

**Cover Letter:**

Firstly, I would like to thank my reviewers for their helpful evaluation and feedback. Reviewers shared similar and valuable guidance to improve my paper for this final draft. The most notable concern related to my underdeveloped data, methods, discussion, and conclusion sections. All reviewers also suggested moving my Tables from the end of the paper to more appropriate respective data/results sections where they are discussed. For this latest iteration, writing guidance from the hourglass approach was also practiced.

In terms of concrete changes, firstly, I elaborated on my data, method, and results sections. The updated data and method section now describes the distribution of my variables and demographics of my survey respondents. New visualizations have also been incorporated. Operationalization of my variables of interest have also been elaborated here and the survey has been added as an Appendix section. Finally, this section now also sees an explanation of my analysis of choice: logistic regression with the accompanying coding package for the calculation. Tables and charts have also been moved up to the data and method, and results sections for easier perusal as suggested by all reviewers. Substantively, my discussion and limitations sections has been expanded in depth with new interpretations of core results from my analyses. The conclusion section has also been doubled in length to discuss the broader implications and significance of my study and the results. Finally my GitHub repository has also been updated with more description regarding my data and results.

It is with high hopes that the concerns made by the reviewers and their helpful feedback have all been addressed accordingly. Again, I am thankful for all of the reviewers' time and effort devoted to evaluating my research paper and I am looking forward to receiving feedback on this latest iteration.

All my best,

Helen Yap

June 3, 2022

**Effect of subjective social status and tie strength on familial network  
mobilization**

Helen Yap

June 2023

MACS 30200: Perspectives on Computational Research

Word count (excluding cover letter): 7765

**Abstract**

Interest in life outcomes and social mobility has long motivated work in research and policy. Abundance of research across social disciplines have frequently found parental influence and variables to affect individual social and economic outcomes. Much of this prior focus on parental determinants however under-examine or ignore the agency of the children in making use of their parental resources for their own mobility. Drawing from sociological and social psychological social network research, this study investigated the relationship between tie strength and perceived subjective social status in the individual's mobilization of their parents for instrumental job search support. Mobilization of mother and father roles were tested separately. Using a retrospective recall survey administered through Amazon Mechanical Turk, egocentric network data was collected to examine mechanisms of parental mobilization in the job search process. Interestingly, tie strength and subjective social status had inconsistent significance in their effects on mobilizations for the mother and for the father. Neither the respondent's subjective social status nor their perception of their mother's social status were found to affect the respondent's decision to mobilize their mother. Instead, the respondent's perception of their father showed a negative main effect on the mobilization of the mother. Tie strength, while having a significant effect on the mobilization of the father, was insignificant in mobilizing the mother until accounting for the father's social class. These results indicate potential effects of gender and interaction effects of gender with relationship roles that importantly affect how individuals make use of their network connections for their own social mobility.

## Introduction

Within both common societal knowledge and academic research, it is well established that parents are important actors and resources in the success of their progeny. Parents are, after all, often the earliest resource providers in an individual's life for shelter, emotional and social well-being, and cognitive development (Aldgate, 1976; Scott & O'Neil, 1996; van Beest & Baerveldt, 1999; Germann, 1994). Unsurprisingly, studies have found parent-based determinants to affect the broader processes of social mobility (Biblarz & Raftery, 1993; Beller & Hout, 2006;). For example, Snarey and Vaillant (1985) found mother's education and mother's occupation to be among variables explaining upward social mobility—in this study, defined as social class movement from working- or lower-class to middle-class—for 278 inner-city men across three generations.

Scholars have also observed disparity in intergenerational mobility and a “stickiness” of social mobility. Stickiness, referring to the persistence of a social class and standing through generations of a family, has been found to persist even in the grandparent-child generational change (Majumdar, 2010). In Chan & Boliver (2013). For example, grandchildren of grandparents in the professional-managerial class were found to be two and a half times more likely to enter professional-managerial positions themselves than grandchildren of grandparents in the manual class positions.

It is important to note however, that the social class of parents and forefathers are not sufficient variables to explain social mobility. Indeed, Toubøl and Larsen (2017) found that common social class schemes, such as those defined by income distribution, education, political action, and also gender, could not alone account for social mobility in their study of the Danish labor market.

Given the simultaneous mystery and observed stickiness of parent-sourced determinants on an individual's social mobility and overall longer-term well-being, researchers have sought to understand how and under what circumstances parent-based determinants lead to beneficial or detrimental outcomes. For example, Majumder (2010) have found macro-level processes of exclusion through labor market discrimination to stagnate upward occupational mobility.

Majumder (2010) succinctly highlights economic effects of exclusion on low intergenerational mobility for less advantaged individuals:

“On one hand, ‘the poor’ are likely to be excluded from wider participation in society because of their relative material disadvantage in terms of income. On the other, exclusion from the avenues of capability formation due to poor income also renders them poorly endowed in terms of human capital and hence reduces the income of their next generation.”

The bounty of research focusing on indirect effects of parental characteristics, however under examines the micro-level processes of the individual in determining how their parental factors affect their own social mobility. In other words, many studies focus on the children as social mobility outcomes rather than as actors and moderators of social mobility outcomes.

Shifting the focus from the passive inheritance of parent-based determinants to the agency of individuals is important for several reasons. Firstly, it can potentially empower individuals and inform them on how to actively circumvent negative effects of their parent's social standing. Secondly, increased attention to the individual's micro-level behavior can uncover a more complete mechanism by which parent-based determinants translate into longer-term social effects and mobility. This perspective shifts from questions such as “how parental social standing affect their children” to “how individuals behave knowing their parental social standing.”

Furthermore, much prior research investigating effects of parent-based determinants on social mobility, like Majumder's, focuses on economic or material resources (i.e. physical and human capital). As prominent sociologists would argue however, the relational and cultural embeddedness from concrete personal interactions and networks should not be ignored (Coleman, 1988; Granovetter, 1985). Social aspects are after all important in generating trust, establishing expectations, creating and enforcing norms, and importantly affecting social capital (Coleman, 1988).

Social capital is broadly defined as resources conferred to individuals through their social relations or the network of social relations. While less tangible than physical capital and even human capital, social capital similarly facilitates productive economic and non-economic activity (Coleman, 1988; Lin, 1999). Among this activity, and unsurprisingly, is the role of social capital in social mobility processes. Prior studies by Lin (1988) on social ties and Banfield (1967) on social network closures have shown how social capital facilitates occupational mobility and micro-processes of helping and asking for help. It is thus not a far leap to understand parents, being social ties and resource providers, as social capital.

*Setting: First significant job search*

As a direct environment to examine individual behavior in utilizing the social capital of parental resources in the process of social mobility, this study focuses on the setting of an individual's first significant job search and if they made use of their parents in the process. An individual's first significant job is often considered a momentous occasion signaling the transition to adulthood. As a prominent life transition, the first significant job can consequently

be considered a hallmark of potential social status change or intergenerational mobility (Manzoni, 2018).

The job search setting is additionally useful given extant theoretical work in social network research that examines micro-level social interactions in job attainment towards status attainment (Lin, 1999; Lin, 1988; Trimble & Kmec, 2011). As described by Lin (1999), the collection of social network analyses uncovering the connection between job attainment and social status have contributed to social resource theory broadly and to the convergence between social resource and social capital theories. More specifically, abundant evidence supports social resource theory in showing that the usage of social capital from social networks enhances the chances of attaining better statuses (Lin, 1999).

While parents are obviously part of an individual's social network and are social capital as argued above, empirical studies evaluating network effects on job attainment often take place within organizations and focus on network connections between friends or work-related acquaintances and is absent of specific attention to network behavior related to parental connections. Fortunately, social network theories still provide structural and social psychological clues—tie strength and subjective social status respectively—to understand how individuals make use of their parents in the job search arena.

### *Mobilization of Network Ties*

Social network literature can additionally help elaborate on what it means for an individual to “make use” of their parents and other network connections. Although Smith et al.'s 2012 study focused on network activation, they unpacked a spectrum of social network activity to explain how individuals interact and conceive of social networks. Firstly, an individual has a

potential network consisting of all the contacts they have at their disposal. Then an individual will have an activated network which is the subset of the potential network that actually comes to mind in a given situation. The formation of this activated network is notably a cognitive action.

Importantly, an individual will have a mobilized network which is the subset of the activated network that people actually solicit resources from when they engage in help-seeking behaviors. Differently from network activation, network mobilization is a social action. Scholars indeed acknowledge that network connections represent opportunities and do not automatically confer advantages just by their existence (Lin, 1999). Network mobilization is a required intermediary step for individuals to actualize the social capital gains from their networks (Smith, et al., 2012). In other words, the social action of mobilizing a tie is an important and required step at which the individual is leveraging their network to achieve benefits.

### *Tie Strength*

In his seminal 1973 paper on the strength of weak ties, Mark Granovetter posits that the structural variable of tie strength—composed of a combination of frequency of contact, emotional intensity, and intimacy—affects the usage and benefits of embedded resources from social networks. On one hand, strong ties, that are high in the combination of frequency of contact, emotional intensity and intimacy, are more motivated to help and provide job information (Ray & McEvily, 2013; Granovetter, 1973). On the other hand, weak ties may be more likely to provide *different* and potentially more *valuable* information in the job search process.

In his study, Granovetter interviewed 282 job changers from a Boston suburb and found that their weak ties were more likely to pass on information leading to their new jobs.



Granovetter argues that this phenomenon is due to lesser overlap between the networks of weak ties (Granovetter, 1973). When job changers connect with their weak ties, they are more likely to encounter new information because their weakly tied connections are more likely to move outside of the same social circles and will consequently have access to information different from what they would commonly receive from their strong ties.

Given the nature of parental relations, as birth givers and as often the earliest resource providers, it is expected that the parent-child relation is a strong tie with high frequency in contact and emotional intimacy or closeness. Granovetter's theory then suggests that parents as strong ties are more motivated to provide the individuals with aid so children are very likely to mobilize parents for aid.

At the same time, children will have high social network overlap with their parents and thus receive less valuable information than from mobilizing weaker ties. These expectations are supported by prior empirical work testing Granovetter's theory. For example, Montgomery (1992) and Lin & Dumin (1986) find that weak ties indeed confer network advantages in the job search process and Bian (1997) on the other hand finds that strong ties are indeed utilized more often for job search than weak ties.

### *Subjective Social Status*

The utility in mobilizing parents for aid may be further affected by the parent's social status as suggested by social resource theory. In prior studies, Lin found that tie strength was not sufficient in predicting social status growth. Instead he found a hierarchical effect in job status attainment with individuals being more likely to experience social status growth from mobilizing

ties with higher social status than from mobilizing ties with lower social status (Lin, 1999; Lin et al., 1978).

Furthermore, social status was found by Smith et al. (2012) to affect network activation. Most interestingly, Smith et al. found self-perceptions of socioeconomic status to be social-psychological constraints affecting the size and density of their activated network. Instead of using common schemes of social status, such as those mentioned above, Smith et al. operationalized status as subjective in order to directly measure the individual's cognitive internalization of status in their network behavior. Put differently, subjective social status is a succinct measurement of an individual's recognition of their social status to allow researchers to more directly understand behaviors that stem from this active recognition.

### *Hypotheses*

To summarize the above discussion: subjective social status, tie strength, and mobilization are collectively the core concepts needed to investigate the process by which individuals make use of their parents to achieve benefits for their job search process. Subjective social status allows us to ascertain the cognitive internalization of social status that has shown to affect individual behavior in social networks. At the same time, prior studies have also found a hierarchical effect of social status: individuals utilizing network contacts with high social status are more likely to experience social status growth—in other words, social mobility—than individuals utilizing network contacts with low social status. Tie strength similarly has been found to affect both the likelihood of mobilization and potential value of information with weak ties having more potential of supplying valuable information, but strong ties being more willing to help.

Given the established effects of tie strength and subjective social status on the value of information, willingness to provide help, and overall gains of outreach, it is expected that individuals will weigh these two factors when deciding whether or not to mobilize—or make use—of their parents when in the job search process.

The extant literature hence provides theoretical premise in the formation of hypotheses explaining mobilization of parents in the job search process. Firstly, social network theories—being the collection of social resources theory and the strength of weak tie theory—suggest that individuals are more likely to mobilize parents to whom they are strongly tied to. As we are interested in the mobilization mechanisms for the mother and father separately, the following two hypotheses are formed in regards to tie strength:

**H1: Tie strength is positively associated with an individual's mobilization of their mother**

**H2: Tie strength is positively associated with an individual's mobilization of their father**

Prior empirical work examining social status effects on network behavior also posits that individuals will be more likely to mobilize network contacts with higher social status as these contacts are more likely to confer network advantages of information and influence. It is then expected that individuals will be more likely to mobilize their parents if they perceive their parents to have high status as opposed to low status. The following two hypotheses are thus formed for the mother and father separately:

**H3: An individual is more likely to mobilize their mother for instrumental job search aid if they perceive the mother to have high social class**

**H4: An individual is more likely to mobilize their father for instrumental job search aid if they perceive the father to have high social class.**

## Data & Methods

Social network research often requires fairly cumbersome methods of collection or antiquated data. As noted by Burt, Kilduff, and Tasselli (2013), much development in SNA is made from organizational data which is not feasibly attainable at the present stage of this study. Organizational data is also not appropriate for our research interests in mobilization of parental relations.

Researchers have also made use of the publicly available General Social Survey (GSS) (Marsden, 1990; Burt, 1984). In fact, sociologist Ron Burt specially designed and contributed social network questions to the GSS questionnaire starting in 1985 and this dataset is used in multiple studies (Burt, 1984; Smith et al., 2012; Marsden, 1990). Although commonly used, the 1985 dataset is arguably dated having been collected almost four decades ago to this date. While, a 2004 GSS survey is available, researchers have found this version to have data anomalies and issues in survey design potentially causing respondent fatigue and drop-off in responses (Fischer, 2006; Smith et al., 2012).

Most importantly, network behavior surrounding mobilization is understudied and existing GSS datasets do not specify questions related to network mobilization nor subjective social status (Burt, 1984; Smith et al., 2012). Consequently, in order to address the research question of how tie strength and subjective social status affect mobilization of parents and to test our four hypotheses, a pilot version of a retrospective recall survey was administered on Amazon Mechanical Turk on April 18, 2022.

The survey was designed to collect egocentric network data. As opposed to sociocentric or complete network data that measures and links all social positions in a full network of relations not necessarily connected to the survey respondent directly, this study leveraged the

egocentric approach to directly focus on the respondent's interactions with their parents (Marsden, 1990).

Respondents were instructed to answer questions regarding the research setting of interest: their first significant job experience. Given the current constraints of time, feasibility, and costs, the pilot survey only recruited and collected responses from 50 respondents. Only respondents from two-parent homes were selected; individuals unable to answer questions regarding one or both parents were removed from the sample. 1 individual was removed for being unable to answer questions about their father. Survey responses from 5 respondents were dropped due to failed attention checks. There were two attention check questions designed for the survey. The first question was administered at the start of the survey and asked respondents to write a brief description (e.g. job title and responsibilities) of their first significant job. Nonsensical responses and one-word responses to this question were considered as failed responses. Responses from 2 individuals were dropped.

The second attention check was posed to respondents at the end of the survey and required respondents to answer a multiple-choice question about which event they were prompted to complete the survey with regards to. It was repeatedly emphasized throughout the survey that respondents should answer based on their "first significant job experience" and this was provided as one of the three options to select from for the second attention check. 2 respondents failed to select the correct option. The final sample size included 45 respondents. The survey questions utilized for this study is available in Appendix A.

### *Variables*

Information regarding a participant's mobilized network (Smith et al., 2012) was collected with the presented egocentric retrospective survey approach. Participants were asked

about their mobilized network size, perception of their social class and of their individual parents' social classes, and about their tie strengths with parents separately.

To measure tie strength, the survey used two questions and accompanying scales from Reagans and McEvily (2003) that were in turn developed from Granovetter's theoretical composition of tie strength and then recoded numerically as follows: 1) "How close were you with <parent> at the time?" (Especially close = 4, Close = 3, Less than close = 2, or Distant = 1), 2) "On average how often did you talk with <parent>?" (Daily = 4, Weekly = 3, Monthly = 2, Less often = 1). The average of the two numerical measures was then computed and used as the tie strength measure for each parent separately (mother-child tie strength:  $M = 3.12$ ,  $SD = 0.72$ ; father-child tie strength:  $M = 2.84$ ,  $SD = 0.93$ ) (Reagans & McEvily, 2003).

To operationalize subjective social class, the survey leveraged survey questions developed by Smith et al. (2012) since their research introduced the construct: "which would you say you (or parent) belonged in: the lower class, the working class, the middle class, or the upper class?" Following the process by Smith et al., responses were dichotomized into two categories, low social status and high social status, by combining the two low categories and the two high categories (Smith et al., 2012). High and low status measures were then recoded into dummy variables where high = 1 and low = 0 (mother's social class perceived by child:  $M = 0.56$ ,  $SD = 0.50$ ; father's social class perceived by child:  $M = 0.60$ ,  $SD = 0.50$ ).

The dependent variables being the mobilization of individual parents were collected by asking participants if they utilized individual parents for the two primary resources for job aid conferred from network contacts: information and influence (Smith et al., 2012; Yakubovich, 2005). If respondents utilized parents for either or both of these resource types, their mobilization would be registered. The mobilization measure was dummy coded where mobilized = 1 and un-

mobilized = 0 (mobilization of mother:  $M = 0.58$ ,  $SD = 0.50$ ; mobilization of father:  $M = 0.51$ ,  $SD = 0.51$ ).

As control variables, the survey also collected the 1) the respondent's self-perception of their own social class which was coded similarly to perceived social classes for the parents ( $M = 0.51$ ,  $SD = 0.51$ ), 2) their estimated mobilized network size as a continuous variable ( $M = 5.93$ ,  $SD = 6.31$ ), 3) the respondent's gender, and 4) the respondent's race. Descriptive statistics with all measured variables for the 45 respondents who passed the attention checks are available in Table 1. Gender distribution of the 45 respondents is provided in Chart 1 (male = 31, female = 14) and distribution of racial identity is provided in Chart 2 (white = 35, black or African American = 6, Asian = 3, prefer not to say = 1). Zero respondents self-identified as Hispanic/Latino.

As the dependent variable of mobilization is a binary outcome, multivariable logistic regression is the analytical method of choice. Multivariable logistic regression models the estimated probability of one binary outcome versus the other (Stoltzfus, 2011). In this study, logistic regression predicts the probability of mobilization given a set of our predictor variables (tie strength and subjective social status). Logistic regression modeling simultaneously fit with multiple variables is additionally advantageous because it reveals the unique contribution or coefficient of each variable after adjusting for the others. Resulting coefficients are interpreted in odds-ratio. The multivariable logistic regression model was performed using the [statsmodel](#) Python package version 0.13.2.

**TABLE 1 – Descriptive Statistics**

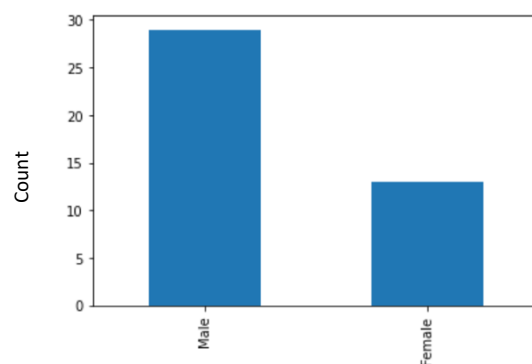
	<i>Mean</i>	<i>Std. dev</i>
Child's perceived social class <sup>1</sup>	0.51	0.51
Father's social class perceived by child <sup>1</sup>	0.60	0.50
Mother's social class perceived by child <sup>1</sup>	0.56	0.50
Mother-child tie strength <sup>2</sup>	3.21	0.72
Father-child tie strength <sup>2</sup>	2.84	0.93
Mobilized network size	5.93	6.31
Mobilization of mother <sup>3</sup>	0.58	0.50
Mobilization of father <sup>3</sup>	0.51	0.51

N = 45

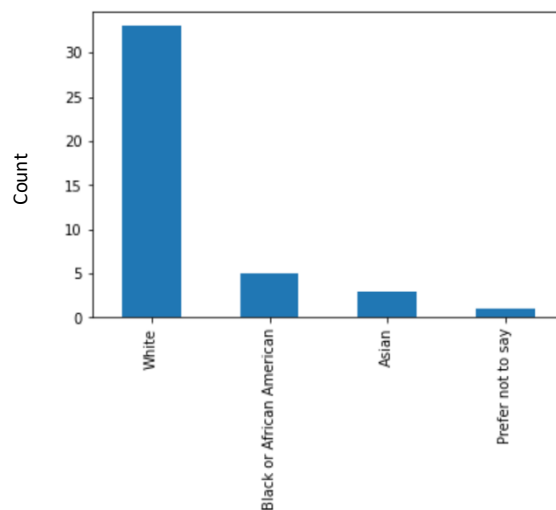
<sup>1</sup> Perceived social classes are dummy variables where 1 = high and 0 = low

<sup>2</sup> Tie strength is a variable measured between 1 to 4 with 1 being low tie strength and 4 being high tie strength

<sup>3</sup> Mobilization of network contact are dummy variables where 1 = mobilized 0 = not mobilized

**Chart 1 – Gender distribution**



**Chart 2 – Racial identity distribution**

## Results

The primary independent variables that are hypothesized to affect the individual's mobilization of their parents include perception of parental social status and tie strength. A series of logistic regressions were performed to assess the effects of perceived social status and tie strength on mobilization of parents separately.

As mentioned, 5 participants were removed from the sample due to failed attention checks, for a final sample of 45 (male = 31, female = 14; white = 35, black or African American = 6, Asian = 3, prefer not to say = 1). Regression coefficients, standard errors, and significant p-values for the mobilization of the mother are provided in Table 2. Regression coefficients, standard errors, and significant p-values for the mobilization of the father are provided in Table 3 below.

**TABLE 2 – Logistic Regression (MLE) – Coefficients in log odds and (standard errors)**  
**DV: Mobilization of Mother**

<b>Independent variables</b>	1	2	<b>Models</b> 3	4	5
Child's perceived social class		0.595 (0.666)	1.090 (0.881)	2.817 (1.379)**	2.708 (1.295)**
Father's social class perceived by child				-3.503 (1.409)**	-3.578 (1.377)***
Mother's social class perceived by child			-1.179 (0.845)	-0.280 (1.087)	
Mother-child tie strength			0.380 (0.305)	0.731 (0.380)*	0.712 (0.372)*
Mobilized network size	0.108 (0.070)	0.079 (0.074)	0.090 (0.078)	0.155 (0.102)	0.148 (0.097)
Child's gender	-0.041 (0.563)	-0.245 (0.611)	-0.538 (0.699)	-0.636 (0.787)	-0.642 (0.790)
Child's race	-0.2244 (0.595)	-0.196 (0.595)	-0.828 (0.866)	-1.583 (1.094)	-1.528 (1.063)
Pseudo R-squared	0.056	0.069	0.120	0.282	0.281
Log-Likelihood	-28.923	-28.518	-26.955	-22.010	-22.043
* $p < 0.10$ , ** $p < 0.05$ , *** $p < 0.01$			N = 45		

**TABLE 3 – Logistic Regression (MLE) – Coefficients in log odds and (standard errors)**  
**DV: Mobilization of Father**

Independent variables	Models		
	1	2	3
Child's perceived social class		0.596 (0.662)	1.143 (0.880)
Father's social class perceived by child			-1.476 (0.918)
Father-child tie strength			0.628 (0.345)*
Mobilized network size	0.100 (0.061)	0.072 (0.066)	0.072* (0.069)
Child's gender	0.292 (0.564)	-0.093 (0.608)	-0.449 (0.725)
Child's race	-0.772 (0.599)	-0.761 (0.599)	-1.475 (0.783)*
Pseudo R-squared	0.063	0.076	0.154
Log-Likelihood	-29.214	-28.805	-26.393
* $p < 0.10$ , ** $p < 0.05$ , *** $p < 0.01$		N= 45	

The results do not support Hypotheses 1 and 3 (Table 2 – model 3). Hypothesis 1 expected a significant positive association between the child-mother's tie strength and the mobilization of the mother. Hypothesis 3 expected the perceived social class of the mother to be positively correlated with the child's mobilization of the mother. Neither the child-mother tie strength and the perceived social class of the mother were significant. Surprisingly, the father's social class was a significant variable in the prediction of the mobilization of the mother and after accounting for the father's social class, the child's social class, and the child-mother tie strength in the regression (Table 2 – models 4 and 5). Model 4 (pseudo  $R^2 = 0.282$ ) still accounted for the mother's social class whereas model 5 removed the variable (pseudo  $R^2 = 0.281$ ). As it is the model with the highest fit (pseudo  $R^2$ ) albeit just by 0.001, Table 2, model 4 will be interpreted:

- 1) Holding all other variables constant, model 4 predicts that the odds of mobilizing their mother for a child who perceives *their father to be high status* over the odds of mobilizing their mother for a child who perceives *their father to be low status* is 0.030.
- 2) Holding all other variables constant, model 4 predicts that the odds of mobilizing their mother for a child who perceives *themselves as high status* over the odds of mobilizing their mother for a child who perceives *themselves as low status* is 16.727.
- 3) Holding all other variables constant, model 4 predicts that the odds of mobilizing their mother for a child with *strong ties with their mother* over the odds of mobilizing their mother for a child with *weak ties with their mother* is 2.077.

The results do not support Hypothesis 4 (Table 3 – model 3) which expected the father's social class to be correlated with the child's mobilization of the father. Hypothesis 2 was however supported as tie strength was found to be significantly and positively correlated with the individual's mobilization of their father. The child's race was a significant variable correlated with the mobilization of the father. The interpretation of Table 3, model 3 (pseudo  $R^2 = 0.154$ ) is as follows:

- 1) Holding all other variables constant, model 3 predicts that the odds of mobilizing their father for a child with *strong ties with their father* over the odds of mobilizing their father for a child with *weak ties with their father* is 1.874.
- 2) Holding all other variables constant, model 3 predicts that for every *increase in the network size*, there is a 0.072 log odds increase in the probability of the child to mobilize their father.

- 3) Holding all other variables constant, model 3 predicts that the odds of mobilizing their father for a *white child* over the odds of mobilizing their father for a *non-white child* is 0.229.

## Discussion

A retrospective recall survey was administered on Amazon Mechanical Turk to test the effects of tie strength and a child's perception of their parent's social class on their mobilization of parents in the job search process. Tie strength is a composite score made up of the individual's estimate of closeness with their parent and the individual's estimated frequency of contact with their parent (Reagans & McEvily, 2003). Subjective social status is a dummy variable where high = 1 and low = 0 and is a measure of how the individual perceives social status of their parents (Smith et al., 2012).

Prior empirical research informing our hypotheses suggests that an individual's strong tie strength with the parent and the individual's high perception of their parent's social status would be positively correlated with the individual's mobilization of their parent:

**H1: Tie strength is positively associated with an individual's mobilization of their mother**

**H2: Tie strength is positively associated with an individual's mobilization of their father**

**H3: An individual is more likely to mobilize their mother for instrumental job search aid if they perceive the mother to have high social class**

**H4: An individual is more likely to mobilize their father for instrumental job search aid if they perceive the father to have high social class.**

### *Mobilization of Mother*

Hypothesis 1—expecting tie strength to be positively associated with an individual's mobilization of their mother—was not supported. Hypothesis 3—expecting a positive correlation between the perceived high social class of the mother and the child's mobilization of her—was also not supported by the data. Instead and surprisingly, the father's social class was a significant variable in the prediction of the mobilization of the mother ( $p < 0.05$ ). The results posit that a child who perceives their father as high class is less likely to mobilize their mother for job search aid than a child who perceives their father as low class. Also, after accounting for the father's social class, the child-mother tie strength were significant variables in the regression that were positively associated with mobilizing the mother.

### *Mobilization of Father*

Hypothesis 2—expecting tie strength to be positively associated with an individual's mobilization of their father—was supported by the data. Hypothesis 4—expecting a positive association between the perceived high social class of the father and the child's mobilization of him—was not supported.

### *Mother versus Father: Gender stereotypes?*

The results from testing hypothesis 3 suggest potential interaction effects between attributes of the mother and father. While these results show that the individual is unaffected by the mother's social class, why is the father's high social class an important variable for the individual to consider when mobilizing their mother? From an intuitive standpoint, it is plausible that the individual is simply just relying on their father instead of their mother for instrumental

job search aid because they find the father to have more valuable resources due to his high status. However, results from testing hypothesis 4 show that the father's high status does not affect the individual's mobilization of him.

It is thus possible there are substantive differences between the mother and the father that were not captured in this study. In other words, there are possibly omitted variables that would describe differences between parental role types or gender effects. For example, it may be possible that omitted variables of parental employment history affected the child's mobilization decision such that the child did not mobilize their mother because their father had greater formal work experience. Relatedly, it is also quite possible that gender stereotypes are at play.

Gender stereotypes in the family unit are well-established and documented. Research have found that since the 1970s, the prototypical image of a professional worker is a man with a stay-at-home wife (Coltrane, 2004). This image of the male professional worker additionally translates into the "breadwinner" role in the family unit. Juxtaposed with the breadwinner role is the mother's place as "homemaker." Furthermore, studies have also found that both sons and daughters aspire to pursue careers of their fathers (Trice & Knapp, 1992).

Indeed, in our sample, individuals on average perceived their fathers to be of higher class than the mothers (Table 1 – mother's social class perceived by child:  $M = 0.56$ ,  $SD = 0.50$ ; father's social class perceived by child:  $M = 0.60$ ,  $SD = 0.50$ ). It can thus be plausibly speculated that when individuals are considering whether or not they should mobilize their mother, stereotypical beliefs are activated that cause the individual to discount the mother because they believe the father to be the breadwinner and professional worker of the family. In this case, it is possible that the perceived social status is a proxy measure of these stereotypical role divisions.

To note however, while considerations of these gender and parental role stereotypes suggest that individuals would simply just mobilize their fathers more, mothers on average were more mobilized than the fathers in our sample (Table 1 – mobilization of mother:  $M = 0.58$ ,  $SD = 0.50$ ; mobilization of father:  $M = 0.51$ ,  $SD = 0.51$ ).

Strict interpretation of the results is however strongly cautioned against given the limitations of our study using a pilot survey. Firstly, the sample size is quite small ( $N=45$ ) and is notably unrepresentative with an imbalance in race and gender with no participants being of Hispanic/Latino origin and with two-thirds of the participants being male. Results from testing the mobilization of the father (Table 3 – Model 3) also indicated race as a significant variable, but this may be due to overestimation of the predominantly sample of self-identified white participants.

Consequently, prior to finalizing claims from this study, future iterations of this study should expand the participant pool and attempt to balance the pool for a more representative sample of the U.S. population. Furthermore, the survey design can be elaborated on to include additional variables such as the education levels of the family members and employment history of the parents. Additional questions can also be drawn from studies on gender and family such as inquiry into whether individuals cognitively register gender roles of “breadwinner” and “home maker” when mobilizing their parents (Coltrane, 2004; Trice & Knapp, 1992).

Despite the limitations, the findings from this study are valuable for several reasons. Firstly, in studies investigating social mobility with family factors, social class appears to be a collapsed variable. In other words, many studies do not appear to consider a child’s social class to be separate from their parents’ social class and studies have measured social status through income levels (Bian, 1997). The results from testing hypothesis 3 however indicate that a child



and parent's social statuses may differ. While the child and father's social class were found to be significant variables with coefficients in the same direction, the mother's social class did not follow the same trend.

Secondly, results from testing mobilization of the father (Table 3 – Model 3) presents new findings of tie strength and network size variables in a specific setting of networks: the mobilized network. Prior studies, such as the seminal work conducted by Mark Granovetter, have found that weak ties confer greater advantages for individuals in the job market as they are more likely provide new information (Granovetter, 1973), but tie strength in regards to the construction of the mobilized network has not specifically been examined.

Finally, results from testing the mobilization of the mother raises new questions regarding the interplay between one parent's influence on their child's interaction with the second parent. The results from this study at this point cannot explain why child's perception of their father's social class affects their mobilization of their mother. Since the father's social class was not a significant predictor in the mobilization of the father (Table 3), it does not appear that the child mobilizes the father in lieu of the mother.

Overall, these results underscore significant differences in social class perception across parental roles in predicting network mobilization. These results also raise the possibility of omitted variables to explain why the child-father relationship is different from the child-mother relationship. As suggested above, unmeasured gender effects may impact these relationships. If gender stereotypes are indeed present in the mechanism of network mobilization, broader questions must be asked to fully understand the processes and outcomes of network interactions.

Specifically, if fathers are more immediately perceived to be professional workers with high social status, and are more mobilized than mothers, are there downstream detriments to

under-mobilizing mothers? Also, do fathers and mothers provide objectively different resources? If so, it may be possible that individuals are losing out on potentially special resources only the mother has access to. Given the importance of parents for an individual's development, gender stereotypes could have long-standing impact on the individual's well-being and social mobility and should be investigated.

## **Conclusion**

Abundant sociological research work examines the effects of tie strength on social network advantages and job search outcomes. Subjective social status effect on network advantage has also surfaced as significant variables for individuals. Such work predicts that network advantages, namely of information and influence, are more willingly provided and occur when individuals leverage network contacts they are strongly tied to and when individuals perceive their contacts to be of high social standing. Much of these studies however remain in organizational behavior and have only focused on friends and acquaintances of the ego or respondent in question. More specifically, the social action of network mobilization of parents has been overlooked despite well-known benefits from familial social support literature.

Despite being under-examined, network mobilization is a requisite step to actualizing benefits for social mobility. This study thus aimed to contribute to the discourse in evaluating the individual's mobilization of arguably the most constant and close relations in our social spheres: parents (Smith et al., 2012). With this aim, this research paper designed and administered a retrospective recall survey on Amazon Mechanical Turk to investigate the effects of subjective social status and tie strength on the social action of network mobilization.

In addition to addressing a gap in the literature, this study also encourages a shift in the attention of parent-based effects on individual social mobility to acknowledge the agency of individuals that may affect how social resources are mobilized in the job search process.

Surprising results from this study suggest that the individual's mobilization of their mother and of their father are not equivalent and future research is needed to investigate these differences more comprehensively. Importantly, given the curious results showing the effect of the father's social status on the mother-child interaction, this study encourages future research investigating the possible role of gender stereotypes in the cognition of the individual when interacting with their social networks. Not only may gender effects affect downstream gains for the individual, but unchecked and subconscious behaviors motivated by gender stereotypes may perpetuate sexism in the household and beyond.

As the current study was limited by feasibility and costs, there is much room to expand this study. Future iterations should consider increasing the sample size and recruiting a more representative sample of the U.S. population. The current research design, having leveraged the Amazon Mechanical Turk crowdsourcing platform to efficiently and quickly collect survey responses, will hopefully also serve as an assistive template to jumpstart future research inquiry.

### **Data and Code Availability**

The dataset and Python code for analyses generated from the survey administered on Amazon Mechanical Turk are available in the [replication-materials-helyap](https://github.com/mac30200-s22/replication-materials-helyap) repository at:

<https://github.com/mac30200-s22/replication-materials-helyap>

## References

- Aldgate J. (1976) The child in care and his parents. *Adoption and Fostering* 84 (2) 29-40
- Beller, E., & Hout, M. (2006). Intergenerational social mobility: The United States in comparative perspective. *The future of children*, 19-36.
- Bian, Y. (1997). Bringing strong ties back in: Indirect ties, network bridges, and job searches in China. *American sociological review*, 366-385.
- Biblarz, T. J., & Raftery, A. E. (1993). The effects of family disruption on social mobility. *American sociological review*, 97-109.
- Burt, R. S. (1984). Network items and the general social survey. *Social networks*, 6(4), 293-339.
- Chan, T. W., & Boliver, V. (2013). The grandparents effect in social mobility: Evidence from British birth cohort studies. *American Sociological Review*, 78(4), 662-678.
- Coltrane, S. (2004). Elite careers and family commitment: It's (still) about gender. *The Annals of the American Academy of Political and Social Science*, 596(1), 214-220.
- Fischer, C. S. (2009). The 2004 GSS finding of shrunken social networks: An artifact?. *American Sociological Review*, 74(4), 657-669.
- Germann, P. J. (1994). Testing a model of science process skills acquisition: An interaction with parents' education, preferred language, gender, science attitude, cognitive development, academic ability, and biology knowledge. *Journal of Research in Science Teaching*, 31(7), 749-783.
- Granovetter, M. S. (1973). The strength of weak ties. *American journal of sociology*, 78(6), 1360-1380.
- Lin, N. (1999). Social networks and status attainment. *Annual review of sociology*, 25(1), 467-487.
- Lin, N., Dayton, P. W., & Greenwald, P. (1978). Analyzing the instrumental use of relations in the context of social structure. *Sociological Methods & Research*, 7(2), 149-166.
- Lin, N., & Dumin, M. (1986). Access to occupations through social ties. *Social networks*, 8(4), 365-385.
- Manzoni, Anna. (2018). "Parental Support and Youth Occupational Attainment: Help or Hindrance?" *Journal of Youth and Adolescence*. 47, pp.1580-1594.
- Marsden, P. V. (1990). Network data and measurement. *Annual review of sociology*, 16(1), 435-463.

- Montgomery, J. D. (1992). Job search and network composition: Implications of the strength-of-weak-ties hypothesis. *American Sociological Review*, 586-596.
- Neblett, Nicole & Cortina, Kai. 2006. "Adolescents' thoughts about parents' jobs and their importance for adolescents' future orientation." *Journal of Adolescence*. 29, pp. 795-811.
- Reagans, R., & McEvily, B. (2003). Network structure and knowledge transfer: The effects of cohesion and range. *Administrative science quarterly*, 48(2), 240-267.
- Scott D. and O'Neil D (1996) Beyond Child Rescue: Developing Family-Centred practice at St Luke. Melbourne: Allen and Unwin.
- Smith, E.B, Menon, T. & Thompson, L. (2012). Status Differences in the Cognitive Activation of Social Networks. *Organization Science*.
- Snarey, J. R., & Vaillant, G. E. (1985). How lower-and working-class youth become middle-class adults: The association between ego defense mechanisms and upward social mobility. *Child development*, 899-910.
- Song, Lijun, Joonmo Son, and Nan Lin. 2011. "Social Support." Pp. 116-128 in *The Sage Handbook of Social Network Analysis*, edited by John Scott and Peter J. Carrington. London: SAGE.
- Stoltzfus, J. C. (2011). Logistic regression: a brief primer. *Academic Emergency Medicine*, 18(10), 1099-1104.
- Toubøl, J., & Larsen, A. G. (2017). Mapping the social class structure: From occupational mobility to social class categories using network analysis. *Sociology*, 51(6), 1257-1276.
- Trice, A. D., & Knapp, L. (1992). Relationship of children's career aspirations to parents' occupations. *The Journal of Genetic Psychology*, 153(3), 355-357.
- Trimble, L. B., & Kmec, J. A. (2011). The role of social networks in getting a job. *Sociology Compass*, 5(2), 165-178.
- van Beest, Mirka & Baerveldt, Chris. 1999. "The Relationship between Adolescents' social support from parents and from peers." *Adolescence*. 34(133)

## Appendix A – Survey

To complete the survey, please think back to your **FIRST SIGNIFICANT JOB** search experience.

- 1) (ATTENTION CHECK) In a few words, please describe what your **first significant job** was (e.g. job title and responsibilities)\_\_\_
- 2) **BEFORE YOU ACQUIRED YOUR FIRST SIGNIFICANT JOB**, which would you say **you** belonged in: the lower class, the working class, the middle class, or the upper class?

- ☐ upper class (4)
- ☐ middle class (3)
- ☐ working class (2)
- ☐ lower class (1)

- 3) Looking back over the **six months LEADING UP TO WHEN YOU LANDED YOUR FIRST SIGNIFICANT JOB—how many** people did you speak with regarding matters important to you?

(Please consider your family, friends, and acquaintances and provide your best estimate in numerical digits) \_\_\_\_

**AT THE TIME YOU WERE SEARCHING FOR YOUR FIRST SIGNIFICANT JOB...**

- 4) Did you approach **your mother** for the following functions in regards to your first significant job search process?  
Please check off all that apply.

☐ **Information or technical guidance regarding job or job search process** (e.g. you spoke with your mother about general job duties, candidate requirements, hiring process, etc.) (1)

☐ **Direct job referral** (e.g. your mother submitted you as a candidate to the job directly or your mother hired you for your first significant job) (2)

☐ **Connection to others** (e.g. you asked your mother to connect you to her friends/acquaintances so that you could speak to them for information or job opportunities/referrals) (3)

☐ I did not approach or discuss with my mother for any of the above functions (4)

☐ Other functions related to my job search (please elaborate) (5) \_\_

- 5) Did you approach **your father** for the following functions in regards to your first significant job search process?

Please check off all that apply.

☐

**Information or technical guidance regarding job or job search process** (e.g. you spoke with your father about general job duties, candidate requirements, hiring process, etc.) (1)

☐

**Direct job referral** (e.g. your father submitted you as a candidate to the job directly or your father hired you for your first significant job) (2)

☐

**Connection to others** (e.g. you asked your father to connect you to his friends/acquaintances so that you could speak to them for information or job opportunities/referrals) (3)

☐

I did not approach or discuss with my father for any of the above functions (4)

☐

Other functions related to my job search (please elaborate) (5) \_\_

**AT THE TIME YOU WERE SEARCHING FOR YOUR FIRST SIGNIFICANT JOB...**

- 6) How close were you with **your mother** at the time?

☐

Especially close (4)

☐

Close (3)

☐

Less than close (2)

☐

Distant (1)

- 7) On average how often did you talk with **your mother**?

☐

Daily (4)

☐

Weekly (3)

☐

Monthly (2)

☐

Less often (1)

8) Which would you say **your mother** belonged in: the lower class, the working class, the middle class, or the upper class at the time?

- ☐ upper class (4)
- ☐ middle class (3)
- ☐ working class (2)
- ☐ lower class (1)
- ☐ cannot answer (0)

9) How close were you with **your father** at the time?

- ☐ Especially close (4)
- ☐ Close (3)
- ☐ Less than close (2)
- ☐ Distant (1)

10) On average how often did you talk with **your father** at the time?

- ☐ Daily (4)
- ☐ Weekly (3)
- ☐ Monthly (2)
- ☐ Less often (1)



11) Which would you say **your father** belonged in: the lower class, the working class, the middle class, or the upper class at the time?

- ☐ upper class (4)
- ☐ middle class (3)
- ☐ working class (2)
- ☐ lower class (1)
- ☐ cannot answer (0)

12) How would you best describe yourself?

- ☐ American Indian or Alaska Native (1)
- ☐ Asian (2)
- ☐ Black or African American (3)
- ☐ Native Hawaiian or Other Pacific Islander (4)
- ☐ White (5)
- ☐ Prefer not to say (6)

13) How would you best describe yourself?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Non-binary / third gender (3)
- ☐ Prefer not to say (4)

14) Are you of Hispanic/Latino/Spanish origin?

- ☐ Yes (1)
- ☐ No (2)
- ☐ Prefer not to say (3)

15) (ATTENTION CHECK) What event/time frame did we ask you to consider in order to complete this survey?

- ☐ Event/time of my first significant job search experience (1)
- ☐ Current time of my life (2)
- ☐ No specific event or time frame was requested (3)