting</td>
<td>Internal Medicine</td>
<td>Neither</td>
</tr>
<tr>
<td>8</td>
<td>Jane</td>
<td></td>
<td>Pediatrics</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ken</td>
<td>Cohabiting</td>
<td>Thoracic Surgery</td>
<td>Man</td>
</tr>
<tr>
<td>9</td>
<td>Diana</td>
<td></td>
<td>Pediatrics</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Nate</td>
<td>Cohabiting</td>
<td>Otolaryngology</td>
<td>Man</td>
</tr>
<tr>
<td>10</td>
<td>Molly</td>
<td></td>
<td>Internal Medicine</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Robert</td>
<td>Cohabiting</td>
<td>General Surgery</td>
<td>Man</td>
</tr>
<tr>
<td>11</td>
<td>Rebecca</td>
<td></td>
<td>Pediatrics</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Tyler</td>
<td>Engaged</td>
<td>Pediatrics</td>
<td>Woman</td>
</tr>
<tr>
<td>12</td>
<td>Amanda</td>
<td></td>
<td>General Surgery</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Ben</td>
<td>Engaged</td>
<td>Pediatrics</td>
<td>Woman</td>
</tr>
<tr>
<td>13</td>
<td>Rose</td>
<td></td>
<td>Obstetrics and Gynecology</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Jack</td>
<td>Engaged</td>
<td>Neurological Surgery</td>
<td>Man</td>
</tr>
<tr>
<td>14</td>
<td>Grace</td>
<td></td>
<td>Pediatrics</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>James</td>
<td>Engaged</td>
<td>Thoracic Surgery</td>
<td>Both</td>
</tr>
<tr>
<td>15</td>
<td>Kayla</td>
<td></td>
<td>Dermatology</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Tim</td>
<td>Engaged</td>
<td>Neurological Surgery</td>
<td>Man</td>
</tr>
<tr>
<td>Couple ID</td>
<td>Name</td>
<td>Relationship Status</td>
<td>Specialty</td>
<td>Whose Specialty Competitive?</td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
<td>---------------------</td>
<td>-----------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>16</td>
<td>Jennifer</td>
<td></td>
<td>Psychiatry</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Matt</td>
<td>Married</td>
<td>Orthopedic Surgery</td>
<td>Both</td>
</tr>
<tr>
<td>17</td>
<td>Gina</td>
<td></td>
<td>Obstetrics and Gynecology</td>
<td></td>
</tr>
</tbody>
</table>

Table 3.2: Outcome of Joint Ranking

<table>
<thead>
<tr>
<th></th>
<th>Egalitarian</th>
<th>Man Prioritized</th>
<th>Woman Prioritized</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neither Competitive Specialty</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Man Competitive Specialty</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Woman Competitive Specialty</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Both Competitive Specialty</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>9</td>
<td>1</td>
<td>17</td>
</tr>
</tbody>
</table>
Conclusion

This dissertation offers a mixed-methods approach to understanding the mechanisms behind household decision-making processes, with a specific emphasis on differences by gender. Previous research suggests that young men and women are significantly more likely than previous generations to express egalitarian desires (Gerson, 2010; Pedulla & Thébaud, 2015), but behaviors have not caught up. The collection of papers in this dissertation offers insight into the barriers mixed-gender couples face, and outlines potential policy solutions.

An overarching theme of this dissertation is that women’s absolute resources and share of childcare are determinative factors in household decision-making. The first chapter provides compelling evidence that the unequal division of labor within dual-career medical couples is an important barrier to egalitarian outcomes. Notably, this study found a remarkable absence of gender bias in expectations of career precedence among evaluators, given full information about couples’ career and childcare plans. The symmetric evaluations suggest that unequal career outcomes by gender may be more influenced by unequal distributions of economic resources, and by assumptions that women will be the primary caregiver in the household. The second chapter also provides novel insight of the role of women’s economic resources in guiding the decision to marry among low-income parents. We find that men’s and women’s economic contributions are similarly predictive of transitions to marriage, and highlight the role of women’s resources in their reported relationship quality. And finally, the third chapter offers greater understanding of the narratives that men and women in couples evoke to explain
joint decisions. The ways in which women adapt and accommodate their partners’ career
goals suggest that women may be limiting their options well before the negotiation
process begins. Thus, while these studies show that a woman’s resources help her achieve
her goals (e.g. women pursuing competitive specialties were more likely to be given
career precedence than those pursuing less-competitive specialties, and women who
contributed to the economic bar reported greater relationship satisfaction), this work also
consistently shows that women face structural barriers in the labor market and at home
that limit their bargaining power.

Each study offers a richer picture of couples that extends the previous literature.
Chapter 1 provides men and women with the same resources and childrearing scenarios,
Chapter 2 incorporates a seven-item index of financial achievement and follows couples
over the course of three years, and Chapter 3 utilizes semi-structured and dyadic
interviews that allow for comparisons both within and across couples. With these new
insights, these chapters offer a deeper understanding of the mechanisms that impede
equal career precedence and positive relationship quality. Policy that facilitates women’s
achievements in the labor market, through encouraging them to pursue high-earning
(often male-dominated) occupations or supportive work-family arrangements in the
workplace, can provide women with greater bargaining power. But additionally, the
efforts of egalitarianism cannot fall exclusively on women. As policy slowly changes,
members of dual-career couples must each make compromises and resist falling back on
gender norms when faced with the difficult task of navigating work and family.
### Appendix A. Regressions on Bar Definitions (n = 4,444)

<table>
<thead>
<tr>
<th></th>
<th>Either-parent</th>
<th>Mother-only</th>
<th>Father-only</th>
<th>Both-parents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OR</strong></td>
<td><strong>β</strong></td>
<td><strong>SE β</strong></td>
<td><strong>OR</strong></td>
<td><strong>β</strong></td>
</tr>
<tr>
<td><strong>Mother race and ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>0.88</td>
<td>-0.13</td>
<td>(0.12)</td>
<td>0.82</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.95</td>
<td>-0.05</td>
<td>(0.12)</td>
<td>0.77</td>
</tr>
<tr>
<td>Other, non-Hispanic</td>
<td>1.07</td>
<td>0.07</td>
<td>(0.25)</td>
<td>1.08</td>
</tr>
<tr>
<td><strong>Father different race</strong></td>
<td>1.10</td>
<td>0.10</td>
<td>(0.13)</td>
<td>1.22</td>
</tr>
<tr>
<td><strong>Mother age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-24 years old</td>
<td>1.07</td>
<td>0.06</td>
<td>(0.12)</td>
<td>0.96</td>
</tr>
<tr>
<td>25-29 years old</td>
<td>1.08</td>
<td>0.07</td>
<td>(0.13)</td>
<td>1.08</td>
</tr>
<tr>
<td>30+ years old</td>
<td>1.12</td>
<td>0.12</td>
<td>(0.16)</td>
<td>1.13</td>
</tr>
<tr>
<td><strong>Father different age category</strong></td>
<td>0.89</td>
<td>-0.12</td>
<td>(0.08)</td>
<td>1.05</td>
</tr>
<tr>
<td><strong>High School diploma</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>1.43</td>
<td>0.36***</td>
<td>(0.08)</td>
<td>1.47</td>
</tr>
<tr>
<td>Father</td>
<td>1.46</td>
<td>0.38***</td>
<td>(0.08)</td>
<td>1.11</td>
</tr>
<tr>
<td><strong>Employed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>1.57</td>
<td>0.45***</td>
<td>(0.09)</td>
<td>2.01</td>
</tr>
<tr>
<td>Father</td>
<td>1.59</td>
<td>0.46***</td>
<td>(0.09)</td>
<td>1.40</td>
</tr>
<tr>
<td><strong>Mother public assistance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash welfare/TANF</td>
<td>0.79</td>
<td>-0.23</td>
<td>(0.14)</td>
<td>0.67</td>
</tr>
<tr>
<td>Food Stamps</td>
<td>0.58</td>
<td>-0.55***</td>
<td>(0.10)</td>
<td>0.55</td>
</tr>
<tr>
<td>Medicaid/SCHIP</td>
<td>1.00</td>
<td>0.00</td>
<td>(0.10)</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>Either-parent</td>
<td></td>
<td>Mother-only</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td>OR  β</td>
<td>SE β</td>
<td>OR  β</td>
<td>SE β</td>
</tr>
<tr>
<td>Depression score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>0.98 -0.02</td>
<td>(0.06)</td>
<td>0.94 -0.06</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Father</td>
<td>0.91 -0.09†</td>
<td>(0.05)</td>
<td>0.98 -0.02</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Cohabiting</td>
<td>1.12 0.11**</td>
<td>(0.04)</td>
<td>1.02 0.02</td>
<td>(0.04)</td>
</tr>
<tr>
<td>Number of children together</td>
<td>0.92 -0.09</td>
<td>(0.05)</td>
<td>0.87 -0.14*</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Children with another partner</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>0.81 -0.21*</td>
<td>(0.09)</td>
<td>0.79 -0.23*</td>
<td>(0.10)</td>
</tr>
<tr>
<td>Father</td>
<td>0.75 -0.28**</td>
<td>(0.09)</td>
<td>0.85 -0.17†</td>
<td>(0.09)</td>
</tr>
<tr>
<td>Mother pregnant</td>
<td>0.82 -0.20*</td>
<td>(0.09)</td>
<td>0.61 -0.49***</td>
<td>(0.09)</td>
</tr>
<tr>
<td>Relationship quality score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>1.01 0.01</td>
<td>(0.09)</td>
<td>1.08 0.07</td>
<td>(0.09)</td>
</tr>
<tr>
<td>Father</td>
<td>1.06 0.06</td>
<td>(0.09)</td>
<td>1.06 0.06</td>
<td>(0.09)</td>
</tr>
</tbody>
</table>

Notes: Standard errors in parentheses. Data measured at baseline.
†p < .10. *p < .05. **p < .01. ***p < .001.
### Appendix B. Multinomial Regression of Meeting Economic Bar on Relationship Status, by Definition of the Bar (n = 4,444)

#### Panel A: 15 months

<table>
<thead>
<tr>
<th></th>
<th>Either-parent</th>
<th>Mother-only</th>
<th>Father-only</th>
<th>Both-parents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RRR</strong></td>
<td><strong>β</strong></td>
<td><strong>SE</strong></td>
<td><strong>RRR</strong></td>
<td><strong>β</strong></td>
</tr>
<tr>
<td>Marriage</td>
<td>1.75</td>
<td>0.56*** (0.13)</td>
<td>1.49</td>
<td>0.40*** (0.12)</td>
</tr>
<tr>
<td>Dating</td>
<td>1.29</td>
<td>0.25* (0.11)</td>
<td>0.85</td>
<td>-0.17 (0.12)</td>
</tr>
<tr>
<td>Broken Up</td>
<td>1.32</td>
<td>0.28** (0.11)</td>
<td>0.90</td>
<td>-0.10 (0.10)</td>
</tr>
</tbody>
</table>

#### Panel B: 36 months

<table>
<thead>
<tr>
<th></th>
<th>Either-parent</th>
<th>Mother-only</th>
<th>Father-only</th>
<th>Both-parents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RRR</strong></td>
<td><strong>β</strong></td>
<td><strong>SE</strong></td>
<td><strong>RRR</strong></td>
<td><strong>β</strong></td>
</tr>
<tr>
<td>Marriage</td>
<td>1.53</td>
<td>0.43*** (0.12)</td>
<td>1.25</td>
<td>0.22† (0.12)</td>
</tr>
<tr>
<td>Dating</td>
<td>0.97</td>
<td>-0.03 (0.15)</td>
<td>0.80</td>
<td>-0.23 (0.15)</td>
</tr>
<tr>
<td>Broken Up</td>
<td>1.15</td>
<td>0.14 (0.10)</td>
<td>0.93</td>
<td>-0.08 (0.10)</td>
</tr>
</tbody>
</table>

Omitted category is cohabiting.

Note: Results control for demographics, economic factors, and relationship characteristics of parents.

†p < .10.  p < .05.  *p < .01.  **p < .001.
Appendix C. NRMP Couples Match Worksheet

NATIONAL RESIDENT MATCH PROGRAM™

Couples Rank Order List of Paired Programs*

REMINDERS:

- Both partners must have an equal number of ranks.
- A program can be ranked more than once provided the corresponding ranks of your partner are different.
- Check the applicable Schedule of Dates for the Rank Order List Certification Deadline.
- If you need to rank more programs, print additional copies of this form.

Login to the Registration, Ranking, and Results® (R³) system when you are ready to enter your rank order lists.

PARTNER I WORKSHEET

<table>
<thead>
<tr>
<th>Pair Number</th>
<th>Institution</th>
<th>Program Name/Description</th>
<th>NRMP Program Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Intended as a planning resource. Worksheet cannot be uploaded to the R³ system.
Couples Rank Order List of Paired Programs*

REMINDERS:

- Both partners must have an equal number of ranks
- A program can be ranked more than once provided the corresponding ranks of your partner are different.
- Check the applicable Schedule of Dates for the Rank Order List Certification Deadline.
- If you need to rank more programs, print additional copies of this form.

Login to the Registration, Ranking, and Results® (R³) system when you are ready to enter your rank order lists.

PARTNER II WORKSHEET

<table>
<thead>
<tr>
<th>Pair Number</th>
<th>Institution</th>
<th>Program Name/Description</th>
<th>NRMP Program Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Intended as a planning resource. Worksheet cannot be uploaded to the R³ system.
Appendix D. Interview Guide

Hello, my name is Rebecca. Thank you so much for agreeing to participate in this study on relationships in medical school. Today I would like to talk with you about your experiences in medical school, the application process, and navigating the Match with your significant other. I also want to remind you that everything we discuss today will be confidential: I will not share this information with your partner, and your name will never be attached to the information we use from this interview. If you don’t mind I’d like to tape-record this interview. Is this okay?
[If the answer is no ask if it’s okay for you to take notes]

First, I’d like to start off by asking you a couple questions about your decision to become a doctor.

• Can you tell me the story of how you decided you wanted to become a doctor? (Probes: want to get a sense of their career identity – When did they decide? Are they motivated by helping people/higher income/fulfilling external expectations?)

• And what about your specialty? Did you enter school with a pretty good sense of what you wanted to specialize in?
  o (If yes) Do you remember when you made that decision?
  o (If no) Can you walk me through your decision to specialize in [___]? (Probes: What other specialties were you considering? When do you decide?)

• What appealed to you about [specialty]? Are there any things that worry you about the specialty?

• Have you thought about whether you want to subspecialize? (Probes: why or why not?)

• When you first started med school, what did success look like to you? What about now? (Probes: want to get at what defines a good job for them, what their goals are)

• And what about for the future? What are some major career decisions that you anticipate will be important for your long term goals/future?
  o What factors do you think will be important to consider? (Probes: want to see if bring up their partner here)

Now let’s talk about you and [Partner].

• How did you meet? What drew you to him/her?
  o (If before medical school) So you met before medical school. How was applying to medical school together? (Probes: did they only apply to the same schools? had they considered long-distance?)
  o (If met in medical school) Had you anticipated meeting someone in medical school? Did you date anyone else before [Partner]?
  o What are some benefits to dating someone who is also a medical student? What are some things that are more difficult?
• Thinking about couples in general, from your experience or just your opinion, what are some of the biggest decisions that couples need to make together?
  o What factors might make these decisions harder or easier? (probing for either type of relationship (egalitarian, open communication) or maybe obvious indicators of who should compromise (someone is making more money)

• And what about you and [Partner]? Can you think of any big decisions you had to make together before the Match?
  o What about when you were choosing your specialty? (Probes: did you ever consider your partner’s preferred specialty when making that decision?)
  o What is [Partner]’s specialty?

• (IF EITHER DOING COMPETITIVE SPECIALTIES) Have you ever heard advice that it’s particularly difficult to couples match when both partners are applying for competitive specialties?
  o Who have you heard that from? Advisors, peers, advice online?
  o Did that factor into your specialty decision?
  o Do you think it factored into [partner’s name]’s decision? How?

Now I’d like you to walk me through how the Match process went for you and your partner. I realize that some of these questions may be asking about things that happened many months ago, but I’d like to get a sense of what stood out to you during that time.

First, let’s talk about deciding to couples match.
• Do you remember when you and [Partner] first start talking about the Match? (Probes: was it on your mind from the beginning? What about Partner?)
• Who brought up the idea of couples matching first? (Probes: was it mutual?)
  o Did you both have the same feelings about it? (Probes: how certain they each were)
• Did you know any other couples who were deciding whether or not to couples match? What did the process look like for them?

Before we look at your rank-order-lists, I’d like to spend a little time talking about interviews.
• How did you decided which programs to interview with?
  o To what extent did you and [Partner] coordinate your interviews? (Probes: for whether only applied to places in same location)
  o Did you decide to interview at any programs in locations your partner did not?
    o Did you decide to decline any interviews due to [Partner’s] preference?
• Did you tell programs that you planned to couples match? Why or why not?
Thanks, so while you were interviewing you each created your individual rank-order-lists. Let’s walk through your worksheet together now.

- What factors did you consider as you developed your list?
  - Were there any program in particular that you were really excited about?
    - Were those always the programs you were most interested in or did that change over time? (Probes: before interview, after interview, etc.)
  - And any geographic preference for where you wanted to move to?
    - What about [Partner]?
- Tell me more about [1st ranked program] – what appealed to you about this particular program?
  - And what about [2nd and 3rd ranked programs]? I’m interested in knowing how differently or similarly you felt about each program compared to your first choice. (Probes: do you feel like you would be happy anywhere, or is this a strict ordering?)
  - Where did you learn about these programs? (Probes: partner, mentor, etc.)

Now I’d like to spend some time going through the process of translating this individual list to your final ROL. There are a lot of ways to create a joint ROL with your partner, and couples report many different strategies to arrange their individual lists. I’d like to hear from you what sorts of strategies you and your partner employed, and what factors were most important in creating the list.

- Could you walk me through how you and [Partner] went about creating your joint list?
  - What factors were most important for you in creating the joint list? For your partner? (Probes: minimize geographic distance, maximize program reputation, intertemporal priority tradeoff)
  - What strategies did you use to decide on creating your list?
  - Did you and [Partner] work on your individual lists separately and then come together to discuss, or was it something you were actively discussing during interviews?
    - Why did you choose to do it that way? What were the advantages/disadvantages?
  - Were there any conditions under which you would be ok living apart?
- What did you agree on? Were there any programs or locations that were easy to jointly decide on? Why?
  - Could you tell me about a time when you disagreed? What was the outcome?
  - Was there something you cared about that you didn’t realize you cared about until you were discussing your joint list?
  - Can you think of any times when [Partner] changed your mind, or when you didn’t want to budge? What about [Partner]?
- How stressful was the application process? Where do you feel like that stress was coming from? (Probes: partner, family, themselves, mentor, etc.)
• Overall, how do you feel like the decision making process went? Better or worse than you had imagined?
  o How much compromise do you feel like was involved in creating your joint list?
  o What do you think would be the three likeliest places you would have gone if you had filed singly? Why is that?
  o What do you think most other couples do? (Probes: want to see what they think is the normal process, and how they differed or same)

_I’d also like to ask you a couple questions about your future plans._

• How do you think your choices will impact your long-term career in any way? How do you think it will impact [Partner]?
  o Have you discussed any future career plans?
  o How often do you communicate about the future in general?

• Have you and [Partner] discussed children and childcare responsibilities?
  o Do you think either of you will take any time off, or switch to part time, at any point in your careers?
  o How do you and [Partner] decide who should do what in the home?
  o Thinking about your careers as medical professionals, how do you think you will decide how to allocate household responsibilities as you advance in your career?

Thanks so much for taking the time to share your experiences today. As part of this project, I also hope to work with medical school administrators to help future couples match students. To wrap up, I’d love to hear more about the advice you received and would provide any future couples.

• Did you get any advice from others during the process? (Probes: from who?)
  o Did any of the advice you get conflict with what you wanted to hear?
  o What factors did other people think would be most important for your decision?

• Looking back, if you could give your past self any advice about making this decision, what would you say?

• What are some things you might advise other couples who are also applying together?

_We’ve covered a lot here: Is there anything else you think I should know?_  
_Thank you. If you think of anything else you would like to share with me, please reach out to me._
References


Bertrand, Marianne, Emir Kamenica, and Jessica Pan. 2015. “Gender Identity and Relative Income within Households.” 


*American Journal of Sociology* 1241–1267.


Brandén, Maria. 2014. “Gender, Gender Ideology, and Couples’ Migration Decisions.” 


165


173


Williams, Joan. 2000. Unbending Gender: Why Family and Work Conflict and What to Do about It. Oxford University Press, USA.


Biography

Rebecca Lillian Lehrman was born on June 1, 1988 in New York, NY. In 2010, she graduated from the George Washington University, receiving B.A.s in Economics and Sociology, *summa cum laude*. She also studied at the London School of Economics and Political Science as part of the General Course from 2008-2009. From 2010-2013, she worked as an Economist at the U.S. Department of Commerce, in the Economics and Statistics Administration.

In 2013, Lehrman began her Ph.D. training in Public Policy at Duke University, during which she also received a Master’s degree in Economics in 2015. During her time at Duke, she received financial support for her work from multiple fellowships and institutions, including: the Joel L. Fleishman Civil Society Ph.D. Fellowship, Sanford School of Public Policy Research Grant, Aleane Webb Dissertation Research Fellowship, Graduate School Competitive Summer Research Fellowship, and Sanford School of Public Policy Conference Travel Grant. A chapter of her dissertation, “His’ and ‘Hers’: Meeting the Economic Bar to Marriage” (with Christina Gibson-Davis and Anna Gassman-Pines), is accepted for publication in *Demography* and the findings were cited in Pew Research Center in 2018. She expects to complete her Ph.D. in August 2018.