



The Impact of Child-Parent Relationship on Young Adults' Career Choice

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The Impact of Child-Parent Relationship on Young Adults' Career Choice

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Abstract

Career choice is one of the most importance decision that young adults make, which may impact them for a long time. Decades of research studying the factors that influence young adults career choice established the critical role that parents play in shaping their child's career decisions. However, there has been no definitive understanding of the child-parent relationship quality as an influencing factor to the specific type of jobs young adults select.

This study aimed to bridge this gap by examining the relationship between the quality of the child-parent relationship and the child's career choice using job stability as a measure. It first evaluated the job stability measure for each career category by comparing the perceived job stability data from young adults with the data published by the government. It then quantified the child-parent relationship quality and examined how it related to the job stability data. The results showed that there were weak positive correlations between the child-parent relationship and the stability of child's career, which countered the initial hypothesis that young adults who enjoy better relationships with their parents are more likely to choose a less stable career. This study also explored other factors that may influence young adults' career decisions, and provided directions for future investigations in this field.

Dedication

I dedicate this thesis to my parents Xiuju Ao, Huazhong Chen, and my husband Yongbo Qian, for their unconditional love, support, motivation, and encouragement throughout my journey of completing this thesis.

Acknowledgments

I would like to express my sincere gratitude to my thesis advisor Dr. Dante Spetter for her long-time guidance and patience with me through the whole process. Her immense knowledge and invaluable advice were not only influential in shaping my thesis work, but also motivated me to constantly grow and improve myself in life.

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Table of Contents

Dedication.....	iv
Acknowledgments	v
List of Tables	ix
List of Figures.....	x
Chapter I Introduction	1
Parental Influence on Career Choice	2
Family Background	2
Parental Involvement Behavior	3
Child-parent Relationship.....	4
Gender Difference	5
Career Choice Measures	6
Study Aims & Hypotheses	9
Aim 1	9
Hypothesis 1	9
Aim 2	9
Hypothesis 2	10
Aim 3	10
Hypothesis 3	10
Significance of the Study.....	10
Chapter II Method	12

Participants	12
Measures	13
Child-Parent Relationship Test (ChiP-C)	13
Career Choices.....	15
Job Stability	16
Procedure	17
Subject Recruitment Protocol.....	17
Survey Protocol	18
Data Collection Protocol	19
Data Analysis Plan	20
Aim 1	20
Aim 2	20
Aim 3	21
Chapter III Results.....	22
Participants Statistics.....	22
Job Stability Score.....	24
Child-Parent Relationship and Job Stability Score	24
Factors Influencing Child-Parent Relationship and Career Choices	29
Chapter IV Discussion.....	34
Job Stability Analysis	35
Child-Parent Relationship and Job Stability.....	37
Factors Influencing Child-Parent Relationship and Career Choices	38
Limitation and Future Directions	41

References	44
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List of Tables

Table 1. Sample Selection and Participant Characteristics	23
Table 2. Actual Job Stability and Perceived Job Stability Scores	25
Table 3. Pearson Correlation Results – Total Score	29
Table 4. Pearson Correlation Results – Male	30
Table 5. Pearson Correlation Results – Female.....	30
Table 6. Pearson Correlations Comparison	31
Table 7. Multiple Regression Result 1	32
Table 8. Multiple Regression Result 2	33

List of Figures

Figure 1. Actual Job Stability and Perceived Job Stability Scores.....	26
Figure 2. Quality of Relationship Index – Total Score (QRI-ts) and Actual Job Stability Score (AJSs).	27
Figure 3. Quality of Relationship Index – Total Score (QRI-ts) and Perceived Job Stability Score (PJSs).	28

Chapter I

Introduction

Career choice is one of the many important decisions that people make, which not only determines what they do for a living and sets a direction of their professional career paths, but also impacts many other important aspects of their lives. For young adults, career choice is an even more significant issue, as it is associated with psychological, physical and socio-economic inequalities that persist well beyond the youthful age into an individual's adult life (Robertson, 2014; Bubic and Ivanisevic, 2016). Here, young adults refer to the group of people who are transitioning from the dependence of childhood to the independent nature of adulthood (UNESCO, 2017). Unlike people in older age group that more likely have already gained independence and better understanding of their career aspirations based on their personal experience and previous developmental stages, young adults' career decision making is often associated with the aid of guidance and planning from external influences (Porfeli and Lee, 2012). Early in 1977, Carpenter and Foster have already recognized those influences and categorized them in the interpersonal dimension as part of the three-dimensional framework to classify the factors that influence career choice (Carpenter and Foster, 1977).

Parental Influence on Career Choice

Among those influences, parents play a key role in impacting the career of their young adult children. Fouad et al. (2010) detailed different types of parenting characteristics that can influence children's careers, including informational support, financial support, emotional support, and parental expectation. Several other studies have identified the major contributions of family factor into children's career choice, including family background (Leppel et al., 2001), parents' direct involvement behaviors (Zajone, 1976; Amato, 2000), and child-parent relationship (Whiston et al., 2004). All these factors can help predict a child's career development and outcomes long after a child turns eighteen, and will be discussed in the sections below.

Family Background

Research showed that young adults' family background had impact on their career choices. There were several influencing factors in the family background, including parents' educational background, career choices, culture and ethnicity. In 1992, Maccoby offered a historical review of parents' role in influencing children in terms of socialization, concluding that children tend to mirror the behaviors of their parents. Several studies have found that children often choose a career similar to that of their parents (Young et al. 2001). In a study by Facebook investigating users' and their parents' career paths, Adamic and Filiz (2016) found that children tend to "follow their parents' footsteps" by choosing a similar type of job that their parents do. For example, a father with a career in military is 3.75 times more likely to have a son doing a "protective" type of job than people with their fathers in different occupations. Similarly, a farmer's son is 7.6 times more likely to stay in the grocery and fishing field; a nurse's

daughter is 20% more likely to become a nurse. Lawyers, officers, and scientists were also careers in which children often followed their parents.

Culture and ethnicity were also found to impact career expectations. Young et al. (2001) studied 20 Euro-Canadian parents and Chinese-Canadian parents and their adolescent children for 6 months and found that hierarchy of family roles and culture also played a role in influencing children's career planning. Specifically, their research showed that traditional Chinese parents had higher expectations of their sons when compared to their daughters. This idea was based on the traditional opinion of the roles of men and women. To be more specific, the traditional view of men's social responsibility was based on their career while the women's social responsibility was based on their role in the family (Tambyah et al, 2008).

Parental Involvement Behavior

Parents' direct involvement in their child's job searching process also had an impact on young adults' career choice. In 2007, Michigan State University conducted studies on parental involvement in the career-pursuit process of college students from the perspective of recruiters. The results showed that more than 32% of 725 recruiters from various companies had witnessed direct parental involvement. The most common involvement behaviors included "obtaining information on company", "submitting resume on behalf of student" and "referring son/daughter for position". In addition, the study found different levels of parental involvement depending on children's choices of industry. For example, involvement was relatively high when children pursued a business career, but relatively low when children pursued engineering or computer science (Gardner, 2007).

One reason for such direct involvement might be that young adults were struggling more in the job market than before. The National Bureau of Economic Research (2019) found that it was becoming more and more difficult for adult children to earn a higher inflation-adjusted salary than their parents, despite GDP growth. Among children born in the 1940s, 90% were able to achieve a higher income than their parents; this dropped to only 50% for children born in the 1980s. At the same time, parents were increasingly willing to invest more emotional and material support into children's pursuit of a career (Birditt et al., 2009, Kornrich & Furstenberg, 2013). Further, parents with higher socioeconomic status tended to provide more time and money to prepare for success in their children's career, per data from Consumer Expenditure Survey in the United States from 1972 to 2010 (Kornrich & Furstenberg, 2013).

Child-parent Relationship

Child-parent relationship is one of the most examined topics in family studies. Many studies have verified the developmental stake hypothesis, that parents emotionally invested more than children in the parent-child relationship (Birditt & Lefkowitz, 2009; Shapiro, 2004; Fingerman, 2001). In 1956, Roe first proposed that child-parent relationships influence children's career choices. Although her theory focused on family interaction and relationships at an early stage for children under five years old, the theory linked parental influence and children's career choices for first time. The later research findings regarding parental influence on children's career choices have been mixed. For example, Eigen et al. (1987) undertook a four-year study among 197 high-school students in the United States and found that those who had difficulty making career decisions experienced one of two opposite family interaction patterns: either very close family

interactions, or very distant. Hartung et al. (2002) examined 172 white American college students and found no significant relationship between emotional closeness among family member and children's expectation on career. Conversely, Kouros (2016) examined the mental health of 118 American undergraduate students and their parents and found that "helicoptering" parents exhibited anxiety when children disobey their instructions. He concluded that parents interfered children's process of developing coping skills and handle decision making including choosing a career path (Kouros, 2016).

Gender Differences

Previous studies argued that parents played crucial roles on children's cognitive and social behaviors, but the roles of a mother and father were different. Several studies researched elementary aged students and found that children's future career aspiration seemed to be closer to their mother's career than their father's. Studies found that 40% of the children had similar career aspirations with their fathers during their childhood. Nevertheless, the percentage dropped to 23% after they entered adolescence (Trice et al, 1995). Other studies also confirmed that children tended to have more reflection from mothers (Gottfredson, 1981). However, some studies argued that influence from mother and father may also be different depending on specific situations for each parent and each child, such as mental health status (Burchinal et al, 1992), marital status (McLoyd et al, 2009; Amato, 2000), and parenting styles (Roe, 1957; Pritchett et al. 2010).

Zingaro et al. (1983) suggested that parents' expectations had an influence on their children's career decision making. However, parents may not have the same expectations from their daughters and sons. To illustrate, Young et al. (1988) administered semi-structured critical incident interviews to parents and their adolescent

children (between 10-18 years old) and found that parents had different expectations for their children depending on their gender, and pointed out that fathers were more concerned with their sons' career development. Young's study also revealed differences in the amount of support that sons and daughters received from their parents, peers, and others. Although Young's study showed that fathers had higher expectations from their sons, Wall et al. (1999) argued that female adolescents generally received more support from peers, parents, and teachers, whereas male adolescents tended to receive support from parents only. In terms of family structure, Zajone (1976) found that children from single-parent families due to divorce or parent death were more likely to have a worse "intellectual environment" and less opportunity to learn from a "teacher" parent than those from two-parent families.

Career Choice Measures

While the previous sections focused on reviewing literature on parental influence, this section provided an overview of methodologies used to measure career choice. A specific measure of the career choice is necessary for studies that aim to investigate its influencing factors. Because there are too many career options for people to choose from, it is challenging to examine how each one of the career options is affected by different influencing factors. For example, when investigating how parents' career affects their children's career choice, Adamic and Filiz (2016) designed a particular method to measure children's career, by calculating the probability of a child having a occupation, given their father's or mother's occupation.

One popular method to facilitate career choice measure is through classifying all occupations into fewer groups based on well-defined criteria. The characteristics of each

group can be further utilized as the measure of the occupations within. Co-developed by U.S. Bureau of Labor Statistics (BLS) and United States Census Bureau, the 2018 Standard Occupational Classification System (SOC) was a federal statistical standard to classify workers into occupational categories based on similar job duties, and in some cases, skills, education and or training requirements. The SOC placed detailed occupations into 23 major groups, including management occupations, business and financial operations occupations, etc. In addition, BLS also published the wage data for each occupation for the nation, states and regions, which could serve as another measure of the career choice based on the wage level.

Another common way to categorize career choice is to utilize the concept of job stability. The term job stability refers to the fact that an employee is able to retain the same job for a long time. Most job stability studies in the United States have used data from the Current Population Survey (CPS). It collected information on job tenure, which is the length of time people spent with the current employer or in the current job (Rokkanen, Uusitalo, 2010). Previous studies have also reviewed the changes in overall job stability trend from the macro-economic level. The general conclusion was that the job stability slowly increased in the mid 1990s (Burgess & Rees 1996, Schmidt & Svorny 1998), but during the more recent years has declined (Gregg & Wadsworth 2002, Farber 2011). In 2019, The Organization for Economic Co-operation and Development (OECD) published its latest findings that although the average job stability has increased globally, it was likely a compositional effect due to the increased number of older workers who tend to have longer job tenure. If the increased share of older workers was disregarded, job tenure actually declined in most countries. OECD also provided some evidence that

the decline in overall job stability was attributed to people's more frequent moves between different employers rather than from employment to non-employment (OECD, 2019).

Traditionally, the perceived stable jobs were associated with consistent income, steady benefits, low stress levels and higher satisfaction. Those jobs provided a sense of security to workers, who would know that they would likely maintain their jobs as long as they performed the main obligations required. Contrarily, jobs with lower stability were often in a declining business or industry, where layoffs happened frequently. However, the modern concept of job stability has evolved. As the OECD study suggested, lower job stability did not equate to lower employment rate, as it could also happen when people decide to move from job to job by choice. Some industries with lower job stability may not be declining at all, but rather have ample job opportunities which allows people to switch employers easily. For example, according to data gathered by LinkedIn in 2017, tech industry, which was perceived to offer stable jobs, had the highest employee turnover when compared to other major industries. Job stability also varies among different generations. Unlike older people who tend to have longer job tenure, millennials are the generation that is hunting for new positions more frequently. A recent Gallup report showed that 21% of millennials indicated they have switched jobs within the year of 2019, which was more than three times the number from non-millennials (Adkins, 2019). Indeed, young people could be more incentivized to choose high-risk 'unstable' jobs which may offer high reward, whether in a start-up environment which provides future stock options if it can succeed, or in a non-profit organization which brings rapid personal growth and connections.

Study Aims & Hypotheses

The purpose of this study was to address the current gaps in the research on how the quality of child-parent relationship influences child's career choice, particularly the level of job stability that the child seeks. The study focused on the following aims.

Aim 1

This study first aimed to better understand how young adults think about the job stability for different occupations, by comparing the job stability data published by the government with the perceived job stability from young adults. Given that the concept of job stability has been constantly evolving in different generations, and the government data did not fully reflect young adults' perspective, hypothesis 1 was proposed below.

Hypothesis 1

For certain occupation categories, young adults perceive the job stability differently than the published data.

Aim 2

The second aim of the study was to investigate how child-parent relationship influences a young adult's career choice in terms of job stability. Previous research focused on children's career decision making process and how heavily parents influence such decisions, but the implication towards choosing a more stable or unstable careers was unknown. One could argue that close relationships with parents made young adults freer to take risks, including job related risks. Therefore, those young adults are more

likely to choose high-risk high-reward type of careers, as opposed to the traditional sense of stable careers. Based on that reasoning, hypothesis 2 was proposed below.

Hypothesis 2

Young adults who have closer relationship with their parents are more likely to choose high-risk careers with lower stability.

Aim 3

The last aim of the study was to further investigate how different aspects in the child-parent relationship would influence the child's career choice differently. Based on the findings from previous studies that children's career development had different influence from father and mother's occupations, education, and background (Mau & Bikos, 2000; Eliason & Patrick, 2008; Burchinal et al, 1992), hypothesis 3 was proposed below.

Hypothesis 3

Mother and father have different influences on child's career choice.

Significance of the Study

Although the existing research generally suggested a connection between parent-child relationship and young adult's occupational choices, the nature of that relationship is not well-defined in terms of whether and to what degree a young adult's decision towards choosing a stable or unstable career is impacted. It could be possible that children who view their parents as role models are likely to have a closer child-parent

relationship, motivated to follow their parents steps and choose careers that are similar to their parents', which may have higher likelihood to be a relatively stable career. It could also be that children who enjoy a closer relationship with their parents have more flexibility in choosing career direction, so they are free to pursue occupations which align with their passion, regardless of whether it offers stability or not. This study aimed to provide explanations to all those questions, by investigating deeper into the connection between child-parent relationship and the stability of career, and establish the critical role parents play in shaping child's career choice.

This study had a few benefits. First, the data for young adults' career choices and their perceived career stability could help understand the current employment trend and career aspirations of young adults. Secondly, this study could offer some insights from family's perspective to help identifying why young adults would choose a specific career, and add that knowledge to the existing research. Lastly, improving the understanding of how child-parent relationship would influence child's career choice may help parents and educators to become more effective in supporting young adults' career exploration, and providing context to assist them in making successful transitions into the workplace. In addition, it may also help young adults to improve self-awareness and make proper career selection to achieve their career goals.

Chapter II

Method

In order to investigate how child-parent relationships affect young adult children's initial career choices, young adults were recruited to complete an online survey via SurveyMonkey. This online survey is referred to as the main survey in later sections. Prior to testing the main study hypotheses, in addition, a small-scale pilot study was conducted in which few more young adults were invited to an online survey to provide their perceived job stability ratings for different job categories. The participants sample, measures, procedures of both studies and the analysis plan are described in the sections below.

Participants

A total of 78 participants completed the main survey for the child-parent relationships and career choices. Inclusion criteria for those participants were: between 18 to 29 years of age, and being located in United States. The recruitment was completed by the SurveyMonkey platform based on these criteria, with the similar number of male (49%) and female (51%) participants enrolled. Participants were also recruited from a wide range of regions in the United States to ensure sample diversity. The regions include Middle Atlantic (17.2%), East North Central (13.8%), West South Central (10.3%), New England (3.4%), South Atlantic (17.2%), Middle Atlantic (17.2%), Pacific (17.2%), and

Mountain (3.4%). Once a potential participant was identified, a consent form was presented before any measures were administered.

The same inclusion criteria and procedure were used to recruit 25 subjects (48% female) for the pilot study, in which participants rated the stability of various jobs for use in the larger investigations.

A full description of the subject characteristics can be found in the next chapter.

Measures

Participants completed measures about their career choices, relationship with their parents, and opinions about the stability levels of different job categories.

Child-Parent Relationship Test (ChiP-C)

ChiP-C is a clinically oriented questionnaire that measures the overall quality of child-parent relationships from a child's perspective (Titze et al. 2001, 2005). The current version of the ChiP-C is divided into two separate parts, one focusing on the participant's relationship with their mother and the other with their father. Each part consists of 36 multiple choice questions. The first 34 questions for each parent are answered on a 5-point scale, ranging from *never (0)* to *always (4)*, and the final two questions are answered on a scale of level of agreement, from *fits not at all (0)* to *fits perfectly (4)*.

The ChiP-C questionnaire consists of nine different scales, including three resources scales, five risk scales, and one additional scale. The resource scales consist of cohesion, identification, and autonomy and are designed to measure the intimate bonding and mutual influence between parents and children (such as "My mother / father has

given me the freedom to make my own choices”). The five risk scales are conflict, punishment, rejection and indifference, emotional burden, and overprotection. The five risk scales questions are designed to test the difficulties in the relationships (such as “My mother / father and I have disagreed). The additional scale asks how children want to help their parents.

In this survey, the four questions in the additional scale were not included, as they were not needed for the computation of the cumulative index scores (Titze, Schenck, Logoz, Lehmkuhl., 2014). Responses were scored by converting answers each question to a numerical value from 0 (*never or not at all*) to 4 (*always or fits perfectly*). Then the values for the questions belong to the same scale were added together, which generated four individual scores: resource scales score for father (ReS-f), risk scales score for father (RiS-f), resources scales score for mother (ReS-m), and risk scales score for mother (RiS-m). Finally, two index scores were calculated below by utilizing the same scoring method from the original authors:

- Quality-of-Relationship Index for each parent (QRI-m/-f): this score is to measure the child relationship was each parent in particular, and is calculated by subtracting the sum of the parent’s risk scales score from the sum of the same parent’s resources scales score:
 - $QRI-m = ReS-m - RiS-m$
 - $QRI-f = ReS-f - RiS-f$
- Quality-of-Relationship Index – total score (QRI-ts): this score is to measure the quality of child-parent relationships in general, and is calculated by combining

scores for both mother and father, minus a *Parent Discrepancy Score (PDS)* term defined below:

- $PDS = |ReS-f - ReS-m| + |RiS-f - RiS-m|$
- $QRI-ts = QRI-m + QRI-f - PDS$

Subtracting the term *PDS* ensured that young adults who have higher *QRI-ts* need to be close to both their father and mother, and being close to only one parent can never generate a high *QRI-ts* since it will be penalized by the *PDS*.

Career Choices

Participants career choices were obtained in the ‘Career Choices’ section of the main survey. In this section, participants were asked to choose their current occupation or, if they were not yet employed, their planned occupation so that the questions were applicable for both young professionals and students who have not yet been employed. The list of occupations provided to the participants were defined by the U.S. the Bureau of Labor. There were 22 occupation categories on the list from five main occupation categories, including management, professional and related occupations; service occupations; sales and office occupations; natural resources, construction and maintenance occupations; and production, transportation and material moving occupations. In addition to participants’ own career choices, this section also asked participants to choose their fathers’ and mothers’ career choices separately, which would be used in future studies to measure how likely child-parent relationship would affect the child-parent career similarity.

Job Stability

In this study, two different measures of job stability were used. Actual job stability and perceived job stability were both considered.

Firstly, to measure the actual job stability, this study utilized a datasheet representing median years of tenure with current employer for employed wage and salary workers by occupation, published by U.S. Bureau of Labor Statistics (BLS) in 2020. This datasheet contains the data of median years of tenure for the same list of 22 job occupation categories from the career choices measure. The latest data from January 2020 was used in this study. The actual job stability is defined as the median years of tenure for that occupation category; therefore, the longer tenure year is, the more stable the occupation is. For example, the actual job stability (*AJS*) for the arts, entertainment, and recreation occupations is 3.4, while the actual job stability for the legal occupations is 5.8. This means legal occupations are more stable than arts occupations from the actual job stability data. Using the tenure data from BLS as actual job stability has several advantages. The dataset was collected among large sample size (over 60,000 households) in the United States consistently every two years since year of 2008. In addition, the median years of tenure of each industry was calculated considering many factors, including changes in hiring numbers, changes in employees' recorded age in profile, and demographic characteristics variation in different areas of the United States (BLS, 2020).

The Actual Job Stability Score (*AJSs*) was generated by scaling the median years of tenure to the same range (between 1 to 5) as the perceived job stability measured in the pilot study. This scaling was required so that *AJSs* can be directly compared with the

perceived job stability. The scaling was achieved by a max-min normalization step followed by a feature scaling step in the equation below:

$$AJSs = (5 - 1) \times \frac{AJS - \min(AJS)}{\max(AJS) - \min(AJS)} + 1$$

Secondly, perceived job stability was quantified using data from the pilot study. In this study, participants were asked to rate the perceived stability for each of the 22 listed occupations from the career choices measure. The ratings include options range from *very unstable (1)* to *very stable (5)* in a Likert scale from 1 to 5. The result for each occupation is represented by a numerical value from 1 to 5 as the Perceived Job Stability Score (*PJSs*).

Procedure

The study was conducted in three stages - subject recruitment protocol, survey protocol and the data collection protocol. Prior to the study, IRB Protocol IRB20-2119 was submitted and approval was obtained from Harvard University's committee on the Use of Human Subjects.

Subject Recruitment Protocol

Data was collected from the online user population on the SurveyMonkey platform. SurveyMonkey provides a Target Audience Collector feature which helps researchers reach their target participants, from a diverse online population that voluntarily joined SurveyMonkey programs to take surveys. Research showed that online surveying platform can help achieve a diverse sample of research participants, and

contribute to research findings that better respond to young people's unique identities (Upadhyay, Lipkovich, 2020). In this study, the Target Audience Collector feature was utilized to recruit participants and collect responses. In order to reach the target participants, at the final step of the survey creation, the screening options from the Target Audience Collector was set to the following criteria: country (United States), age (18-29), gender (male and female, with census balancing), number of responses required (75) and estimated completion rate (75%). After paying an associated fee with this feature, SurveyMonkey sent survey invitations to their panelists who fit the screen criteria via email to recruit participants. The panelists were from either the contribute program, in which they would take surveys for charity and a chance to win a sweepstakes prize; or the rewards program, where they could earn credits for completing surveys that can be further redeemed for gift cards or donated to charity. The number of invitations sent is determined by the number of responses required and estimated completion rate.

Survey Protocol

Participants that were selected by SurveyMonkey were provided with an online link via email to the survey on the SurveyMonkey platform. To ensure the participation was completely voluntary, a consent page was displayed at the beginning of the survey to the participants. The consent page informed participants with the following information: a welcome message describing the research, background information, study procedures, sample questions, a statement about the voluntary nature of the study, risks and benefits, payment, privacy and contacts for questions. Participant could only proceed to the survey questions once they read through the consent information and had acknowledged the agreement to participate.

The participants who consented were directed to the self-report measures, including career choices, and their relationship with their mother and father separately. Each participant took approximately 12 minutes to complete the study protocol. Participants were not paid.

The pilot study was following the same protocol. Participants went through the same invitation, consent, and surveying process through SurveyMonkey. The pilot study was focused on measuring the perceived job stability, where participants rated the stability level for each of the 22 different occupations listed by U.S. Bureau of Labor Statistics.

The demographic information, including gender, age group, region, and household income, came directly from SurveyMonkey, and was included in the survey result.

Data Collection Protocol

After the surveying process was complete, the following procedures were used for data collection. First, the result reported by SurveyMonkey was exported to a .csv file, which was then copied into an excel spreadsheet for further cleaning and analysis. Participants who left empty responses to any of the questions in the survey were excluded. As SurveyMonkey also included completion time for each participant, any responses where the total completion time is less than $\frac{1}{4}$ of the median completion time (i.e., less than 3 minutes) were excluded. Finally, duplicated data entries were checked and excluded as well. These data cleaning procedures were aligned with the best practices for using crowdsourcing platforms for survey research (Cobanoglu et al., 2021).

In addition to the data cleaning steps above, data grouping, data ranking and other data post-processing techniques were also applied on the raw survey result to facilitate analyzing the data and generating the final results.

Data Analysis Plan

The goal for data analysis was to help answer the research question in the hypothesis on how child-parent relationship affects young adult's career choice. To achieve that, data analysis was conducted separately for the three aims below.

Aim 1

In order to provide a comprehensive assessment of the stability level to different occupations, the aim of the first analysis was to examine the differences between the perceived job stability from the pilot study result and the actual job stability represented by median years of tenure from the U.S. Bureau of Labor Statistics.

Aim 2

The second aim of the analysis was to evaluate the child-parent relationship with the actual job stability and perceived job stability of young adult's career choices separately. Pearson product-moment correlation was utilized as the main statistical method to analyze the result. The evaluation metrics included correlation coefficient r , which measures the strength of linear association between child-parent relationship and job stability level; and the p value, which tests the null hypothesis that child-parent relationship has no correlation with the job stability level. Additional statistical analysis was also performed to compare results from different correlations.

Aim 3

The last aim of the analysis was to further investigate the factors that may affect the correlation between child-parent relationship and the child's career choice.

Exploratory analysis was performed to examine each of these factors, including different scales of the child-parent relationship, the relationship to each parent, and the gender of the young adults. Multiple regression was chosen as the main analysis approach, as it could help answering how a particular factor contributed to the child's career choice, after the effects of other factors were taken into consideration.

From the Measures section, the quality of child-parent relationship total score can be computed using the following two equations:

$$QRI-ts = (ReS-f + ReS-m) - (RiS-f + RiS-m) - PDS$$

$$QRI-ts = QRI-m + QRI-f - PDS$$

In the first equation, the *QRI-ts* was calculated by subtracting the risk scales score from the resource scales score, minus the term *PDS*. To investigate how these scores would affect the overall job stability score, a multiple regression was conducted using these three terms as the input variables. Similarly, the second method explained the *QRI-ts* by combining mother's and father's scores and subtracting the *PDS*, therefore, these three terms was supplied to another multiple regression model to predict the job stability score. The final evaluation metrics of the multiple regressions included the *R value* and the *standard error* for the overall model performance, and the *coefficient* and *p value* for each independent variable to measure how it contributed to the regression.

Chapter III

Results

As noted above, the perceived job stability was measured using ratings from a smaller sample independent of those participants who completed the measures needed for testing the main study hypotheses. The results for both studies are described in the sections below.

Participants Statistics

Demographic characteristics for the study sample may be found in Table 1. For the main survey, a total of 100 participants were invited by the SurveyMonkey platform. This number was determined by the target number of response (75) divided by the estimated completion rate (75%) which were defined in the survey creation process. Three potential participants did not consent to complete the survey. During the data cleaning process, 19 entries were excluded, as they were either had incomplete fields, or completed within $\frac{1}{4}$ of the median completion time (less than 3 minutes). Note that 3 of these 19 participants did not provide their career information, therefore their responses were disregarded as the job stability score cannot be determined. 4 out of the 19 participants only provided responses to the questions related to their mothers in the child-parent relationship section of the survey. Although such data was still sufficient to calculate Quality of Relationship Index – Mother's Score, the survey did not request more information regarding their parent-status; therefore, the reason why they did not provide their fathers' scores cannot be determined. For the convenience of computing the

Quality of Relationship Index - total score, and the consistency of sample used for data analysis, these responses were disregarded as well.

After data cleaning, there were 78 valid survey results available for further analysis. For the pilot study, 32 participants were invited, and 25 valid responses were collected. In both studies, the number of male and female participants were approximately equal.

In summary, the participants who completed the main survey and pilot study are a good representation of the 18-29 age group young adults in the United States.

Table 1
Sample Selection and Participant Characteristics

Study	Main Study		Pilot Study	
	Total	Percentage	Total	Percentage
Invited	100	100%	32	100%
Disqualified	3	3%	0	0%
Incomplete	19	19%	7	21%
Completed	78	78%	25	79%
Gender				
Male	38	49%	13	52%
Female	40	51%	12	48%

Job Stability Score

Table 2 provided the results of job stability scores for the 22 occupation categories listed by the U.S. the Bureau of Labor. The method for calculating the Actual Job Stability Score (*AJSs*) was described in the chapter above. The Perceived Job Stability Score (*PJSs*) was averaged from 25 valid responses from the pilot study. Figure 1 visualized the difference between the *AJSs* and *PJSs* in each job category.

Child-Parent Relationship and Job Stability Score

For each participant, the child-parent relationship was measured by the Quality of Relationship Index – Total Score (*QRI-ts*). Note that there were more questions in the risk scales (19) than the resource scales (13), and the *QRI-ts* needed to discount the Parent Discrepancy Score (*PDS*), therefore, *QRI-ts* could be negative values.

Figure 2 and Figure 3 presented the scatter plots of the *QRI-ts* for each participant with their *AJSs* and *PJSs* separately. Trendlines were added to the scatter plots as they attempted to fit a linear regression model to the data. The correlation coefficients r and p -values were reported in Table 3.

Table 3 showed the correlation between the child-parent relationship total score, parent discrepancy score, and the two job stability scores. Results indicated that the correlation between *QRI-ts* and *PJSs* ($r = 0.338$), and the correlation between *QRI-ts* and *AJSs* ($r = 0.285$) were both weak positive with the p -values smaller than 0.05. Additional statistics comparing these two correlations can be found in Table 6, where it showed that these two correlations did not pose significant difference ($|z| < 1.96$).

Table 2

Actual Job Stability and Perceived Job Stability Scores

Job Categories	<i>AJSs</i>	<i>PJSs</i>	Difference
Management Occupations	5.0	4.4	0.6
Business and financial operations occupations	3.9	3.8	0.1
Computer and mathematical Occupations	3.1	4.2	1.1
Architecture and engineering occupations	4.3	3.4	0.9
Life, physical, and social science occupations	3.3	3.8	0.5
Community and social service occupations	3.8	1.9	1.9
Legal occupations	5.0	4.5	0.5
Education, training, and library occupations	4.2	3.9	0.3
Arts, design, entertainment, sports, and media occupations	2.5	1.8	0.7
Healthcare practitioners and technical occupations	3.9	4	0.1
Healthcare support occupations	1.9	2.4	0.5
Protective service occupations	4.5	2.8	1.7
Food preparation and serving related occupations	1.0	3.5	2.5
Building and grounds cleaning and maintenance occupations	3.2	3.3	0.1
Personal care and service occupations	2.2	3.2	1
Sales and related occupations	2.4	3.6	1.2
Office and administrative support occupations	3.3	3.4	0.1
Farming, fishing, and forestry occupations	2.6	2.2	0.4
Construction and extraction occupations	3.2	2.8	0.4
Installation, maintenance, and repair occupations	3.9	2.6	1.3
Production occupations	4.1	3.8	0.3
Transportation and material moving occupations	2.4	2.7	0.3

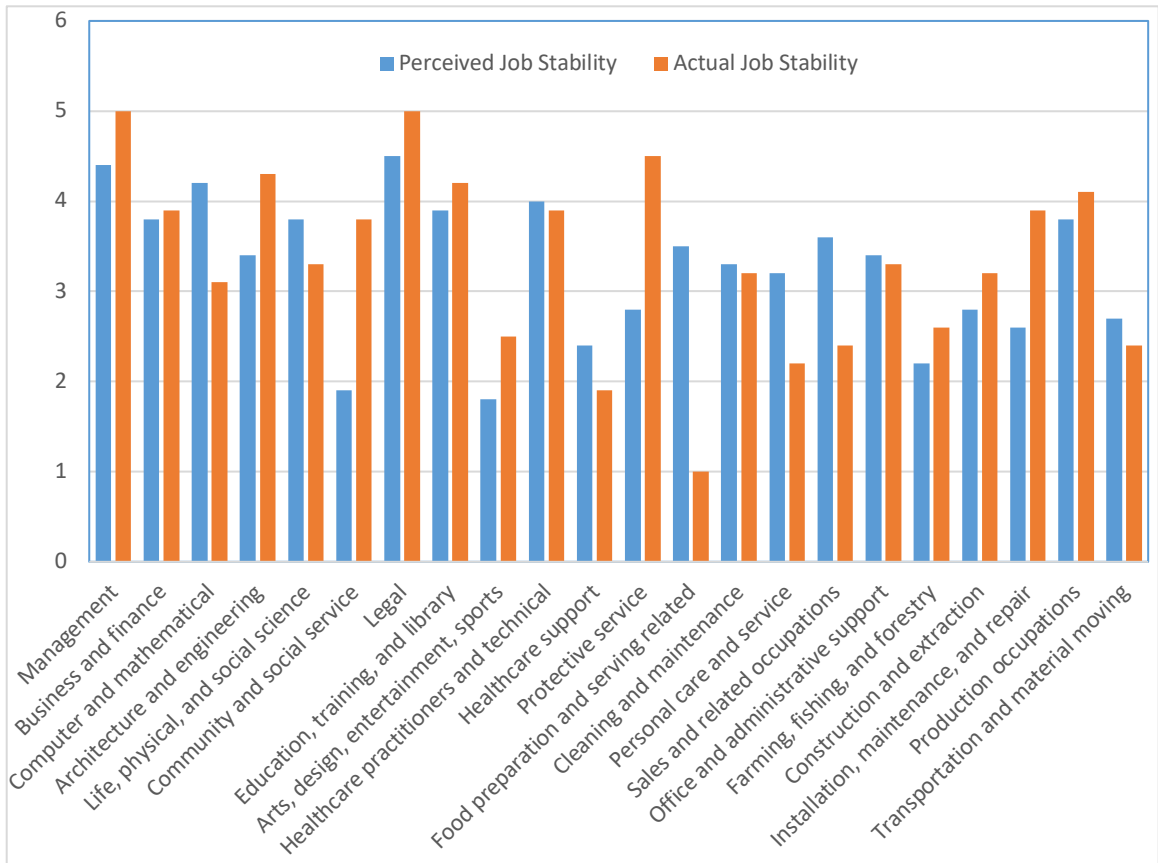


Figure 1. Actual Job Stability and Perceived Job Stability Scores.

Figure 1 displays the overlay of the actual job stability score (red) on the perceived job stability score (blue) for each job categories

QRI-ts and AJSs

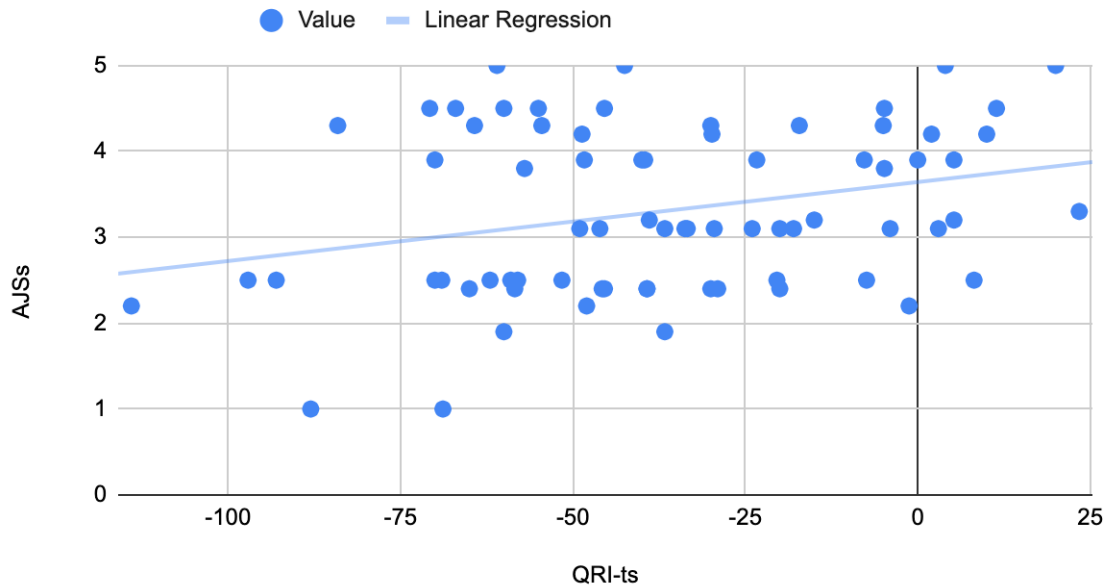


Figure 2. Quality of Relationship Index – Total Score (QRI-ts) and Actual Job Stability Score (AJSs).

Figure 2 visualizes participants' QRI-ts and the AJSs of their occupations. It also displays the line fits those points through linear regression.

QRI-ts and PJSs

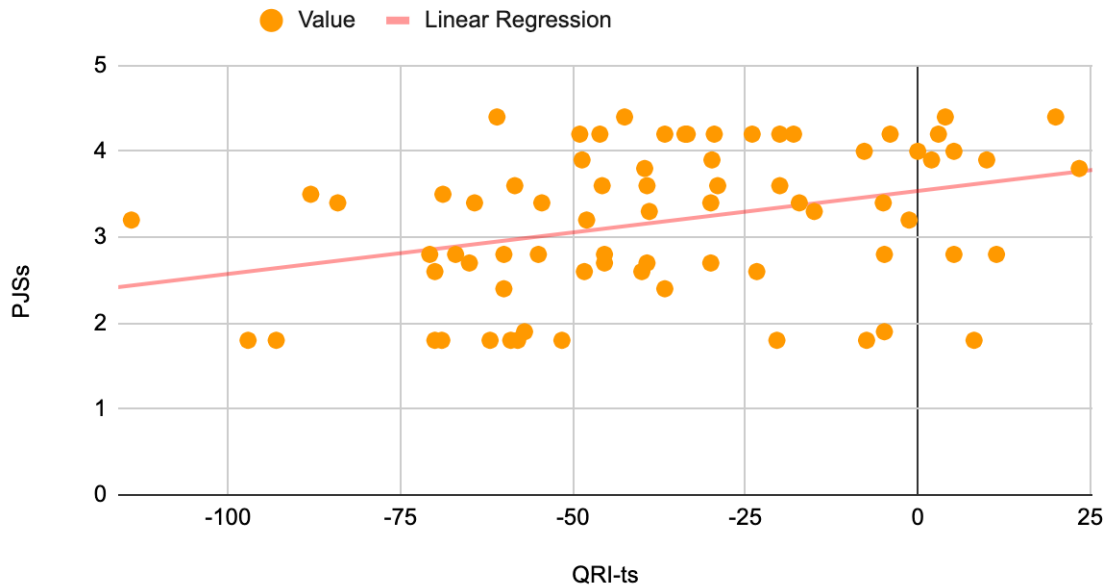


Figure 3. Quality of Relationship Index – Total Score (QRI-ts) and Perceived Job Stability Score (PJSs).

Figure 3 visualizes participants' QRI-ts and the PJSs of their occupations. It also displays the line fits those points through linear regression.

Table 3

Pearson Correlation Results – Total Score

<i>Measure</i>	1	2	3	4
1. Actual Job Stability Score: <i>AJSs</i>	-			
2. Perceived Job Stability Score: <i>PJSs</i>	0.313**	-		
3. Total score: <i>QRI-ts</i>	0.285*	0.338**	-	
4. Parent Discrepancy Score: <i>PDS</i>	-0.151	-0.276	-0.367**	-

*Note: This table displays the Pearson correlation results (N = 78) between the child parent relationship total score, parent discrepancy score and the two job stability scores. *Correlation is significant at the 0.05 level (p < 0.05), **Correlation is significant at the 0.01 level (p < 0.01)*

Factors Influencing Child-Parent Relationship and Career Choices

An additional analysis was conducted to examine the correlation between *QRI-ts* and *AJSs* / *PJSs* for male and female participants separately. Results were shown in Table 4 and 5. As all the correlations remained weak positive, however, the significance levels decreased comparing with using the full-participant sample, and no significant differences were observed between male and female participant groups, based on the correlation difference testing result in Table 6.

Table 7 and Table 8 provided the statistical data on some other factors that may affect the job stability score. Such factors included different measurement scales within the child-parent relationship, and child relationship with each parent.

Table 4

Pearson Correlation Results – Male

<i>Measure</i>	1	2	3
1. Actual Job Stability Score: <i>AJSs-m</i>	-		
2. Perceived Job Stability Score: <i>PJSs-m</i>	0.328*	-	
3. Total score - male: <i>QRI-ts-male</i>	0.250	0.306	-

Note: This table displays the Pearson correlation results for male participants (N = 38) between the child parent relationship total score and the two job stability scores.

**Correlation is significant at the 0.05 level ($p < 0.05$), **Correlation is significant at the 0.01 level ($p < 0.01$)*

Table 5

Pearson Correlation Results – Female

<i>Measure</i>	1	2	3
1. Actual Job Stability Score: <i>AJSs-f</i>	-		
2. Perceived Job Stability Score: <i>PJS-f</i>	0.282	-	
3. Total score - female: <i>QRI-ts-f</i>	0.304	0.298	-

Note: This table displays the Pearson correlation results for female participants (N = 40) between the child parent relationship total score and the two job stability scores.

**Correlation is significant at the 0.05 level ($p < 0.05$), **Correlation is significant at the 0.01 level ($p < 0.01$)*

Table 6

Pearson Correlations Comparison

<i>Sample 1</i>	<i>Sample 2</i>	Test Statistics <i>z</i>	Probability <i>p</i>
<i>AJSs & QRI-ts</i>	<i>PJSs & QRI-ts</i>	-0.421	0.337
<i>AJSs-m & QRI-ts-m</i>	<i>AJSs-f & QRI-ts-f</i>	0.037	0.485

*Note: This table displays the Pearson correlations comparison results for two sets of samples. The methods for calculating the *z* score are slightly different, as the first samples are dependent, and the second samples are independent. Both methods involve converting the Pearson correlation coefficients *r* into a *z* score using Fisher's *r*-to-*z* transformation, and computing the asymptotic covariance of the estimates (Eid, Gollwitzer & Schmidt, 2011).*

Specifically, Table 7 provided the results for the multiple regression model using the perceived job stability score (*PJSs*) as dependent variable; and the total scores for resource scales (*ReS-m* + *ReS-f*), total score for the risk scales (*RiS-m* + *RiS-f*), and parent discrepancy score as the independent variables. In this model, both resource scales scores and *PDS* showed statistically significant (*p* value < 0.05) to influence the *PJSs*, while the score for risk scales did not produce the small *p* value to reject the null hypothesis.

Table 8 provided the results for another multiple regression model to predict *PJSs*, using both mother's score (*QRI-m*), father's score (*QRI-f*), along with the *PDS* as the independent variables. Unlike the overall results from the previous model, this model did not yield to the same degrees of correlation, and the *p* values showed that all the input variables failed to achieve the statistical significance to impact the prediction of the perceived job stability score. This indicated that while parent child relationships predicted

participants' career choices when both parents were combined, when each one was examined separately, neither relationship with mothers nor relationships with Father predicted career choices.

Table 7
Multiple Regression Result 1

Explanatory Variable	Coefficients	<i>p</i> Value
Constant	1.017	0.21
Input Variable		
Resource scales: <i>ReS-m + ReS-f</i>	0.031	0.014
Risk scales: <i>RiS-m + RiS-f</i>	-0.045	0.852
Parent Discrepancy Score: <i>PDS</i>	0.009	0.001
Model Statistics		
R	0.436	
Standard Error	0.952	

Note: this table displays the multiple regression result using the total scores for resources scales, risk scales and parent discrepancy score as the independent variables

Table 8
Multiple Regression Result 2

Explanatory Variable	Coefficient	<i>p</i> Value
Constant	3.176	0.002
Input Variable		
Mother's Score: <i>QRI-m</i>	0.025	0.282
Father's Score: <i>QRI-f</i>	0.007	0.458
Parent Discrepancy Score: <i>PDS</i>	-0.012	0.635
Model Statistics		
R	0.386	
Standard Error	0.950	

Note: this table displays the multiple regression result using the mother's and father's quality of relationship index scores, and the parent discrepancy score as the independent variables

Chapter IV

Discussion

The purpose of this study was to evaluate how child parent relationships affect young adult's career choices. Prior to testing the study hypotheses, job stability perceptions were surveyed in an independent sample, to see how young adult perceptions of job stability related to job stability as defined by the United States Department of Labor. The analysis was done by comparing the actual job stability data from Bureau of Labor Statistic with the perceived job stability level from the pilot study. Results showed that perceived stability was consistent with government defined stability for most, but not all professions. Specifically, the job stability data for community and social service occupations, food preparation and serving related occupations, protective service occupations, computer and mathematical occupations and installation, and maintenance and repair occupations varied the most between two sources.

The main study then investigated the relationship between parent-child relationships and the job stability of child's career choice, using correlation analysis. Finally, this study also explored the factors that may affect the association between child-parent relationship and the child's career choice.

The findings from this study provided initial evidence that the quality of the parent child relationship is related to young adult's career choices. Specifically, those young adults who reported closer relationships were more likely to choose occupations understood to be more stable than those who reported more distant relationships.

Job Stability Analysis

As noted above, the US government quantifies job stability based on longevity in a specific job or working for a particular employer. However, in some industries people move around between companies much more often. And, particularly among millennials, there is a common perception that the best way to get ahead is to work for a start-up (Thorsen, 2019 & Beyer, 2019), but more startups fail than succeed in the long run making working for a startup a gamble. A small minority really do become very successful working for new companies doing innovative work but most others wind up switching jobs, a pattern which is inconsistent with most people's definition of job stability.

Because of this perception that taking a risk on a start-up is the "responsible" if not the most stable path forward for ambitious young adults, it was important to consider perceived job stability data in comparison to the government metric of using the median years of tenure data as the measure of actual job stability. It was predicated that both sources would yield similar results for most, but not all, job categories.

Comparing the two sources of data for each potential job/career, using the same 5-point Likert scale, 15 out of 22 (68.2%) occupations considered had less than 1 point difference, which indicates that the young adults' perceptions of job stability aligns relatively well with the job turnover data published by the government. This validates using the median years of tenure as a job stability measure but is counter to the original study hypothesis 1.

However, there are some job categories where young adults' perceptions were quite different in terms of job stability level. For example, their perceived stability ratings

for the computer and mathematical occupations are much higher than the job stability data from the BLS. Young adults viewed computer occupations quite stable, and this makes sense because those jobs are plentiful in the current job market. This means that youth who pursue these fields are unlikely to be unemployed or underemployed and highly likely to make good wages. It is generally understood that once people acquire the required skillsets, it is unlikely they will be unemployed for longer period of time even if their specific company is unable to retain them. In fact, it is generally expected that people in the computer related job categories would change employers frequently, not only as companies merge, close and startup but also to pursue faster promotion so multiple or frequent job changes do not have the negative connotations it may have in other professions. All of these factors result in a lower actual job stability score in engineering and technology than in many other occupations.

On the other hand, for community and social service occupations, the BLS data show higher actual job stability score as people in those occupations tend to stay with the same employer longer, however, young adults perceived these fields as relatively unstable, which may have reflected their concerns over the job security of the occupations in that field. Many of these jobs depend on government or charitable funding which can be perceived as unpredictable. Young adults may also have been responding based on their beliefs about *earnings potential* rather than job security in those types of jobs which generally pay lower salaries than those in the private sector. Thus, while for most occupations both data sources aligned for some specific job categories, young adult perceptions were distinct from government ratings and it was important to consider both sources of data.

Child-Parent Relationship and Job Stability

The main goal of this study was to evaluate if child-parent relationship was related to young adults' decision of choosing jobs in different stability levels. Results of linear regression and Pearson's correlation analyses showed that young adults' relationships with their parents is related to both the actual stability of those job choices and young adults' perceptions of the stability of those choices, and the strength of the association was small to medium. This actually countered the hypothesis 2 that young adults with closer child-parent relationships are more likely to choose less stable careers. We had presumed that close family relationships with offer young adults the confidence to choose less stable jobs. It was also thought that having close family ties might provide a safety net if a foray into a riskier career path did not work out, and a young adult needed financial support in the future. However, our results were in the opposite direction, with those reporting tighter parent child relationships being more likely to choose more stable occupations.

The positive association between the closeness of child-parent relationship and the young adults' career decisions could be explained in multiple ways. One possible explanation is that, young adults who have a stronger relationship with their parents often take cues from their parents and are more likely to pursue activities and make choices that would win approval of their parents. Under the current circumstances, especially with the social and economic impact of the global pandemic, parents may encourage their children to choose relatively stable careers which could bring stable income, reduced stress levels, permanent professional relationships and lower unemployment risks. Children who are closer to their parents may be more likely to make choices consistent

with their parents' expectations and choose such occupations. On the contrary, youth who do not have good relationship with their parents might resist to their parents' advice, and are more willing to make choices that make their parents unhappy or uncomfortable. They are also likely to pay less attention to their parents' wishes and pursue a vastly different career paths based on their own preferences.

The lack of support for hypothesis 2 could also be explained from different angles. Firstly, it was reasonable to argue that close child-parent relationship may grant young adults the flexibility in pursuing high-risk careers, however, those careers do not necessarily equate to less stable careers from the latest job stability measures. Secondly, the hypothesis focused too much on young adults' own career preferences, neglecting what their parents may want them to do and their willingness to follow their parents wishes.

Note, this investigation examined relationships among the study variables but there were no additional details about how or why these participants made their career choices. Further investigation into how young adults make these choices could be used as hypothesis for future studies.

Factors Influencing Child-Parent Relationship and Career Choices

Further exploratory analyses examined the factors which may also shape and influence young adult's career choices. These factors included different measurement scales within the child-parent relationship, the relationship to each parent, and the gender of the young adults.

Firstly, the multiple regression was conducted to investigate how different aspects of the child-parent relationship would affect children's career choices. The overall child-

parent relationship measure consists of three resources scales and five risk scales. Here, the resource scales measurement referred to the positive aspects of the child-parent relationship, such as cohesion, identification and autonomy. Risk scales on this measure referred to the relationship risks that may harm the closeness, such as conflicts, punishment, rejection, indifference, emotional burden and overprotection. The multiple regression result from Table 4 indicated that the scores for resources scales contributed to stronger positive influence on the perceived job stability score, while the risk scales scores did not pose any significant impact to the same job stability measure. Since the resource scales were designed to measure the closeness, intimate bonding and mutual influence between parents and children; therefore, it is nature that higher scores for resource scales, the more likely parents could positively influence children's career decisions. This reinforced the possible explanation that the closer children are to their parents, the more likely they are to make choices that will please their parents, who may be eager for their children to pursue stable careers. Risk scales on the other hand, were designed to measure the difficulties in the relationships. Those difficulties may contribute to negative influence on children which may result in them choosing their own career path. However, their own career paths could be either stable or unstable, which could offer a possible explanation on why the risk scales in child-parent relationship is not related to the stability of child's career choice. For future studies, it will be valuable to further explore how each scale inside the resource and risk scales could affect differently to children's career choices.

Secondly, we explored how the children's relationship with each of their individual parents predicted the stability of their job choices in this study. As noted

previously, the young adults who had better relationship with their parents were more likely to choose relatively stable careers. We wondered whether mothers or fathers played a more important role in affecting their children's career decisions remained unknown. Based on the multiple regression results provided in Table 5, children's relationship with each one of their parents considered separately did not have a clear impact on the stability of the job they choose. Therefore, hypothesis 3 could not be evaluated in this study. This showed that, with only one parent considered, the data for child-parent relationship was less powerful to infer child's career stability.

Interestingly, the analysis did show that a higher discrepancy between the closeness of their relationship to each parent was related to their career choices. Larger parent discrepancy score, which represented the case that the young adults were only close to one of their parents, would slightly contribute to them choosing less stable careers. Why such family relationship would shape young adults' career decision making towards that direction would be an interesting topic in future research.

Lastly, to investigate if child-parent relationship may have different impacts to male and female participants' career choices, the correlation between the overall quality relationship index score and the job stability scores were ran separately for male and female participants. As all the correlations remain weak positive, no consistent differences were observed between male and female results. Larger sample size, as well as advanced statistical approaches focused on testing differences, such as ANCOVA and partial correlation were required to confidently conclude that if gender is a factor that may affect child-parent relationship and children's career choices.

Limitation and Future Directions

While the findings of this study suggested that young adults with closer child-parent relationships are more likely to choose stable careers, it is important to understand the limitation of these findings. First, sample size was relatively small, limiting the generalizability of the results. It is unknown whether correlation results would still hold with more data from participants. Replication with a larger sample would help improve the accuracy and reliability of the survey result.

Secondly, participants were recruited using SurveyMonkey. While there is no guarantee that the participants in SurveyMonkey's pool are representative of the general population of young adults in the United States, using their platform was likely to get a broader sample than the researcher would be able to access on her own. It is most likely that SurveyMonkey's participants pool are frequent internet users, who may be different from a non-internet user group. In addition, SurveyMonkey panelists are the people who incentivized to take online surveys for monetary benefits, which may not be a common behavior for the general population.

Besides the potential issues with the sample used in the study, there are some other important limitations to this work. First, there are many other variables that contribute to career choices. Such variables include young adults' interest and passion, their relationship with other external influences from peers and teachers, and the environment in which they grew up including their parents' own career or job choices and history, family socioeconomic status, parents' marital status, and the range of jobs or careers held by other significant adults in the young person's life. Beyond childhood, young adults may also be influenced by peers they meet in school and/or post secondary

educational settings and by people they meet in many other settings. All of these variables were beyond the scope of the current investigation.

Finally, it is essential to point out that all the results obtained from this study only point towards potential positive correlations between child-parent relationship and child's job stability. It does not infer more details on how different aspects inside the child-parent relationship would affect child's career choices. The ChiP-C test was designed with the capability to measure individual scale in the child-parent relationship, including cohesion, identification, and autonomy, as well as conflict, punishment, rejection and indifference, emotional burden, and overprotection. With more data collected, it would be meaningful to conduct further investigation to connect those individual scales as the influencing factors to child's career choices.

Understanding the key role that parents play in child's career decision making process is critical to the society. This study expanded the existing knowledge on the child-parent relationship and young adult's career choice, and laid the foundation for future studies in the similar topics. The limitations discussed above provide directions and guidance for an improved design of a follow-up study. Future studies should focus on explaining why the child-parent relationship is related to the stability of the career that young adults choose. For example, using a sample with higher quality and larger size, a future study exploring how identification, autonomy, conflict and overprotection in the child-parent relationship would affect child's career choice would provide more value to the field. Additional improvements, including designing a better measure for young adults' perceived job stability, conducting the experiment in control groups, and utilizing

more advanced statistical approach such as ANCOVA and partial regression, would further improve the accuracy and reliability of the follow-up study results.

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