

Gender Role Stereotypes and the Influence of Female Significant Figures

Thesis by
Sruthi Petre Mallika

Submitted in Partial Fulfillment of the
Requirements for the Degree of Bachelor of Arts
in Psychology

State University of New York
Empire State College
2016

Reader: Dr. Judith Gerardi, PhD

Acknowledgement

First, I would like to express my sincere gratitude to my mentor Dr. Judith Gerardi for the advice and support she gave me throughout the one year journey of my thesis work. From our very first meeting, she guided and helped me choose a topic appropriate for an undergraduate study. She was always considerate of the changes I wished to make and was willing to give me the guidance and support I needed on several occasions. Her concern over my future plans and further studies was also highly motivating. Although she was away for the major part of my thesis and our communication was over emails, her prompt and thorough comments on my work, both positive and negative, helped me think through potential issues and improve. Second, I would like to say a big thank you to my best friend and life partner, Jeffrey, for being a pillar of support and for the constant encouragement throughout the course of this work. He always motivated me to stay on track and work constantly so as to finish the work in time to meet each submission deadline. In times when I was lost, especially during statistical analysis, he guided me through the process and helped me learn the application of statistics in real- life research. Next, I would like to express my sincere appreciation to Dr. Sapna Cheryan from the University of Washington (UW) for giving me an opportunity to work as a Research Assistant at her lab during the summer of 2015. I cannot express how much that opportunity has helped in materializing my thesis. I learned a lot about research, from data collection to data entry to the different factors one should consider while filtering data to get the most representative sample, from her lab. Lastly I would like to thank my parents and my close friends for standing by me and showing me love, concern, and support throughout my journey of one year. Without their constant support, I would not have made it this far.

TABLE OF CONTENTS

Abstract

Chapter I:

Introduction.....	5
Literature Review.....	5

Chapter II: Method

Participants.....	22
Instruments.....	22
Procedure.....	24
Analysis.....	26

Chapter III: Results

Participants.....	30
Univariate analysis of Independent Variables.....	30
Frequency Histograms.....	30
Reliability of Dependent Measures.....	36
Feature Scale Correlations.....	37
Overall Correlations.....	44

Chapter IV: Discussion.....

Limitations.....	53
Suggestions for Future Research.....	56
Conclusion.....	58

Appendix.....

Work Cited.....

Bibliography.....

Abstract

The purpose of this study is to determine the influence of female significant figures such as siblings or cousins on the belief of power balance among Indian men in romantic relationships (RR). Stereotypes broadly refer to the beliefs people hold about a certain group of people with similar characteristics. Gender stereotypes are widely held beliefs specifically about the roles of males and females in the society. Gender role stereotypes and gender gaps are highly prevalent in India and previous studies have showed its existence in various domains of the society. India is a traditional country, which follows a patriarchal value system where women are expected to follow the orders of men. However, the prominent developments and changes in the country tend to influence the attitudes of the population. The present study analyzed 48 Indian men who were in a relationship currently or who had been in romantic relationship(s) previously. The results support the hypothesis moderately in that the number of female siblings can predict the presence of gender stereotypes in mature relationships. Future research should analyze a larger population and also other factors such as birth order and age difference between the participants and their siblings.

Chapter I: Introduction

Stereotyping refers to the generalized beliefs ascribed to a social group where members are grouped together with little relevance given to individuality. Gender roles refer to society's set of ideas, beliefs, and expectations from a male or a female. Gender role stereotyping refers to generalizations about attitudes, beliefs, and role expectations from members of each gender ("Glossary of Psychological Terms," n.d.). Accordingly, when these expectations are applied consciously or unconsciously by an individual towards another, he or she is said to hold gender stereotypes. Such attitudes and beliefs each gender holds over the other has great influence in their outlook on marriage and family. India is a traditional country, which follows a patriarchal value system, and previous studies have shown the existence of gender role stereotypes and gender gaps in several domains of the society. However, India is undergoing constant change and development. Such a process of modernization creates economic growth and changes in demographics where traditional views of people may adapt to fit the current changing times. There exists more opportunities for women in terms of education, gaining a job, and attaining financial independence. Hence, the role of women in Indian society has undergone some drastic changes. Extensive research has been performed on gender role attitudes of women; however, even less is known about the attitudes and beliefs of Indian men. This paper attempts to investigate the influence of having female siblings or cousins and the power or dominance Indian men hold over their partner in romantic relationships (RR), either married or unmarried.

Literature Review

The development of gender role attitudes is influenced by several factors. According to Weitzman's Role Theory (1979), as children, their behaviors and attitudes are developed on

the basis of the presence of significant figures in their life. Since women tend to form a major part of their life for most children, it suggests the significance of female figures, such as mothers, female siblings or cousins. Research suggests that sons of working mothers have significant effect on their attitudes towards their partner or wife (Farre & Vella, 2013). It is also suggested that boys develop gender role attitudes at a young age and carry certain beliefs into adulthood as well (Blee & Tickamyer, 1995). Hence, the influence of female figures in the lives of young boys tends to have significant role in their attitudes and behaviors as adults.

Social role theory (Koenig & Eagly, 2014) explains why individuals conform to gender stereotypes. According to this theory, individuals conform to gender stereotyping because of social roles each gender is associated with. These social roles expect them to behave and act in certain ways that align along the traditional beliefs of gender roles. Consequently, expectations from men and women differ and so do the skills required to achieve those expectations. In a study examining whether emotional vulnerability plays a role in men and women conforming to gender stereotypes, Vogel, Wester, Heesacker, and Madon (2003) found that high emotional vulnerability caused American men to conform to gender stereotypes. The study notes that although there appears to be a large difference between the two genders with respect to their attitudes and belief system, men and women are quite alike for the large part. This study examined several potential moderators that might play a role in the attitude differences between men and women. Researchers suggest that emotional vulnerability may especially be relevant in romantic relationships for its growth and maintenance. The study also found that men's behaviors were more contexts dependent than women's. This study suggests that conformation to gender stereotypes appears to be context dependent on factors like emotional vulnerability.

Research based on social dominance theory and social role theory was used to explain hand holding behavior between people. Pettijohn, Ahmed, Dunlap, and Dickey (2013) observed hand holding behaviors between romantic partners as well as between parent-child. The researchers observed that in romantic relationships, men tend to keep their hands on top of their partner. Similar observations were made in parent-child relations where the parent kept the hand on top of the child's. Such hand holding patterns can be described as the establishment of dominance over one person. Thus, it can be suggested that in romantic relationships, men tend to have a tendency to dominate over women. This study is relevant to the present study because it suggests other factors such as culture or inborn tendency of men to conform to gender role stereotypes.

Such factors may also explain the attitude of men during sexual encounters. According to social script theory, during sexual encounters in romantic relationships, men tend to take a dominant role, in both initiating and directing sexual acts, more than women. Research by Sanchez, Fetterolf, and Rudman (2012) examined the predictors of traditional gender and sex roles in romantic relationships among couples in the United States. Their results suggested that gender differences are still prevalent in relationships. Traditionally, men tend to initiate and pursue sexual acts while women often have a restricted role where they have more freedom to reject any form of sexual act that they find inappropriate depending on cultural norms. In other words, traditionally, the role of women is often submissive during sexual encounters. Hence, women who initiate a sexual encounter are considered less desirable and are stereotyped as less feminine. This prevents women from being more expressive sexually in romantic relationships; thereby leading to eventual less satisfaction in relationships.

Expanding the studies of gender stereotypes and its perceptions in work context, Hettinger, Hutchinson, and Bosson (2014) examined how traditional stereotypical beliefs about professional status of men and women affect romantic relationships. The paper explored how the negative judgments of outsiders impact relationship dynamics especially in a non-traditional professional context in the US. The study adopted a vignette design to determine whether professional status influences the way men and women are perceived at the workforce and also analyzed how non-traditional attitudes affect relationship dynamics. The study revealed that professional status affects how outsiders perceive a relationship. Male participants were the happiest when they had a higher professional status than their wives. It was also found that male participants were less favorable and had less concern for wives with higher status than them. Relationships where wives had higher professional power than husbands witnessed violence and conflict between the couple. The study also found that women with higher status are more likely to face interpersonal hostility at the workplace. The results of the study suggest that outsiders and men hold active traditional beliefs towards highly successful working women providing relevant information about the role of professional status of women and how men and outsiders view women and how it affects the relationship dynamics.

The influence of income on gender role attitudes in men in the US was assessed by Coughlin and Wade (2012). They found that men who believed in traditional male ideology and earned a lower income than their wives had lower standards in their romantic relationships. They had less empathy, trust, poor communication skills, and difficulty to make decisions together. The study also produced another interesting result where men who believed in non-traditional masculine ideology and had lower incomes than their wives had higher satisfaction and better standard in romantic relationships. This study signifies that men who believes in non-

traditional ideology did not relate masculinity with income and had less stereotypical beliefs towards women. Compliance with traditional beliefs and income disparities appear to play a role in men's attitudes towards women.

Endendijk, Groeneveld, Berkel, Hallers-Haalboom, Mesman, and Bakermans-Kranenburg (2013) found that family dynamics seem to play a role in gender stereotyping in the Netherlands. The study examined the role of implicit and explicit gender stereotypes of preschoolers and their parents in the Netherlands. Mothers with low education appear to hold explicit stereotypes. The study suggested that in families with opposite-gender siblings, children tend to perceive both genders with an egalitarian view because they view siblings of opposite gender equally while growing up, which then influences their attitudes as adults. It was also found that maternal gender schema have an impact on the schema held by offspring, suggesting the significance of mothers in the lives of young children. Gender schema refers to the set of expectations which people use as guidance for a better understanding of the concept of gender ("Psychology Dictionary - Free Online Psychology Dictionary," n.d.). Hence, the study suggested that such gender schemas held by mothers had a significant influence on the beliefs and attitudes of her children about gender roles.

Study by Hupp, Smith, Coleman, and Brunell (2010) explored the role of family structure in a child's understanding and compliance to gender role stereotyped information. The study analyzed twenty-eight young boys aged between 2- 4 years and their mothers. The results of the study suggest that children's knowledge about gender stereotypes is largely dependent on the mother's relationship status (married or unmarried). It was found from the study that children of unmarried women had less understanding about gender related stereotypes compared to women who are married. This is probably because family work and duties must

be divided according to gender roles between a married couple and children who grow up in such an environment will naturally apprehend gender roles and stereotypes associated with it. Another interesting finding from the study, which is of great relevance to the present study, is the influence of androgynous traits displayed by the mother. An androgynous person is someone who portrays the psychological traits of both males and females in a suitable way; the concept aims to facilitate people to be flexible under circumstances that demand so (Hemmer & Kleiber, 1981). The study found that as mothers adopted an androgynous personality, it appeared to weaken children's gender role stereotypical beliefs. This study is highly relevant to our present research as it shows the great influence of a female significant character in the attitudes of young boys. The changes in the personalities of mothers have great impact on the development of gender role stereotypes in young boys.

Most of the above- discussed literature has been done in modern and developed western countries. However, the influences and factors contributing to gender role attitudes in more traditional and developing nations would be different. A study in Turkey showed that culture appears to play a main role in gender role stereotypes. Sakalli-Ugurlu (2003) examined the role of relationship satisfaction, gender, and gender stereotypes on future time orientation in romantic relationships (FTORR) in Turkey. Traditional masculine stereotypes such as power, dominance, and authority still remain strong in Turkey. So do traditional feminine stereotypes such as dependence and compliance. Another relevant result from the study showed that men preferred the superior position in a romantic relationship. They preferred to take initiatives and protect women. It was also found that women were more future-oriented and took relationships more seriously than men. This finding suggests that Turkish women prefer to comply with the traditional culture of Turkey where women have restricted freedom with regard to dating and marriage. This study provides an elaborate view of how traditional

cultures function and how culture has shaped people's beliefs on gender roles and gender stereotypes.

Manea (2013) investigated whether hometown size where children grow up plays a role in the development of gender stereotypes in young children in Romania. It was found that there exist differences in the perceptions of gender related stereotypes between children who grew up in a city and a small town. City- raised children, as feminine perceived the trait "friendliness" while the same was perceived as a trait of one's own gender by town- raised children. This is probably because in a small town, due to lower density of population, people are friendly with each other regardless of gender or gender roles. However, in a big city, certain traits are associated with each gender more strongly. The study found that the environment in which children grow up plays a significant role in the development of gender role stereotypes. If children are constantly exposed to attitudes and behaviors pertaining to gender role stereotypes, it will have a great influence on their attitudes from that age.

Other subjective elements such as personality traits also seem to play a role in the perception of gender stereotypes. Mast (2005b) introduced the Interpersonal Hierarchy Expectation construct to examine the relationship between IHE and stereotypical behavior. Interpersonal Hierarchy Expectation (IHE) can be defined as the expectations people have about the hierarchy according to the degree of dominance between people or in relationships (Mast, 2005a). He conducted two studies: First one analyzed whether IHE contributes to stereotypical behavior. Second study analyzed whether gender plays a role in the relationship. The results revealed that higher the IHE, men held stronger stereotypes. Men with high IHE viewed themselves and other men as dominant to females. It was also found that such men believed that they hold higher social positions than women and that they make better leaders

than women. The results of this study has major implications in real-life situations where women are stereotyped and are seen as inferior to men because men accept the notion of high IHE. This research is especially relevant to the present study because it introduces the factor of interpersonal hierarchy expectation (IHE), which appears to play a role in men holding gender stereotypes towards women.

Study by Kaur and Jawaid (2012) provides an insight into the decision- making and power balance in a Malaysian Sikh household. The study explored the prevalence of inequality in decision- making and balance of power based on gender roles among 197 Sikh couples. The paper studied decision- making in five spheres: domestic work, childcare and child rearing, finance, social life, and family planning. Each of these spheres probed the question “Who has the greatest say in” followed by various different situations. This form of probing is similar to the instrument used by the present study *Self-perceived Decision Making Power Questionnaire*. The results of the study found that females have a dominating word in the domestic work sphere. The man in the family mostly dominates the childcare and child rearing as well as finances. For instance, in the finance sphere, women tend to have a dominating word on the amount of money to spend on monthly groceries however, for larger expenditures, men tend to have a dominating word, such as on savings or kids’ education. In the family planning sphere, however, both men and women tend to have an equal distribution of power. This study is relevant to the present research as it identifies the male dominated or patriarchal system of a certain population who potentially share similar cultural views to the sample that is being analyzed in the present study.

Allen and Sethi (1981) investigated the assignment of gender role in India and its comparison to the US population. The study moderately used the Bem Sex Role Inventory (Bem, 1974),

which is a commonly used tool in the US to examine gender roles. The researchers added items to the scale considering factors based on culture such that it can be validated for use on Indian population. The items on the scale were categorized into three: Masculine (aggressive, ambitious), Feminine (warm, gentle), and Neutral (secretive, friendly). The results of the study revealed a significant overlap between both cultures. It was found that there were no gender differences between the two cultures for almost half of the traits (both masculine and feminine). The variance was the least for the neutral traits. Also, characteristics such as dominance, aggressiveness, competitiveness were preferred to be associated to men and sensitivity, warmth, tenderness were characteristics that were preferred to be associated with women. Indian women were considered more feminine and desirable if she was amiable, passive, and religious. Such stereotypes tend to affect people's choice for education and career. Indian society tends to think highly of a male with strong traits that are considered desirable for men. This study is relevant to the current literature as it presents the attitudes of Indian society in the past.

Another study by Shukla and Kapoor (1990) explored the marital roles and power among 130 couples from an upper middle class background in India. The results of the study revealed similarities between the upper middle class families of India and the US. This is due to two observations: The presence of highly educated women in families a) lower the dominance of men, and b) women's involvement in familial decision-making increases greatly. This study points out only the status of women as a cause for the liberal attitudes of men. More research has to explore other factors contributing to traditional or liberal attitudes of Indian men.

A study by Bhatnagar and Rajadhyaksha (2001) suggests that attitudes towards women in India still conforms to the traditional beliefs in that Indian women are expected to consider

their family roles as a priority over their professional roles. Men, on the other hand, are given the freedom to prioritize their professional roles over family roles. The study also found that in couples where both men and women are equally qualified, men are identified on the basis of their academics and profession while educated women are still identified on the basis of her family and household affairs. The study also indicates that couples enter marriage with preconceived notions of the expected behavior and duties of each gender and they tend to conform to those notions, regardless of circumstances and their own views. Men are expected to be the bread- winners of a family, while women are expected to be the homemaker. This result suggests the role of culture and tradition in the formation and maintenance of attitudes among Indian couples. Although developmental theories suggest that individuals change their attitudes and beliefs during different stages of development, this study suggests that gender role differences may still be prevalent in Indian society amidst developmental changes.

Women in India opt for better education, thereby attain better jobs, and become financially independent, trends that are new to the Indian society. Richa and Deepti (2009) discuss the differences in the career paths of men and women in India during their different cycles of life. The findings from the study suggest both men and women view that career as progressive in their early years of professional life. For men, this trend continues throughout their professional career. However, women tend to take a break sometime during the initial years of work due to personal reasons such as childbirth. Women are often faced with the hard choice between families or career and this, more often, tend to hinder their progress in careers. After the break, women tend to lose the steady progress which they had before the break or which men continue to have throughout their careers. Instead, they get periodic gratification which may not be frequent; but fulfilling enough for them to continue their work. The study is relevant as it explores the practical life experiences of women in India. However, it still

remains a question whether women choose to opt for periodic gratification or whether men play a role in the formation of it.

In a more recent study by Simister and Mehta (2010), they conducted interviews and surveys among married Indian couples across several cities to study the attitude towards gender-based violence in India. The results of the study suggest an increase in domestic violence against women. The study claims that women are less willing to have a lower status to their spouses. Such an on-going modernization in the attitudes of Indian women appears to explain the significant increase in violence. The changing trends in the status of women in a traditional society like India may conflict with the traditional beliefs and attitudes that Indian men still hold. This study is relevant to the current research as it confirms two relevant aspects: Indian men still hold traditional beliefs and attitudes and that there appears to be a conflict and increase in negative attitudes in the recent years in modern India.

India is going through extensive modernization in terms of technological advancements and socio-economic growth. Such transition periods often bring about significant changes in the attitudes of the general population. A very recent research by Shukla (2015) studied three generations Indian families to observe attitude changes among Indians towards women. They studied grandfathers and grandmothers, their children, and grandchildren. Women tend to hold egalitarian attitudes in terms of their professional and social roles. The results of men's attitudes suggested that men from younger generations tend not to believe in the dowry system and had very negative attitudes towards harassment of women. Hence, younger participants tend to hold non-traditional attitudes compared to those from older generations. However, among the participants of younger generations, women held more non-traditional attitudes compared to men. This study is highly relevant to the current research as it illustrates

the present changing attitudes among young Indians and suggests the need for more research on younger generations in order to better understand the factors contributing to such attitudinal changes.

Another recent study by Kuruvilla and SP (2014) investigated the changes in the attitude of men and women towards women at workplace. The participants of the study included employees and master's students from a university in India. The results of the study showed a significant positive attitude among young working adults towards working women, while a negative attitude was seen among boys. The study found that employees, both males and females, tend to have a positive attitude towards working women. Such an attitude may be due to personal experiences and practical reasons. Having worked with females at work, they may witness the caliber, efficiency, and hardworking mindset of women and realize that they are as equally efficient as their male counterparts. Also, with urbanization, costs of living in countries like India have risen significantly over the years. Hence, income from both partners is often required to meet living costs and attain higher standards of living. However, there was a notable difference in the gender role attitudes between girls and boys. Girls appeared to have very modern outlook towards gender roles while boys tend to hold strong traditional attitudes towards gender roles. The study showed that boys consider women's earnings as an additional income and not a necessity, while girls view one's income as a necessity in a marriage. This study showed significant results in that there appears to be a difference in the attitudes between boys and young adult males in India. Several factors, such as age, education, employment, or life experiences may be responsible. More research has to be done to explore the factors that may be responsible for such differences in attitudes between the two groups.

Conklin (1979) explored the cultural differences in power in rural and urban India. The study was a part of a bigger research exploring marital roles and balance of power among Indian couples from the southern state of Karnataka. The sample included people living in the rural and urban areas of a particular district in the state. The study utilized Bloode and Wolde's (1960) questionnaire as well as interviews. The study found that rural Indian women appear to have less power compared to urban women. This correlation explains the traditional and conservative attitudes of rural population in India. Also, in a traditional joint family, there was less likelihood of decision-making power for women. Higher educational levels of husband and wife appear to be positively correlated with the power of the wife. However, high income and power of women appear to be negatively correlated. The study of migrants, who moved from rural to urban areas of the district showed that migrants has less traditional views and did not appear to believe in the patriarchal system. In general, in an arranged marriage, where the man's family and relatives meet the woman first, the power of women appears to be high. Hence, traditions not only lower but can also improve the status of women in India. This study is especially relevant to our present study as it explains differences between rural and urban areas of the same place in India.

A few years later, Ramu (1988) conducted a similar study that was also part of the bigger research mentioned previously. Regarding the perception of marital roles, there appeared to be two models: firstly, the couples appear to have agreed on their roles within the marriage and secondly these agreements appear to have formed as a result of the traditional influences. For instance, it was expected that the men would be the income producer while the women remain the warm, loyal, wife and mother. Although there were marital role expectations for each partner, it appeared as if there was a fair and equal division of expectations and roles between the couples within the marriage.

Farre and Vella (2013) examined the development of gender roles and how it is passed down from generation to generation. To measure the attitudes towards gender roles, the study utilized the NLSY79 survey, which is a longitudinal research sampling people aged between 15 and 22 years. This study used data for years ranging from 1979 to 1994. The participants were interviewed yearly for the mentioned years. The findings of the study were interesting in that it showed strong correlation between maternal influence and gender stereotypes held by children. It was found that children tend to inherit their mother's views on women's role in a family and society, in general. Men who have working mothers may be willing to divide household activities that are otherwise traditionally assumed to be a part of female gender roles. This may eventually lead to less traditional outlooks and families. The study also revealed that the attitude of men towards female colleagues at work depends largely on their wife's attitudes towards work. Both results reveal the influence of women in shaping the attitude of men towards gender roles of women.

Jin, Doukas, Beiting, and Viksman (2014) studied Indian men in Kerala to investigate intimate partner violence (IPV) in marriages. Kerala has the highest literacy rate in India and is considered to have non-traditional attitudes compared to other Indian states. The study utilized Self-perceived Decision Making Questionnaire, which was used to determine the decision-making power among married couples. The researchers adopted the Bloode and Wolfe's (1960) version of the six- question questionnaire with a modification to one of the questions to adapt it for use among Indian population. Also used in the study is the Index of Marital Satisfaction, which determines how each partner feels about the other in a relationship. In a sample of 134 men, approximately 40% of men reported to be violent and about 20% of men reported to have used a weapon against their spouse in a violent encounter. The study by Simister and Mehta (2010) also reported similar results and suggested that

increasing educational and career opportunities for women play a key role in the increase in violent activities. Also it was noted that violent men appear to believe that they possess less power in the decision-making process of family. Dissatisfied marriages also appear to be a reason for violence among Keralite men. The study is especially relevant to the present literature as Kerala is considered to be a developed state, which provides many opportunities for women with respect to education and employment. Hence it provides significant information regarding the attitudes of men in the current modernized society.

Role theory suggests that female figures play a significant role during childhood and contributes to the formation of gender role attitudes as kids. The influence of mothers, female siblings and cousins has a significant impact during childhood for most children, especially young boys. Theories such as social dominance theory, social role theory, and social script theory seem to explain the beliefs and behaviors of men and hence form the basis for such male characteristics such as dominance and conformation to gender role stereotypes. Research on gender stereotyping and on romantic and marriage relationships show that many factors contribute to an individual's conformation to gender stereotypes. Literature suggests that such a conformation is largely context dependent on elements such as emotional vulnerability, particularly for men. Personality traits, such as interpersonal hierarchy expectations, where men believe in hierarchy in relationships and marriages, may also contribute to gender stereotyping. Social script theory provides information on the tendency of men to dominate during sexual encounters. Women are expected to remain passive during sexual encounters and those who did not abide by this "stereotype" were considered less feminine and less desirable. Studies on the effect of professional status on the conformity to gender stereotypes show that men preferred if they had higher professional status and income compared to their romantic partners. Professional status of men and women also influence how outsiders are

perceiving it. Often men who have a lower professional status and earn a lower income than their partner are viewed as less masculine. This, in turn, may contribute to men's desire to have a higher status and income than women. Such studies suggest not only the attitude of men but also of that of the society and outsiders' perception of gender roles. Studies on men in traditional marriages suggest that they prefer to be the bread-winner of the family and had either neutral or negative response to women advancing in their careers. However, related research shows that such a mentality is more often unconscious, suggesting the prevalence of a strong structure in traditional marriages. Research on family dynamics suggest that parents and siblings have a significant influence on children's development of gender stereotypes. Female figures appear to shape the attitudes of boys; having female siblings contributes to men adopting an egalitarian attitude towards gender roles. Research from a traditional and religious nation like Turkey suggests that women preferred to comply with traditional gender roles whereby they remain inferior to men and would let men have the superior hand in a romantic relationship. Research from India indicates similar results such that Indian men are given the freedom to prioritize their professions over family, while women are expected to prioritize family and children over their careers. In the current face of change in a highly developing country like India where women are increasingly becoming independent, studies show that family roles still tend to be a priority for Indian women and hence beliefs in traditional gender roles are still prevalent. There also appear to be differences in the attitudes and beliefs of people in rural and urban India. Rural women prefer to comply with traditional gender roles and have less power in family decisions when compared to urban women. Women who moved from rural to urban areas also have a more modern outlook towards gender roles and have stronger decision-making power. However, more recent studies from India have shown some interesting changes in the attitudes of men and women towards

traditional gender roles. Women appear to not accept lower statuses compared to their husbands. This is often against many traditional beliefs and attitudes. Research shows that the consequences of such non-traditional attitudes are an increase in violence against women. Present generation women tend to hold egalitarian views on gender roles; similar are the attitudes of younger men in India.

Previous research has mostly studied maternal significance in the lives of men. Also, significant amount of research has been done on Western population while much less research has been done in India. India is a traditional country characterized by big families with more number of children and strong family bonds, even with extended family. This gives way for more interaction with siblings and cousins, especially of the same age group. Hence the significance of female figures such as siblings and cousins is highly relevant in an Indian context. There is much less research done on the influence of such female figures in the development of gender role attitudes, especially power or dominance. This paper attempts to explore the role of female siblings or cousins in the formation of gender role attitudes of Indian men.

Chapter II: Method

Participants

The participants in this study were 48 Indian men over 18 years of age, who were either currently in a relationship (married or unmarried) or had previously been in a relationship. Every participant read a consent form and was asked to confirm their age and their consent to participate in the study. Each participant submitted only one survey.

Instruments

Self-perceived Decision Making Power Questionnaire In order to determine the perception of power in Romantic Relationships (RR), participants were provided with seven life events and asked whether they or their partner have the final say in the given situations. The situations included “buying a car or furniture”, “having children”, “what house or apartment to take”, “whether a partner should go for work or quit work”, “how much money to spend each week on food”, and “how much money to send to relatives”. The questions were originally derived from the study conducted by Blood and Wolfe (1960) which examined the dynamics of married life, including balance of power and conflict among married couples. The original scale included only six questions. Since the original scale was developed in the US and tested on the American population, a modified version of the scale was adopted by Jin et al., (2014) to adopt the scale to test Indian population. In the original version, the first question was “buying a car”. In the modified version, the study included “buying a car or furniture” as not all participants may own a car and since the study does not collect data regarding participant’s socioeconomic status. Also the last and seventh question (“how much money to send to relatives”) was added in the modified version, as it is of high relevance in an Indian context

with strong familial bonds. The responses were recorded on a five-point Likert scale which includes options such as “you alone”, “you more than your partner”, “you and your partner exactly the same”, “your partner more than you”, “your partner alone”. Cronbach’s alpha provides information about the reliability measure of an instrument (Mohsen & Reg, 2011). Its value ranges from 0.7-0.95 corresponding to low to high reliability value. The Cronbach’s alpha for the modified version of the instrument used in the current study is 0.70. The low value may be due to the fewer number of items (seven items) in the scale.

The Index of Marital Satisfaction (IMS) To determine the level of marital satisfaction, participants were asked twenty-five questions to understand how the men feel about their RR. A five-point Likert scale was used to report the response. The Likert scale options include “rarely or none of the time”, “a little of the time”, “sometime”, “a good part of the time”, “most or all of the time”. The instrument was also used in the study on Indian population by Jin et al., (2014) and reported a very high reliability of 0.93 (Cronbach’s alpha).

Sociodemographic details Lastly, the participants’ demographic details were collected through a short questionnaire which included questions regarding their gender, age, current relationship status, length of current relationship (if any), number of male siblings, number of female siblings, questions denoting the presence female significant figures such as “Would you consider yourself having influenced by female figures other than your mother?”, “Have you spent substantial amount of time with cousins (first or second) in your childhood or in your adulthood?”, and also the gender of the cousins (if any).

The survey used in the study is attached in the Appendix.

Procedure

The survey was uploaded online with the use of Google forms and participants were recruited by word of mouth. Participants in this study are friends of friends and they received the survey either via email or as a message with the survey link via social media such as Facebook. All instruments were uploaded and set up on Google forms as a three page survey. The first page included a consent form. In order to participate in the survey, participants were required to answer two questions located at the bottom of the first page: participant's age and the consent to participate in the study (both are required questions). One can proceed to the survey only if the response to both questions is "Yes". If the response to either of the questions is "No", then the survey would be discontinued. The second page included two instruments, Self-perceived Decision Making Power Questionnaire and The Index of Marital Satisfaction. The Self-perceived Decision Making Power Questionnaire was made a required instrument so that one can proceed to the next part of the survey only if all questions in this instrument were answered. The third page included the questionnaire for Sociodemographic details. In this instrument, the following questions were required from each participant:

- *Gender*: Participants should choose either Male or Female.
- *Age*: Participants were required to enter their age.
- *Number of male siblings*: Participants had to choose one option from the list [0, 1, 2, 3, 4, 5, >5].
- *Number of female siblings*: Participants had to choose one option from the list [0, 1, 2, 3, 4, 5, >5].

- *Would you consider yourself having influenced by female figures other than your mother?* : Participants had to answer Yes or No for this question. To provide more context and help to participants, an example of a scenario where the answer is Yes was also provided. The following example was provided: “Example: Do you consult with, say, an aunt of yours or other such female significant figures for advice?”.
- *Have you spent substantial amount of time with cousins (first or second) in your childhood or in your adulthood?* : Participants had to answer Yes or No for this question. To provide more contexts and help to participants, an example of a scenario where the answer is Yes was also provided. The following example was provided: “Example: Did you spend your weekends or holidays with cousins?, Are you still in touch with your cousins? ”.
- Two follow up questions were asked immediately after:
 - *If yes, how many were males (approx.):* Participants were expected to enter a numeric value if their answer to the previous question was yes.
 - *If yes, how many were females (approx.):* Participants were expected to enter a numeric value if their answer to the previous question was yes.
- *Which of the following best describes your current relationship status?:*
Participants had to choose from one of the following options:
 - Single, never married
 - In a relationship

- Married
 - Separated
 - Divorced
- *Length of the current relationship, if applicable (approx.):* Participants were expected to enter a numeric value for the length of their current relationship.

Also, only one response per participant was possible and this was assured by requiring the participants to sign in with a Google ID to participate in the survey. Google Forms allows export of the survey responses in the comma separated value (csv) form, which is a data format that is easy to ingest for all standard statistical analysis tools like R.

Analysis

The study aimed to explore the predictive power of the number of female siblings on decision making power balance in romantic relationships. All statistical analysis and visualization was done in R, the statistical programming language. Once the data was collected, the analysis had the following stages:

1. *Data cleaning and preparation:* The first step was cleaning and preparation of the data to make it easy to analyze with standard statistical tools like R. This involved handling:
 - *Handling missing data:* Although participants were expected to answer all relevant questions, a handful of participants forgot to provide their age. In these cases, their age were filled in using the median age of all other participants.

- *Handling invalid data:* Although the survey was intended only for Indian male participants, there was an entry with Gender marked as “Female”. While this might have been a data error, we discarded the participant.
 - *Sanitizing non-standard data:* There were many data entries where numeric data was expected, but the participants provided answers in non-standard forms. For example, Under “Age”, some participants enter “25 years and 10 months”, while a numeric value was expected. This was also noticed for other questions that expected numeric data, like “Number of male siblings” or “Number of female siblings”. In all these cases, manual sanitization was performed.
 - *Discarding whole participants:* Data from two participants had to be discarded because of enough missing data. These two participants completed only one of the two questionnaires, and so were discarded, as scales cannot be computed for them.
2. *Computation of scales under study:* Once the data was sanitized and standardized, the scales under study were computed. Two primary scales and three auxiliary scales were computed from the data.
- *Self Perceived Decision Making Power (SPDM):* This is a primary instrument already described above. We describe the specific of scale computation in the Results section.
 - *Index of Marital Satisfaction (IMS):* This is a primary instrument already described above. We describe the specific of scale computation in the Results section.

- *Shared Power Index*: This is an auxiliary instrument that was computed to understand agreeability of relationships by computing the percentage of questions in the the Self Perceived Decision Making Power questionnaire were the participant answered “husband and wife exactly the same”.
 - *Decision Power Index*: This is an auxiliary instrument that was computed to help aid the data analysis and to identify interesting clusters of survey participants. The Decision Power Index is just the Self Perceived Decision Making Power instrument scaled to a 0-100 scale. These values, once scaled to 0-100 aids interpretation as percentages and allows to classify relationships of participants into the following categories:
 - *Wife- dominant relationships*: These were relationships with values between 0 and 33.
 - *Husband- dominant relationships*: These were relationships with values between 66 and 100.
 - *Cross Classified Relationships*: Both auxiliary scales described above can be used to classify each participant into one of the following relationship categories: female-dominant, male-dominant, equalitarian and divided-power. The categories are self-explanatory and the details of their computation are described in the Results section.
3. *Univariate statistics and distribution analysis of all independent and dependent features*: Univariate statistics were computed using the summary command in R, and

distributions were plotted using the `ggplot2` library in R. Understanding the data distribution was key in slicing the data in different ways. The details are in the Results section.

4. *Reliability of scales under study:* The reliability of the primary instruments under study were confirmed by computing Cronbach's alpha using the `alpha` command from the `psych` package. In addition to the reliability, the mean (using the `mean` command), standard deviation (using the `sd` command) and range of both scales were computed. The same values were computed again for other interesting splits of the data as well.

5. *Feature Scale Correlations with significance levels:* Correlations between the independent variables (or "features") and the dependent variables (or "targets"/ "scales") were computed to understand the effect of each feature. These were plotted using the `ggplot` command and the correlations were computed using the `cor.test` command in R.

6. *Correlation Analysis with significance levels:* Standard statistical tools like R make it easy to compute the correlations with significance levels between all variables in our data. The `corrplot` command was used to compute a matrix of correlations between all possible combinations of variables along with their significance values. This allowed us to test our primary hypotheses under study. More sophisticated analysis techniques like Factor Analysis and Generalized Linear Models were not employed because of the small number of data points in the study (48 valid responses in total).

Chapter III: Results

Participants: Participants were 50 Indian males who were selected from the researcher's social network. Although 51 responses were recorded and the survey was intended to be completed by males alone, one respondent was female. Two of the participants did not answer the survey completely, so they are not included in any of the analysis. This leaves 48 valid responses (mean_age = 29.35 years, sd_age = 9.92, age range = 20-58, 4% did not provide this information).

1. Mean and Standard Deviation of Independent Variables

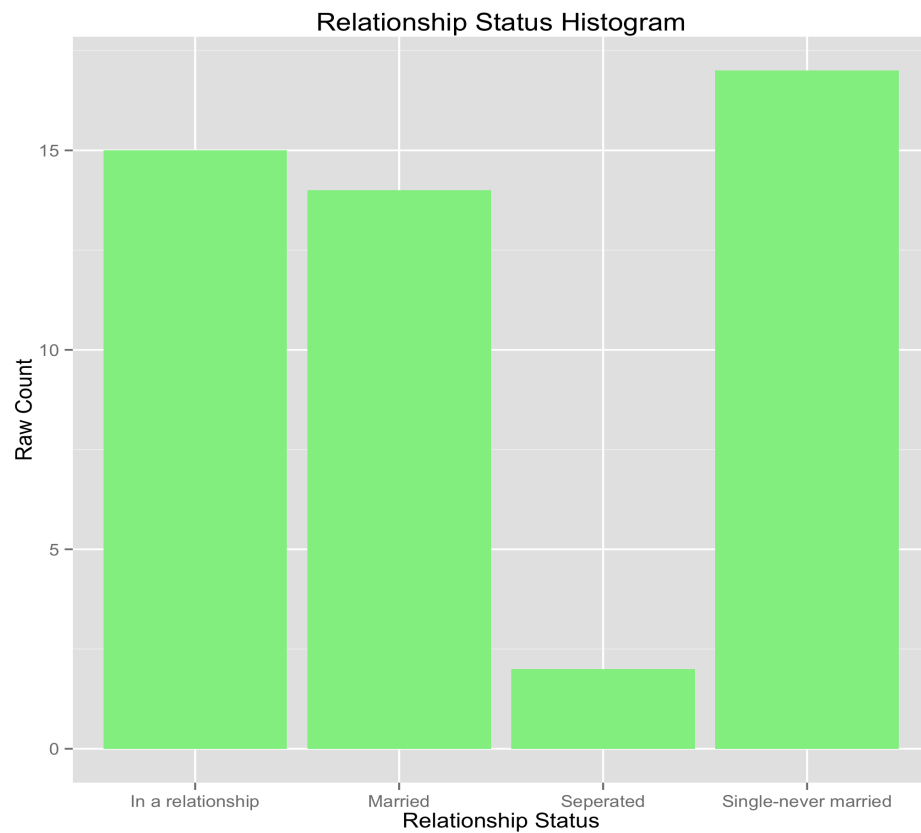
Independent Variable	Mean	Standard Deviation	Range of Values
Age (in years)	29.35	9.92	20-58
Number of Male Siblings	0.625	0.92	0-5
Number of Female Siblings	0.92	1.15	0-5
Number of Male Cousins	4.46	8.26	0-50
Number of Female Cousins	4.5	10.15	0-70

2. Frequency Histograms (See histograms below)

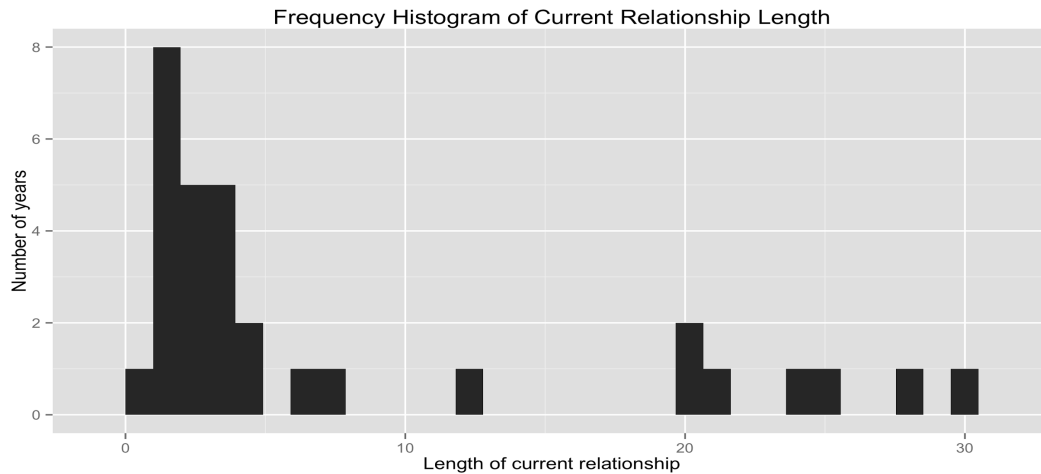
2.1 Relationship Status: 35% of participants reported their current relationship status as 'Single-never married'. We believe the responses from this group are not indicative of their behaviors in an actual relationship. For most analysis, we split the participants in three ways:

- All participants.
- All participants who are in ‘Single-never married’ Relationship Status (35%)
- All participants who have been in a relationship for more than two years. (40%)

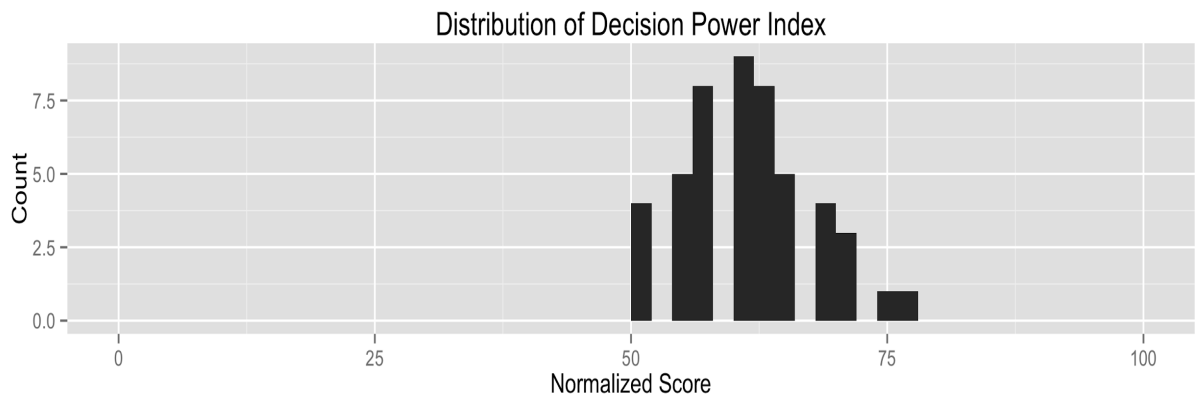
The raw counts can be seen in the figure below.



2.2 Length of Relationship: It's very clear from the figure below that most of the participants in the survey have had relationships for less than two years. Only ~ 40% of the participants have had a relationship for more than two years, so it is worth analyzing this group alone.

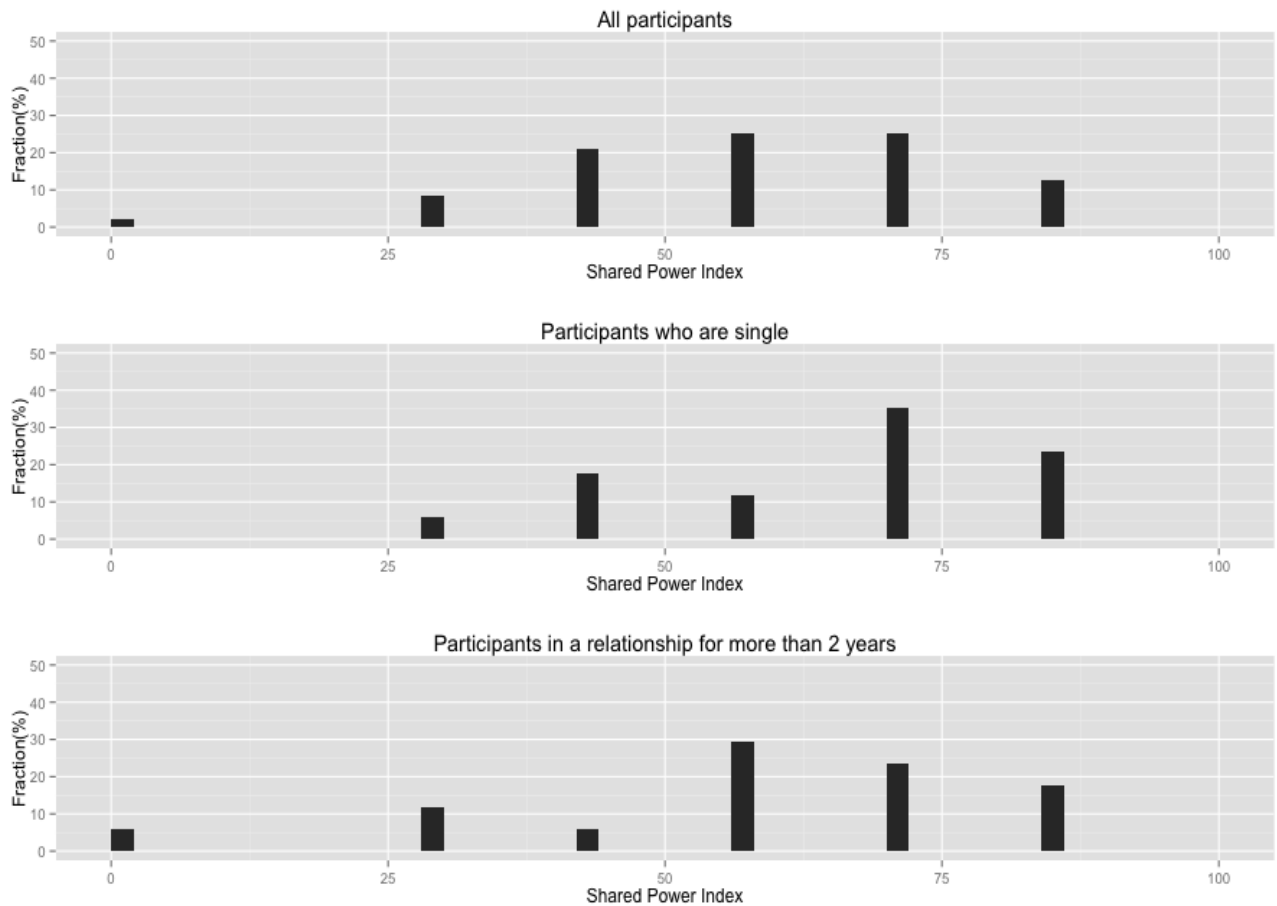


2.3 Decision Power Index: Decision Power Index is computed by scoring responses for each decision from 1 ("your partner alone") to 5 ("you alone") and summing these scores. The resulting index has a range of 7 to 35. The raw score index was then transformed to a 0-100 scale to indicate the percentage of the maximum score. Low scores (for example, a percentage score less than 33) indicates wife dominance in decision making and high scores (for example, scores of 66 and above) indicate husband-dominance in the sense of the husband most often had the final say.



2.4 Shared Power Index: This index is the number of decisions for which the respondent indicated the decision was made by the "husband and wife exactly the

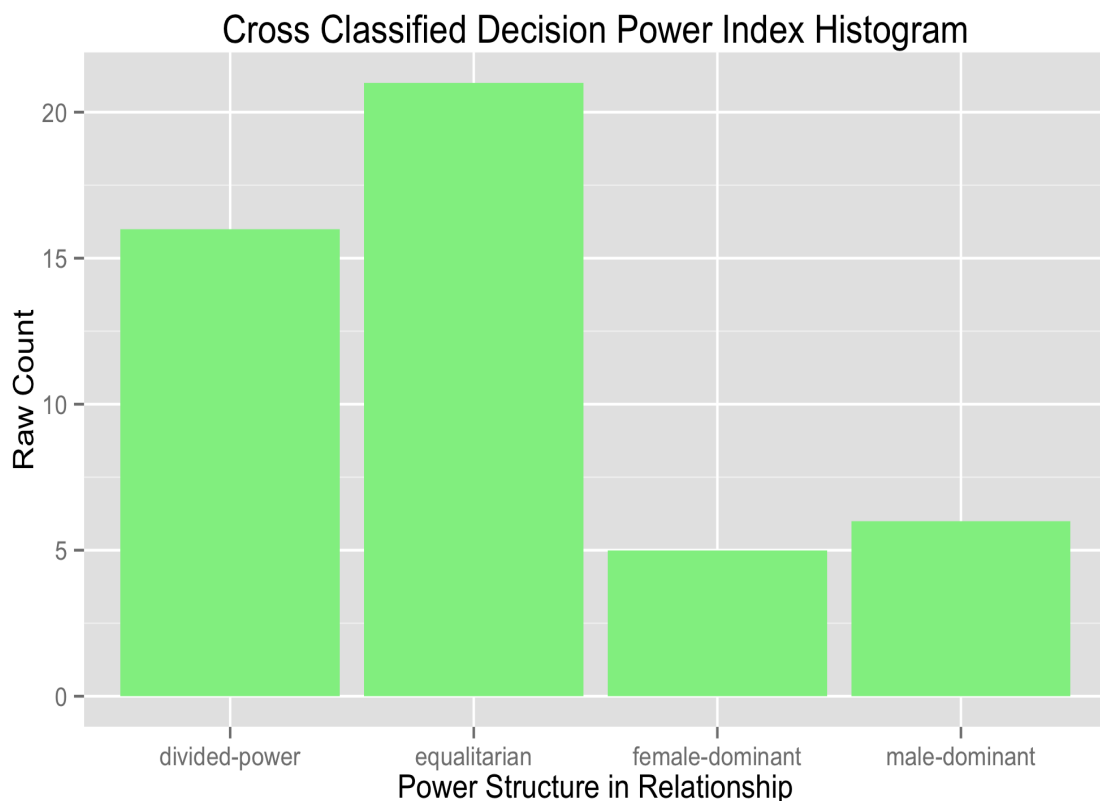
same." The resulting index has a range of 0 to 6, which was also transformed to 0-100 percentage scale by dividing by the maximum score of six. A 100 on the Shared Power Index means a couple who tends to agree on most questions.



It is interesting to note the *shift in Shared Power Index* between participants who are single and participants who have been in longer relationships. The single participants claim to have more equalitarian structure in their relationships, potentially because of an idealized view of a relationship.

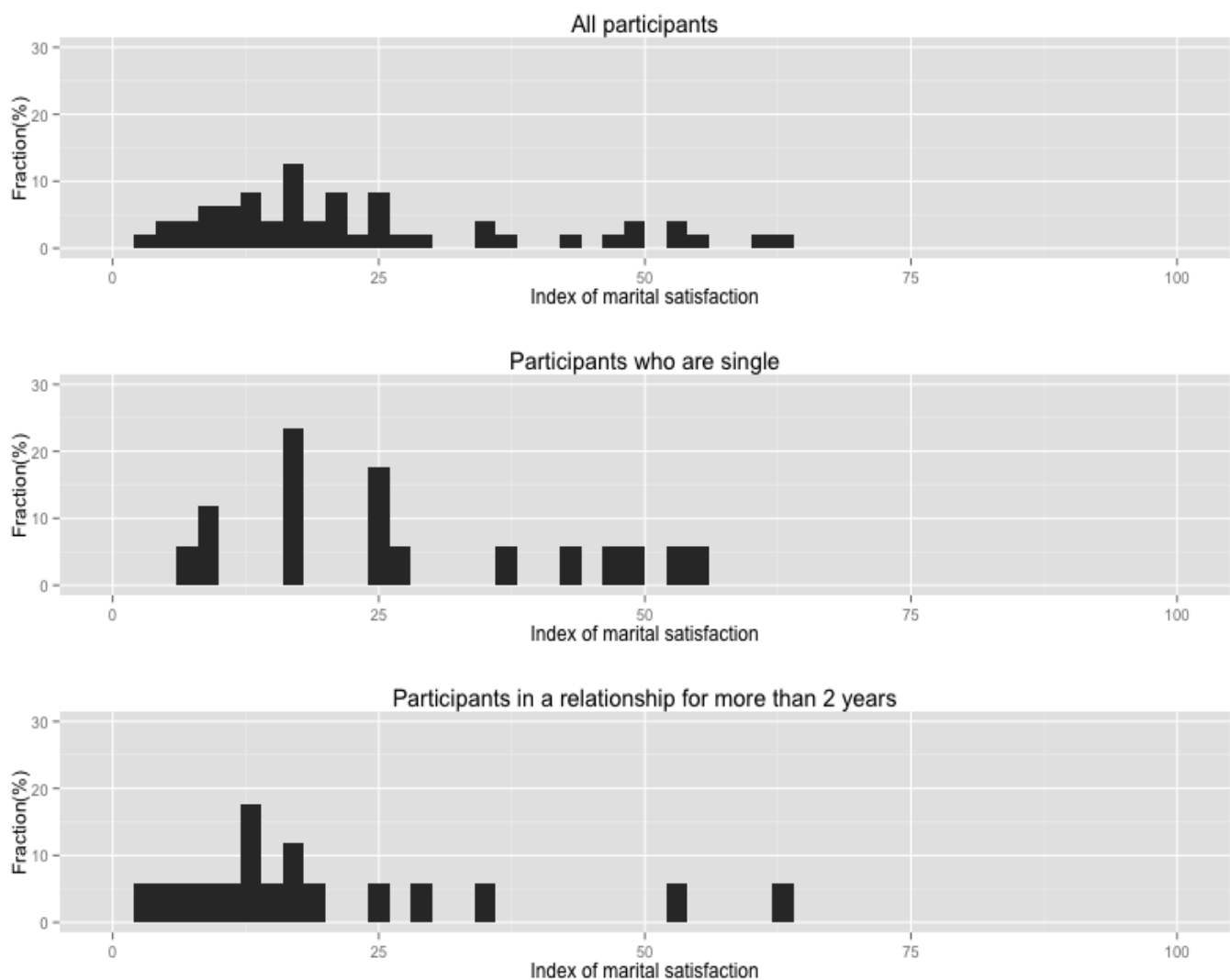
2.5 Cross Classified Decision Power Index: Couples with a score of 66 or more on the Shared Power Index (i.e., who shared two-thirds or more of the six decisions)

were classified as having an equalitarian power structure. Couples who shared fewer decisions and had a score of less than 33 on the Decision Power Index were defined as having a female dominant relationship. Couples with a score of less than 65 on the Shared Power Index and more than 66 on the Decision Power Index were defined as male-dominant. Couples with scores of less than 65 on the Shared Power Index and between 34- 65 on the Decision Power Index were classified as a divided power relationship.



2.6 Index of Marital Satisfaction: The index of marital satisfaction (IMS) is a questionnaire designed to measure the degree of satisfaction in a marriage. To score this questionnaire the positively worded items must be reverse-scored. If you have scored a positively worded item as 1 it is re-scored as 5, 2 becomes 4, 3

remains 3, 4 becomes 2 and a score of 5 becomes 1. The positively scored items that must be reversed scored are 1,3,5,8,9,11,13,16,17,19,20,21,23. After all the positively worded items have been reverse scored, all 25 items are summed. The final step is to subtract 25 from this sum. Scores below 30 are considered indicative of satisfaction with the relationship. **The higher the score the more dissatisfaction with the relationship is indicated.**



3. Reliability of Dependent Measures: For all the four scales under study, we see a Cronbach's alpha close to 0.7, which is a generally accepted cut-off or reliability.

3.1 For all 48 respondents

Dependent Measure	Reliability Measure (Cronbach's Alpha)	Mean	Standard Deviation	Range
Self Perceived Decision Making Power	0.67	21.48	2.19	7-35
Decision Power Index	0.67	61.37	6.26	0-100
Shared Power Index	0.71	60.42	21.09	0-100
Index of Marital Satisfaction	0.67	51.46	15.99	0-100

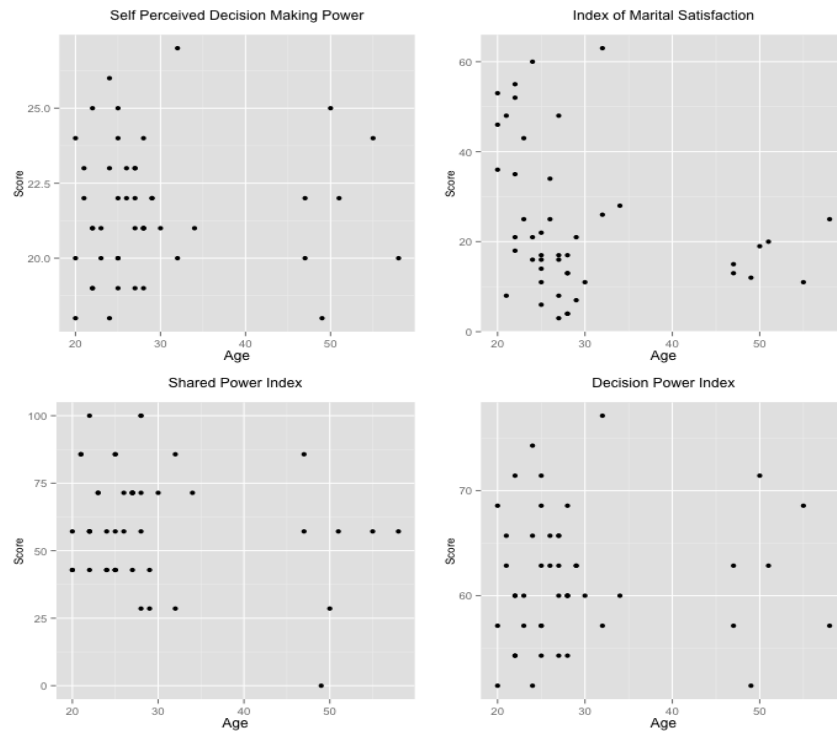
3.2 For all respondents who were not single and never married

Dependent Measure	Reliability Measure (Cronbach's Alpha)	Mean	Standard Deviation	Range
Self Perceived Decision Making Power	0.69	78.16	2.3	7-35
Decision Power Index	0.69	53.74	15.7	0-100

Shared Power Index	0.70	56.68	21.3	0-100
Index of Marital Satisfaction	0.68	53.74	15.7	0-100

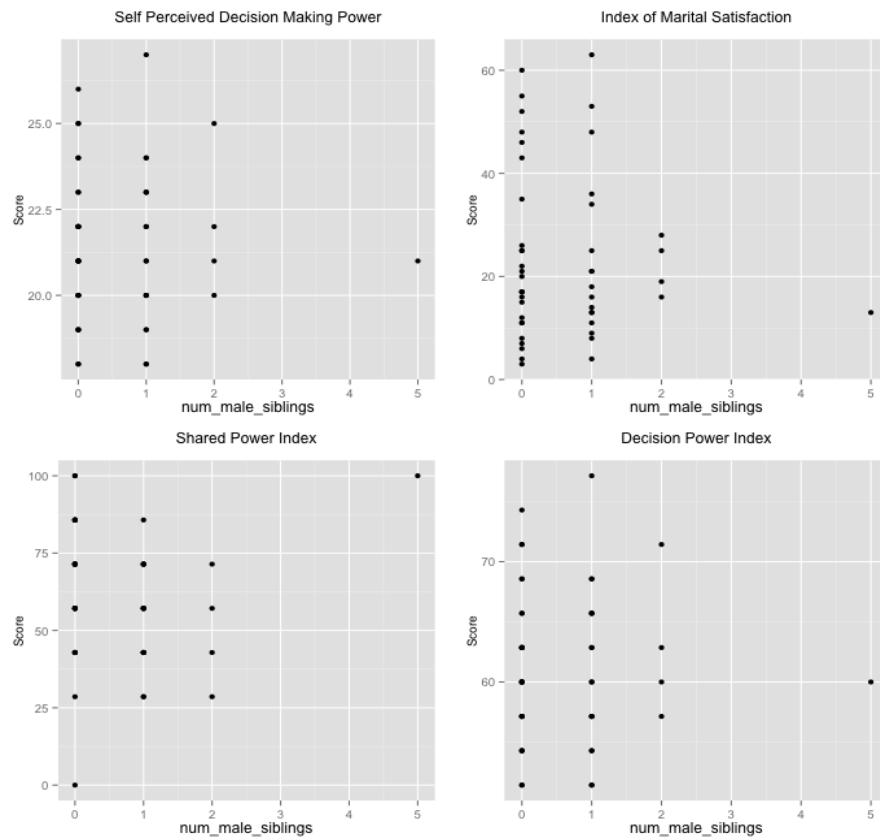
4. Feature Scale Correlations: In this section, we look for correlations between each independent measure and dependent scales. We plot each of the four scales under study versus each of our independent variables to observe any patterns. We also compute the Pearson's correlation coefficient, and the p-value from Pearson's Product Moment Correlation Coefficient. The relationships which with weak evidence (p-value between 0.05 and 0.1) are highlighted in **Orange** and the relationships with moderately strong evidence (p-value between 0.01 and 0.05) are highlighted in **Blue**. The scatter plots are for the complete data, while all the correlations and p-values are computed for three types: (1) Complete Data (2) Only single participants (3) Participants who have been in a relationship for more than 2 years.

4.1 Age vs Dependent Measures



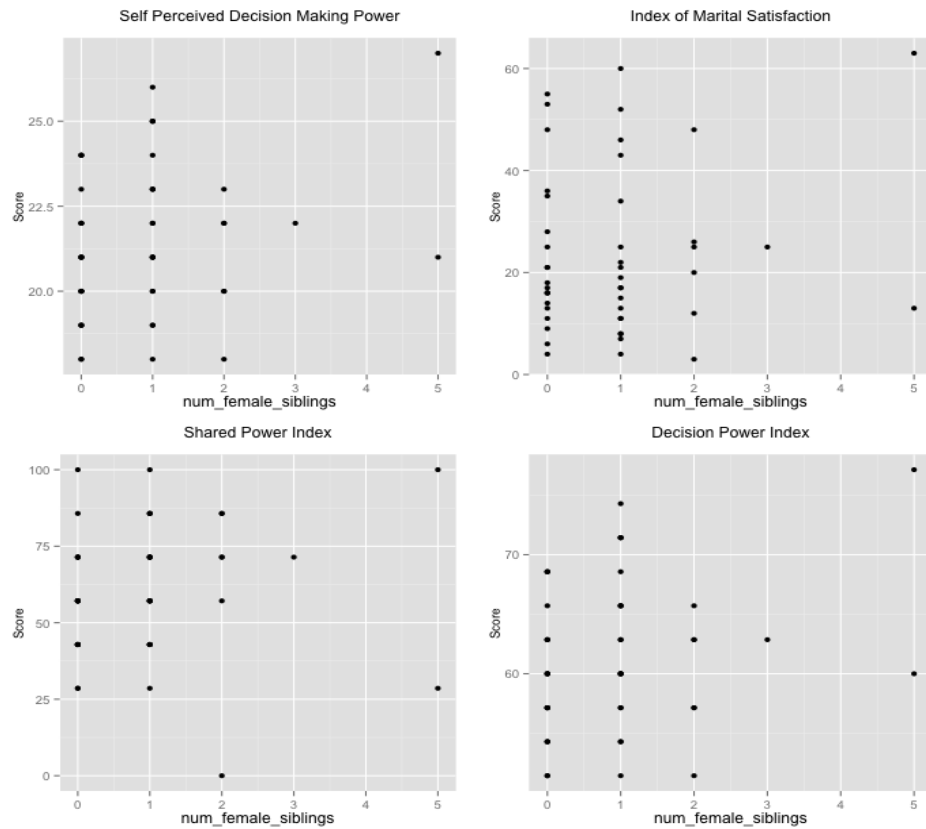
Measure	All participants	Single participants	Participants with relationship > 2 years
<i>Self Perceived Decision Making Power (spdm)</i>	$r = 0.04130776$ p-value = 0.7804	$r = -0.1524609$ p-value = 0.5591	$r = 0.03260245$ p-value = 0.9011
<i>Index of Marital Satisfaction (ims)</i>	$r = -0.2664288$ p-value = 0.06718	$r = -0.5406261$ p-value = 0.02505	$r = -0.1488408$ p-value = 0.5686
<i>Decision Power Index</i>	$r = 0.04129666$ p-value = 0.7805	$r = -0.1524942$ p-value = 0.559	$r = -0.03261231$ p-value = 0.9011
<i>Shared Power Index</i>	$r = -0.1954398$ p-value = 0.1831	$r = 0.08877315$ p-value = 0.7348	$r = -0.3873331$ p-value = 0.1245

4.2 Number of Male Siblings vs Dependent Measures



Measure	All participants	Single participants	Participants with relationship > 2 years
<i>Self Perceived Decision Making Power (spdm)</i>	$r = 0.0066363$ p-value = 0.9642937	$r = -0.266175$ p-value = 0.3017654	$r = 0.1873609$ p-value = 0.4714741
<i>Index of Marital Satisfaction (ims)</i>	$r = -0.084834$ p-value = 0.5664488	$r = -0.1511484$ p-value = 0.5625383	$r = 0.1604564$ p-value = 0.5384268
<i>Decision Power Index</i>	$r = 0.006597049$ p-value = 0.9645048	$r = -0.266219$ p-value = 0.3016824	$r = 0.187401$ p-value = 0.4713776
<i>Shared Power Index</i>	$r = 0.01775121$ p-value = 0.90468	$r = -0.302117$ p-value = 0.2385683	$r = -0.3289361$ p-value = 0.1973394

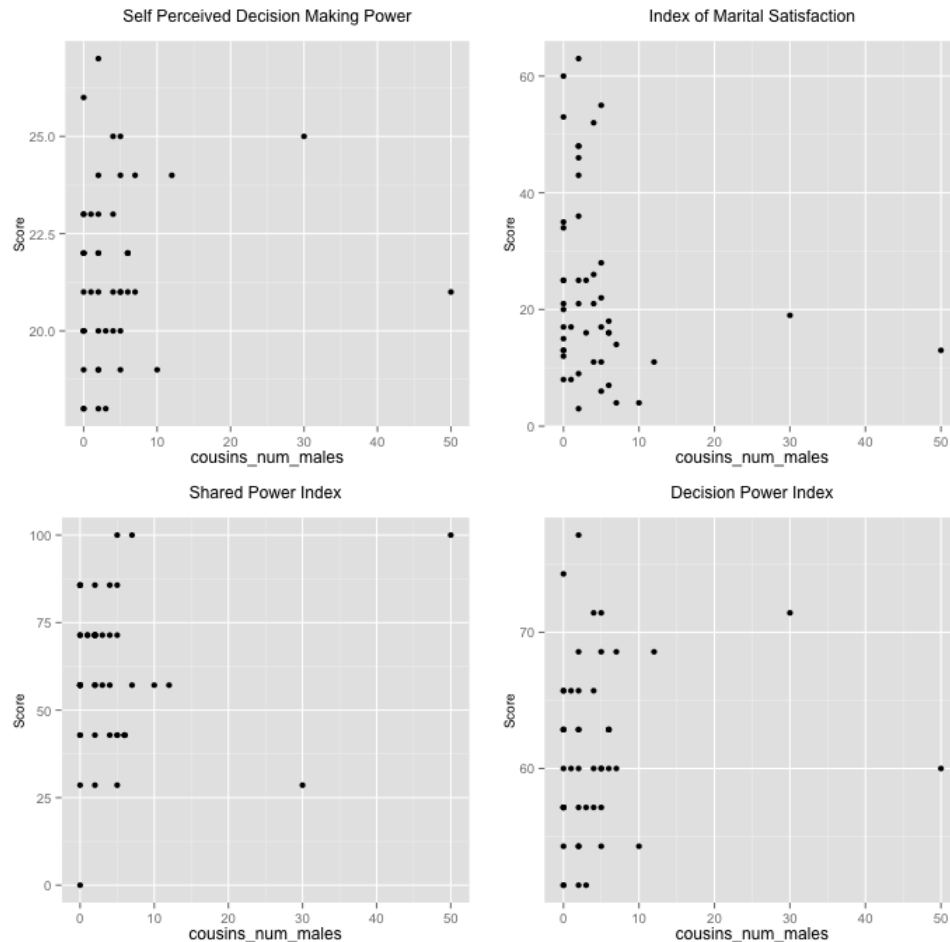
4.3 Number of Female Siblings vs Dependent Measures



Measure	All participants	Single participants	Participants with relationship > 2 years
<i>Self Perceived Decision Making Power (spdm)</i>	r = 0.2449564 p-value = 0.0933382	r = 0.1913726 p-value = 0.4618583	r = 0.4960733 p-value = 0.0428399
<i>Index of Marital Satisfaction (ims)</i>	r = 0.1396216 p-value = 0.3439062	r = 0.09816218 p-value = 0.7078004	r = 0.4636509 p-value = 0.06085103
<i>Decision Power Index</i>	r = 0.244940 p-value = 0.0933598	r = 0.1914518 p-value = 0.4616695	r = 0.4959923 p-value = 0.04287916
<i>Shared Power Index</i>	r = 0.1247386	r = 0.3926998	r = -0.3935083

	p-value = 0.3982559	p-value = 0.1189433	p-value = 0.1181182
--	---------------------	---------------------	---------------------

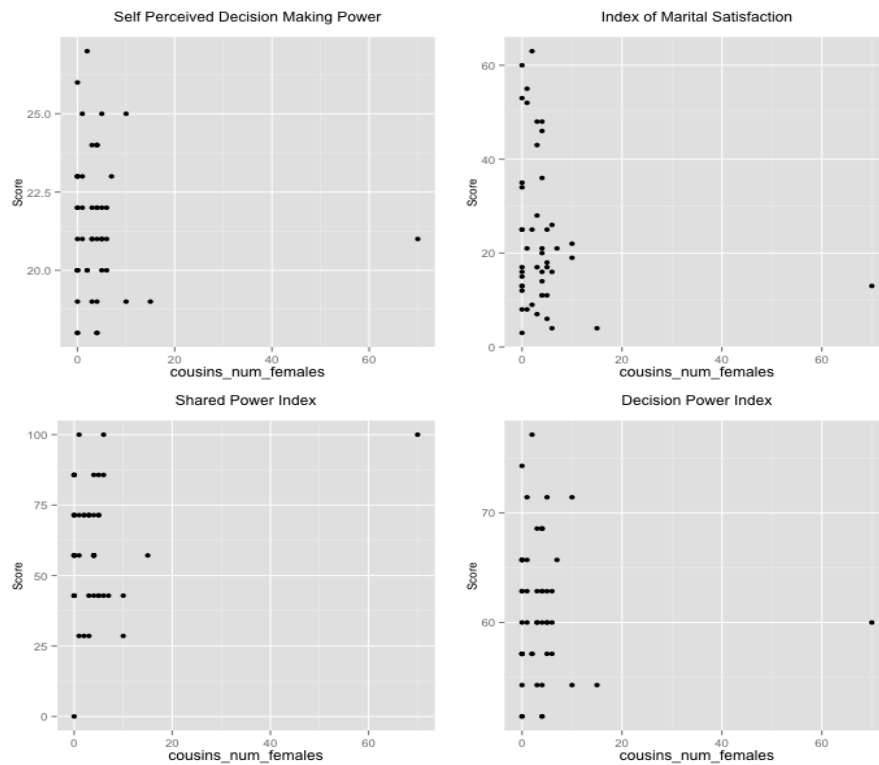
4.4 Number of Male Cousins vs Dependent Measures



Measure	All participants	Single participants	Participants with relationship > 2 years
<i>Self Perceived Decision Making Power (spdm)</i>	$r = 0.1321239$ p-value = 0.3706881	$r = 0.1734596$ p-value = 0.5055441	$r = 0.4554416$ p-value= 0.0661898
<i>Index of Marital Satisfaction</i>	$r = -0.1951336$	$r = -0.1551331$	$r = -0.06930933$

<i>(ims)</i>	p-value = 0.1838128	p-value = 0.5521595	p-value = 0.7915333
<i>Decision Power Index</i>	r = 0.1321635 p-value = 0.3705432	r = 0.173518 p-value = 0.5053986	r = 0.4555394 p-value = 0.0661242
<i>Shared Power Index</i>	r = 0.1203143 p-value = 0.4153275	r = -0.05060113 p-value = 0.8470649	r = -0.2327496 p-value = 0.3686576

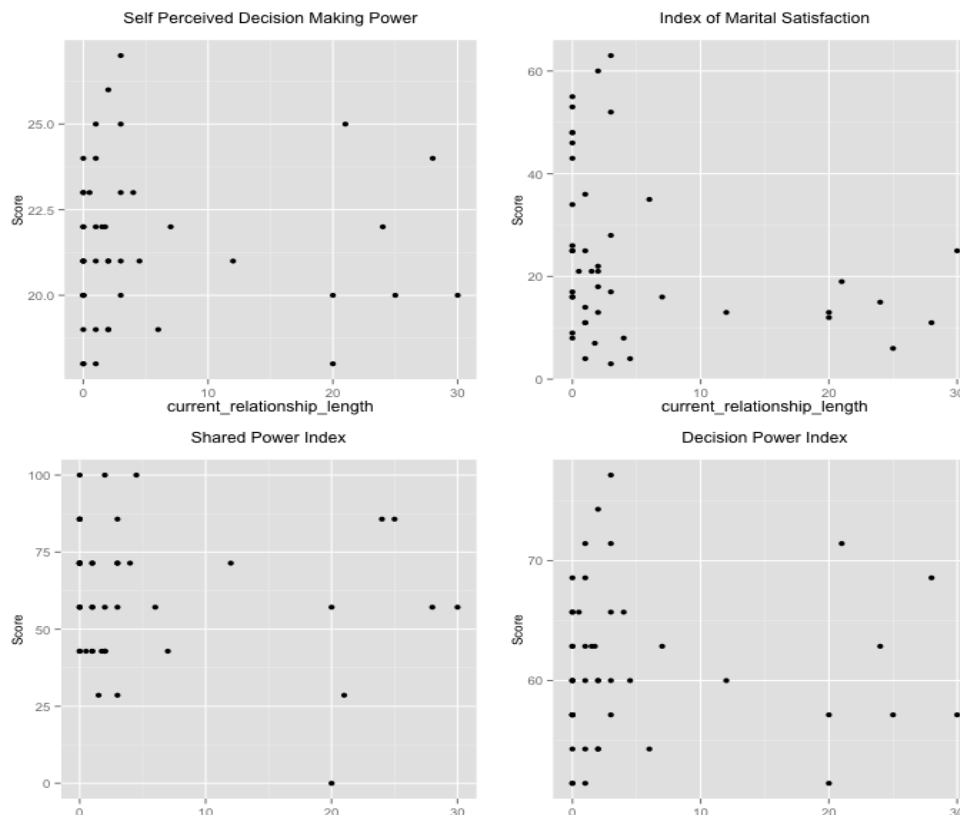
4.5 Number of Female Cousins vs Dependent Measures



Measure	All participants	Single participants	Participants with relationship > 2 years
<i>Self Perceived Decision Making Power (spdm)</i>	r = -0.04446272 p-value = 0.7641198	r = 0.1065732 p-value = 0.6839305	r = 0.3501185 p-value = 0.1682977

<i>Index of Marital Satisfaction (ims)</i>	$r = -0.163414$ p-value = 0.2670843	$r = -0.2224129$ p-value = 0.3908904	$r = -0.1081116$ p-value = 0.6795943
<i>Decision Power Index</i>	$r = -0.04443069$ p-value = 0.7642849	$r = 0.1067426$ p-value = 0.6834525	$r = 0.3501523$ p-value = 0.1682538
<i>Shared Power Index</i>	$r = 0.2378461$ p-value = 0.1035535	$r = -0.09297183$ p-value = 0.7226612	$r = 0.005847234$ p-value = 0.9822307

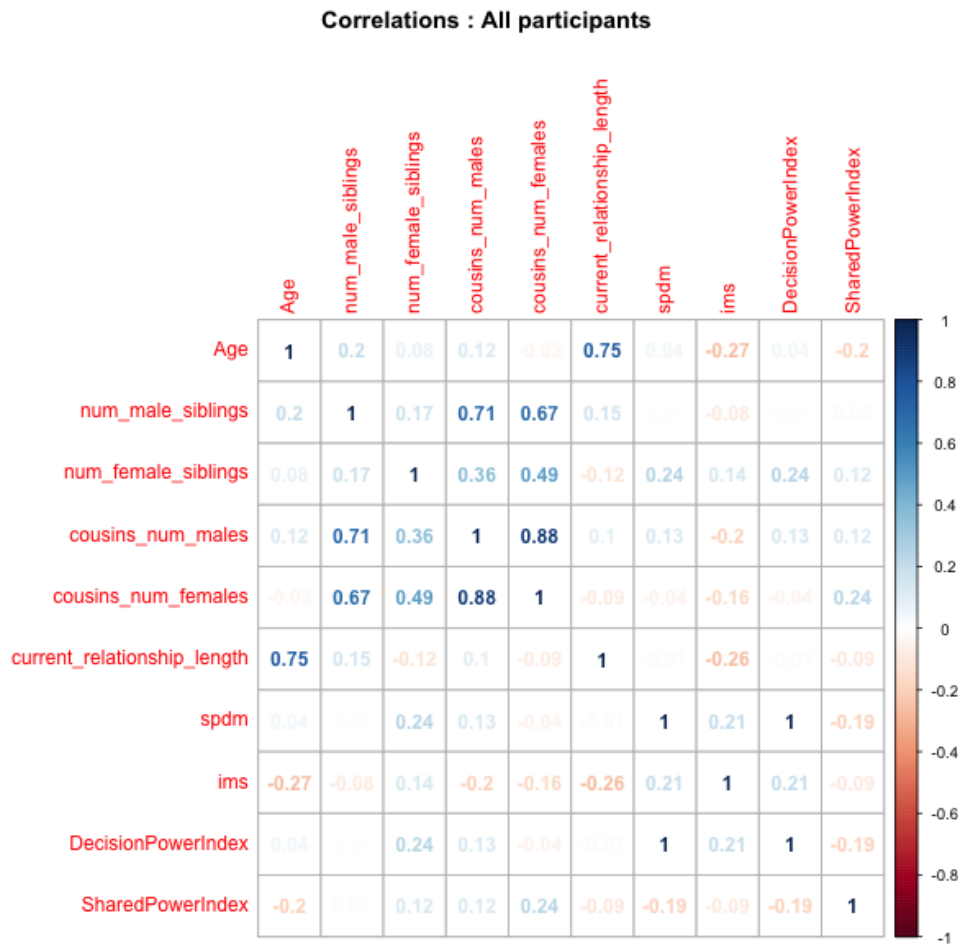
4.6 Length of Relationship vs Dependent Measures



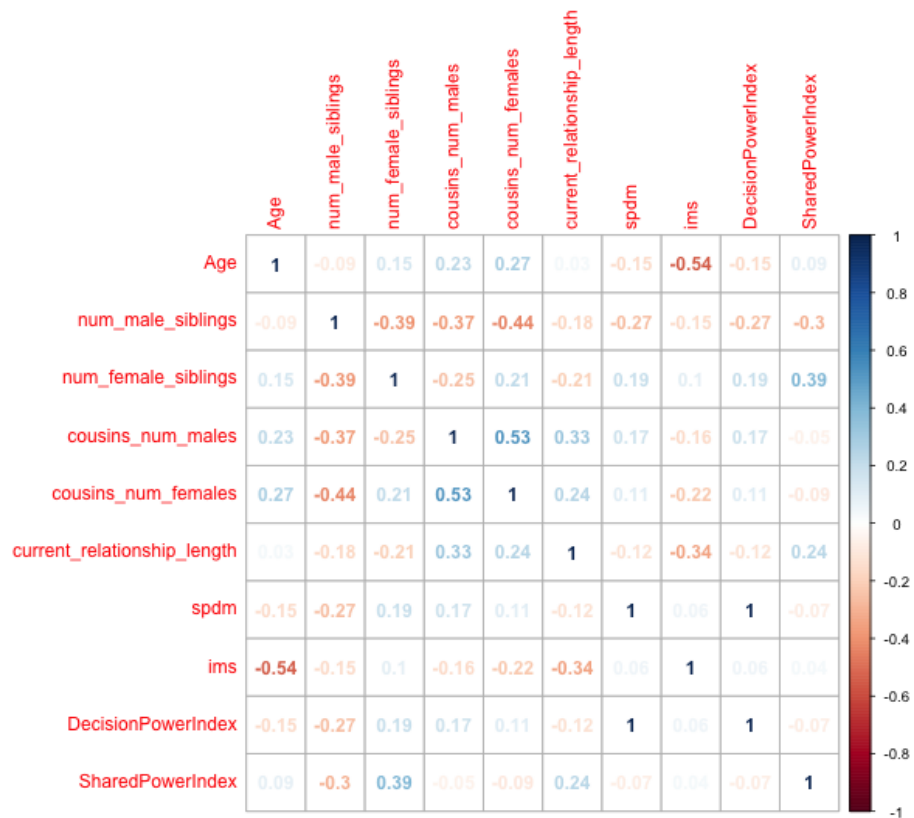
Measure	All participants	Single participants	Participants with relationship > 2 years
<i>Self Perceived Decision Making Power (spdm)</i>	r = -0.01267409 p-value = 0.9318659	r = -0.1224282 p-value = 0.639711	r = -0.2164633 p-value = 0.40401
<i>Index of Marital Satisfaction (ims)</i>	r = -0.2625823 p-value = 0.0713796	r = -0.344052 p-value = 0.1763022	r = -0.3124608 p-value = 0.22207
<i>Decision Power Index</i>	r = -0.01272013 p-value = 0.931619	r = -0.1225379 p-value = 0.6394088	r = -0.2164726 p-value = 0.4039894
<i>Shared Power Index</i>	r = -0.09436132 p-value = 0.5235078	r = 0.2355573 p-value = 0.3627431	r = -0.1618594 p-value = 0.5348333

4.7 Overall Correlations: In all correlation matrices below -The values in bold are correlations that are significant at the 0.05 level ($p < 0.05$).

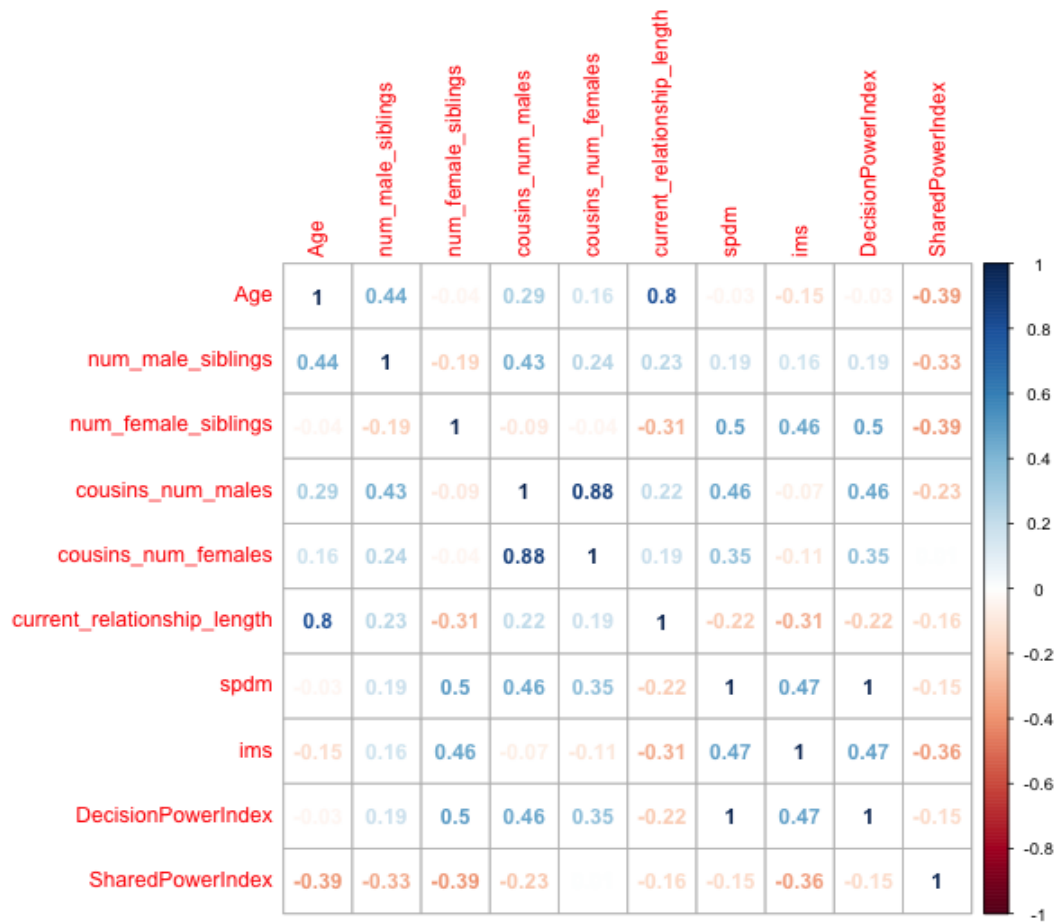
- **Correlation Matrix for the entire data set.** There is much less evidence or support for the main hypothesis under study, potentially from noise from much younger participants and participants who were never in a relationship.



- Correlation Matrix for the subset containing only participants who are single are never been in a relationship.** We believe most of the responses from this group reflect an ideal hypothetical relationship that they would like to have. This effect is stronger as the age of the participants go down, as evidenced by the statistically significant ($p < 0.05$) negative correlation with Index of Marital Satisfaction. (Recall that the lower the index of marital satisfaction, the happier the relationship).

Correlations : Participants who are single

- **Correlation Matrix for the subset containing only participants who have been in a relationship for more than two years.** We see much stronger correlations and support for the main question under study (“Do female siblings decide gender stereotypes in romantic relationships?”). The responses of this group are probably more based on their experience in their relationships, and are a more likely description of reality.

Correlations : Participants with relationship length more than two years

Chapter IV: Discussion

The present study produced some relevant and interesting outcomes. The study examined the role of female significant figures such as siblings or cousins to understand men's belief in power balance in Romantic Relationships (RR). It was hypothesized that female significant figures, such as siblings, do have an influence on the balance of power belief in men who are in RR. The present study is based on Weitzman's Role Theory (1979), which postulates that children are influenced by the significant figures in their life when young and it influences the development of their behaviors, beliefs, and attitudes as adults. In a general context, women tend to play a consequential role in the lives of young children especially. Research by Blee and Tickamyer (1995) and Farre & Vella (2013) has shown such influence of mothers and other significant figures in the lives of young boys and how that influence carries on to adulthood. Studies based on social dominance theory and social script theory have shown that men tend to take a dominant role over their partner in romantic relationships and are mostly based on Western cultures (Pettijohn, Ahmed, Dunlap, & Dickey, 2013; Sanchez, Fetterolf, & Rudman, 2012).

In the past, studies from India have shown that Indian society strongly held to traditional gender role beliefs and found resemblance in the attitudes between the upper middle class families of India and the US (Allen & Sethi, 1981; Shukla & Kapoor, 1990). However, a very recent study, which examined the attitudes of three generations of men towards women's role in society, showed that men of the younger generation did not believe in traditional gender roles (Shukla, 2015). Another study showed similar attitudinal changes towards women at workplace (Kuruvilla & SP, 2014). This study showed that age tend to play a role in changing attitudes of men towards women; younger boys tend to hold more traditional beliefs while

older men tend to have positive attitudes towards female co-workers. Such a developing and constantly changing society provides scope for research on the constantly changing attitudes of people.

In the present study, it was hypothesized that Indian men do believe in power balance in Romantic Relationships (RR) if they had influential female significant figures in their life, such as siblings or cousins. The results of the study observed significant differences in the responses of participants when grouped according to the length of their relationships and hence the participants are reported in three categories: All participants, Participants who are single, and Participants in a relationship for more than two years. The data from all participants of the study did not support the hypothesis. However, analysis of data of 'Participants in a relationship for more than two years' supported the hypothesis of the present study in a weak form.

Most participants who participated in the study reported that they have been in relationships for less than two years. The results from the *Shared Power Index* showed that these younger participants who are either single or have been in short-term relationships believe in an equalitarian structure in their relationships. This is in sharp contrast to older participants and those who have been in long-term relationships, who believe in divided power or unbalanced power structures. Such an attitude of the younger participants may be due to their idealized perception of RR. The older participants, those who have been married or have been in a long-term relationship appear to have a more realistic view of RR.

There is a moderately significant negative correlation between age and the index of marital satisfaction, which gets stronger specifically for participants who are single and have never been in a relationship. Recall that the lower the index of marital satisfaction, the higher is the

marital satisfaction so a negative correlation implies more satisfactory marriages. Interestingly, most of the older participants reported lower levels of satisfaction in their marriage, while single participants tend to have positive attitudes about marital satisfaction. This positive attitude would also be due to the lack of real life experiences of the younger participants. This suggests that their expectations from a long-term relationship are rather optimistic and that they expect greater satisfaction from their marriages in the long run. The above mentioned observations indicate that the older participants, who constituted approximately 40% of the participants, reflected a more accurate and non-idealized attitude when compared to the younger participants who may have less experiences with long-term RR and hence, have an idealized hypothetical view of long-term RR.

We also observed weak evidence ($p \sim 0.07$) for negative correlation between the length of the relationship and the Index of marital satisfaction (We did not observe any evidence for single participants alone or for the group with relationship lengths greater than two). This seems to imply longer relationships are more satisfactory, since the index of marital satisfaction is an inverse scale as mentioned above. However, we just reported above that we observed less satisfactory marriages in older participants. This can be confusing at first, however a quick look at the age distribution of the participants tells us about potential reasons for this seemingly counter intuitive result. Only 7 out of the 48 participants are above the age of 32, and therefore we should take both results with a grain of salt. Since the result for the length of relationship is extremely weak, we are inclined to ignore it and stick to the moderately strong evidence we had with Age before. Age tracks length of relationship ($r = 0.8$, $p < 0.05$) for participants with relationship length greater than 2, however age has absolutely no relation with the length of relationship for the rest of the participants. This is one of the main reasons for the disparity we saw above - Our study population is an extremely skewed sample with

respect to Age. A more uniform sampled population with respect to age would have allowed us to control for these effects.

Upon evaluation of the participants with more than two years of RR, it was found that there exists a significant correlation (moderately statistically significant $p < 0.05$) between the number of female siblings and self perceived decision making power and weak correlation ($p \sim 0.06$) between the number of female siblings and the index of marital satisfaction. The Pearson's coefficient r - value was used to measure the strength of correlations. A value of 0 indicates no correlation, a value of 1 indicates perfect positive correlation and a value of -1 indicates perfect negative correlation.

The r - value was 0.5 for the correlation between the number of female siblings and the decision making power index (p -value < 0.05) - This means that with Indian men with higher number of female siblings believe in higher decision power for themselves in their romantic relationships. The scale is so designed so that a higher value indicates male dominance and a lower value indicates female dominance. Since the value increases with the number of female siblings, this supports the main question under study, which is whether the number of female siblings or cousins can influence gender stereotypes in Indian men. Contrary to what our intuition was at the start of the study, a higher number of female siblings actually enforce gender stereotypes in Indian men. This also brings out a severe limitation in this study, which was that we measured only the number of female siblings - If we knew the birth order and the age separation between siblings, we could have made stronger conclusions. For instance, if most participants in the study had younger female siblings, this result would not be surprising. It is well accepted in Indian families that elder brothers command the same decision making power as the head of the family and strongly influence or in some cases, decide life choices

for other siblings, especially female siblings. It should not be surprising that this is true in India where most societies are strongly patriarchal. There is also something to be said for analyzing individuals with 0-2 female siblings and individuals with more than 2 female siblings to check for further effects. It is unfortunate that we cannot make more observations because of the limitation in the data collected. It is hard to make stronger conclusions in the presence of a lot of potentially collinear factors like birth order.

Recall that the lower the index of marital satisfaction, the more satisfactory the marriage is. The r -value was 0.46 for the correlation between the number of female siblings and the index of marital satisfaction (p -value ~ 0.06). This is again evidence contrary to what we believed when we initiated the study. While this result supports the hypothesis and confirms that the number of female siblings does influence the power structure and marital satisfaction, it means that increasing number of female siblings predicts less satisfactory marriages. However, keep in mind the evidence for this result is only weakly significant and hence, we refrain from extrapolating this result and making strong conclusions.

The responses from those who have been in long-term relationships would be more reliable as it would be based on their personal experiences and hence would reflect on reality than an idealized view shared by single and those who have been in short-term RR. However, the data only collected the number of siblings and did not include questions as to whether the participants believe their female siblings have influenced them.

While the initial study setup only intended to collect data around the number of female siblings and cousins, it was later decided to collect data around male siblings and male cousins as well. This was a good choice in hindsight, because we could measure the effect from male siblings separately. While there were multiple observable effects from the number

of female siblings, there was no significant correlation between the number of male siblings or cousins and the instruments measuring balance of power in romantic relationships. However, it is worth mentioning that we observed weak evidence for a positive correlation between the number of male cousins and the decision power index. This implies that larger the numbers of the male cousins, the more likely Indian men are to hold gender stereotypes. This again, should not come as a huge surprise because of the patriarchal nature of almost all Indian societies. We did not observe any effect from female cousins on either the decision power index or on the balance of power in romantic relationships. The choice to include the measurement of female cousins was done to see if it is just the interaction with more females in childhood that can influence gender stereotypes in Indian men. Not only did we not observe any effect from female cousins, we observed strong evidence for the predictive power of the number of female siblings.

Limitations

The study, however, had its limitations. One potential limitation would be the sample size. The sample size was significantly small. The aim of the study was to explore the attitudes of a large population (Indian men) on power balance in RR. The small sample size may pose a potential barrier for us to understand and conclude the general attitudes of Indian men and the role of women in the lives.

Some participants had to be discarded. A total of 51 responses were recorded. However, the study considered 48 participants. One of the participants responded as female, who was discarded. Two other responses were discarded as they failed to respond to the survey completely. The study analyzed 48 valid responses, of which the experienced participants, whom we like to believe that responded accurately, constituted approximately 40%. This

again compressed the sample size. Due to the small sample size, the results may not be reflective of the actual effect.

The study also did not ask for detailed socio-demographic information, such as the hometown or the mother-tongue of the participant. As India is a multilingual and multicultural nation, people from different parts of the country share different views and attitudes about the role and influence of women. Hence, we cannot draw general conclusions about the population as a whole as to whether the results of the study reflect the attitudes of all the population or whether it is limited to a certain part of the country's population who share similar culture and values.

Another potential limitation would be the diversity of the participant pool. A significant number of participants reported as single or have never been married. Although the study received very few no-response (4%) from participants, 35% of participants were single or have never been married before. This means that they lack experience and knowledge about marital relationship. This significant proportion of participants may have responded based on a hypothetical situation or may possess an idealized view of RR. Their responses may be reflective of how they would ideally want their relationship to be rather than the reality. The instruments used in the present study were intended towards exploring the attitudes of married people or those who have been in long-term relationships. Hence, the quality of responses of those participants would potentially be biased and may reflect the biased views of the inexperienced participants.

Another limitation would be participant selection. Participants were invited to participate in the survey by word of mouth and included mostly friends of friends. Although the survey was completely anonymous, there does exist a potential bias in the responses as most participants

were friends of friends and there exists a probability of them holding similar views. Also, of concern, is the genuineness of responses of participants; in other words, the accuracy and honesty of response.

We have further evidence to support the argument for bias in survey responses. A quick look at the distribution of power structures in relationships shows that most respondents claim to have an equalitarian structure in their relationship. Given that a lot of survey participants knew the researchers outside of a professional setting and that the survey required the users to authenticate themselves using their Google account, it is conceivable that a lot of survey responses might have been “mellowed down”, for fear of being judged directly. Despite making it clear in the survey description that data is anonymized and is being collected solely for the purposes of research, there were at least three instances where participants declined to complete the survey because of the Google login process. These could have been avoided with a better online survey setup, and better study planning upfront.

As discussed earlier, the sample distribution with respect to age was very uneven. There were just 7 participants above the age of 32- this is understandable, given that this is an online survey. However, this also means that the results related to older participants are prone to effects that might be specific to that particular group. For instance, there is an extremely strong significant correlation between the number of male cousins and the number of female cousins. ($r = 0.88$, $p < 0.01$). While it can be argued that larger number of male cousins implies larger families, which in turn implies larger number of female cousins. However, it is always a good idea to uniformly sample to control of potential effects such as these.

Suggestions for Future Research

Future research should focus on improving the research method. The present study employed online survey and the sample included friends of friends. In the future, both online and in-campus survey would potentially generate better quality data as it will not limit us to friends of friends only but will also facilitate a larger reach of participants from diverse backgrounds who do not share similar views and attitudes; thereby improving the quality of data.

Future research should also focus on expanding the sample size as well as improving the quality of participants. The present research studied 48 participants. A study analyzing a minimum of 200 participants and whose socio- demographic details are collected in more detail than the present study will also facilitate in understanding the attitudinal differences between people from different parts of India. A larger sample size also allows us to apply more powerful statistical methods like Factor Analysis and/or fit generalized linear models to the data to understand the predictive power of the independent variables much better. Also categorizing participants into those from rural and urban India will also be interesting to explore the changes in attitudes due to the on- going developmental changes. It would also be very interesting to know the attitudinal changes between different age groups. Hence a study which categorizes its participants into young adults, middle aged, and older people might yield interesting results.

India has diversity in terms of even societal power structures between individual states- most states follow strongly patriarchal structures, however a good number of participants in the current study were from the southern state of Kerala, which used to follow a matriarchal social structure and still do perhaps (Biju & Amritha Jyothi, 2012). The sex ratio of the state of Kerala in comparison to other states of India seems to support this fact. Nevertheless, it is

safe to assume that traditional state-specific family power structures might have a strong influence on gender stereotypes. Unfortunately, since the present study did not collect this information and has participants from many different states, we do not know if this effect was at play latently.

Future research should also focus on exploring other factors or characteristics of female siblings or other significant figures that contribute to the influence. The present study simply asked the number of such female significant figures. It would be interesting to explore factors such as age of siblings, the age difference between the participant and sibling, and whether the participant feels that he is greatly influenced by a certain female figure and not others.

Finally, it is also worth mentioning the effort that went to manual data cleaning and preparation. For a survey run using Google Forms, a lot of the manual work could have been avoided if we introduced better input restrictions. Hence, we recommend the following for future research using Google Forms:

- Prevent participants from submitting responses if they do not answer all the required questions. This reduces the effort to decide manually whether to accept a survey response.
- Explicitly accept only numeric values for questions where numeric answers are expected. For example, Age - We had to spend substantial effort to sanitize and convert responses like “25 years and 10 months” to a valid numeric value. For a larger sample size, this would have taken a substantial amount of time, and again, prone to human errors.

Conclusion

The present study hypothesized that Indian men who had influential female significant figures in their lives tend to hold less gender role stereotypes in Romantic Relationships (RR). Data was collected using a Google Forms survey distributed by word of mouth. The study analyzed 48 Indian men who were either currently in a romantic relationship or had been in one (or more) previously. The results showed that the number of female siblings do influence the conformation to gender stereotypes in mature relationships, which moderately support the hypothesis. The result is surprising; although we expected the effect of gender stereotypes to diminish with increased number of female siblings, the data proves the opposite for mature relationships (more than two years). This can be an artifact of the uneven sampling across age and the limited sample size, which is why we emphasize on future studies and other precautions. Future studies should explore other factors such as birth order and age gap between siblings, which may contribute in shaping the gender role attitudes.

Appendix

Copy of the survey used in the study is attached in the following pages:

CONSENT FORM

This study involves a survey to better understand the attitude of Indian men towards their partner in romantic relationships. I would like to kindly ask you to fill out the survey which should take less than 15 minutes to complete.

You can choose to skip any question if you wish to or withdraw from the study at any time without any penalty. Your response will be completely anonymous.

I'd like to kindly ask you to be honest in your responses as it would help me and Psychology research at large to better understand the studied variables. This study involves no deception or risk to participants.

I'm a student of SUNY Empire State College majoring in Psychology. I am conducting this study as a part of my thesis in Psychology. For any further questions or concerns, please free to contact me at sruthikurup@gmail.com.

Please choose one answer:

I'm over 18 years of age	Yes	No
I consent to participate in the study	Yes	No

Who has the final say in making decisions about the following six issues?

- Buying a car or furniture
- Having children
- What house or apartment to take
- What job either partner should take
- Whether a partner should go to work or quit work
- How much money to spend each week on food
- How much money to send to relatives

The responses for each issue are:

- You alone
- You more than your partner
- You and your partner exactly the same
- Your partner more than you
- Your partner alone.

- I feel my partner is affectionate enough.
- I feel that my partner treats me badly.
- I feel that my partner really cares for me.
- I feel that I would not choose the same partner if I had it to do over.
- I feel that I can trust my partner.
- I feel that our relationship is breaking up.
- I feel that my partner doesn't understand me.
- I feel that our relationship is a good one.
- I feel that ours is a very happy relationship.
- I feel that our life together is dull.
- I feel that we have a lot of fun together.
- I feel that my partner doesn't confide in me.
- I feel that ours is a very close relationship.
- I feel that I cannot rely on my partner.
- I feel that we do not have enough interests in common.
- I feel that we manage arguments and disagreements very well.
- I feel that we do a good job of managing our finances.
- I feel that I should never have married my partner.
- I feel that my partner and I get along very well together.
- I feel that our relationship is stable.
- I feel that my partner is pleased with me as a sex partner.
- I feel that we should do more things together.
- I feel that the future looks bright for our relationship.
- I feel that our relationship is empty.
- I feel there is no excitement in our relationship.

1 - Rarely or none of the time

2 - A little of the time

3 - Sometime

4 - A good part of the time

5 - Most or all of the time

Demographic details

- Gender
- Age
- Number of male siblings
- Number of female siblings
- Would you consider yourself having influenced by female figures other than your mother? (Eg: Do you consult with, say, an aunt of yours or other such female significant figures for advice?)

Yes No
- Have you spent substantial amount of time with cousins (first or second) in your childhood or in your adulthood? (Eg: Did you spend your weekends or holidays with cousins? Are you still in touch with your cousins?)
- If yes:
 - How many were males (approx.)
 - How many were females (approx.)
- Which of the following best describes your current relationship status?
 - Single, never married
 - In a relationship
 - Married
 - Separated
 - Divorced
- Length of current relationship, if applicable (approx.)

Work Cited

- Allen, M. J., & Sethi, R. R. (1981). A Comparison of Sex Role Stereotypes in India and the U.S.
- Bem, S. L. (1974). *The Measurement of Psychological Androgyny*. Journal of Consulting and Clinical Psychology.
- Bhatnagar, D., & Rajadhyaksha, U. (2001). Attitudes towards work and family roles and their implications for career growth of women: A report from India. *Sex Roles*, 45(7-8), 549-565. doi:10.1023/A:1014814931671
- Biju, C., & Amritha Jyothi, C. (2012). Socio-Economic Life and Institutions in the Traditional Society of Kerala in 18th and 19th Centuries. *International Journal of Scientific and Engineering Research*, 3(12).
- Blee, K. M., & Tickamyer, A. R. (1995). Racial Differences in Men's Attitudes about Women's Gender Roles. *Journal of Marriage and Family*, (1). 21.
- Blood, R. O., & Wolfe, D. M. (1960). *Husbands and wives*. Glencoe: Free Press.
- Conklin, G. H. (1979). Cultural Determinants of Power for Women Within the Family: A Neglected Aspect of Family Research. *Journal Of Comparative Family Studies*, 10(1), 35-53.
- Coughlin, P., & Wade, J. (2012). Masculinity Ideology, Income Disparity, and Romantic Relationship Quality Among Men with Higher Earning Female Partners. *Sex Roles*, 67(5/6), 311-322. doi:10.1007/s11199-012-0187-6
- Endendijk, J., Groeneveld, M., Berkel, S., Hallers-Haalboom, E., Mesman, J., & Bakermans-Kranenburg, M. (2013). Gender Stereotypes in the Family Context: Mothers, Fathers, and Siblings. *Sex Roles*, 68(9/10), 577-590.

Farre, L., & Vella, F. (2013). The Intergenerational Transmission of Gender Role Attitudes and its Implications for Female Labour Force Participation. *Economica*, (318), 219.

Glossary of Psychological Terms. (n.d.). Retrieved May 10, 2015, from
<http://www.apa.org/research/action/glossary.aspx>

Hemmer, J. D., & Kleiber, D. A. (1981). Tomboys and Sissies: Androgynous Children?. *Sex Roles*, 7(12), 1205-1212.

Hettinger, V. E., Hutchinson, D. M., & Bosson, J. K. (2014). Influence of professional status on perceptions of romantic relationship dynamics. *Psychology Of Men & Masculinity*, 15(4), 470-480. doi:10.1037/a0034034

Hupp, J. M., Smith, J. L., Coleman, J. M., & Brunell, A. B. (2010). That's a boy's toy: gender-typed knowledge in toddlers as a function of mother's marital status. *The Journal Of Genetic Psychology*, 171(4), 389-401. doi:10.1080/00221325.2010.500637

Jin, X., Doukas, A., Beiting, M., & Viksman, A. (2014). Factors contributing to intimate partner violence among men in Kerala, India. *Journal Of Family Violence*, (6), 643.

KAUR, P., & JAWAID, A. (2012). INEQUALITY IN DECISION-MAKING AND MARITAL POWER AMONG THE SIKHS. *International Journal Of Sociology Of The Family*, 38(2), 149-160.

Koenig, A. M., & Eagly, A. H. (2014). Evidence for the social role theory of stereotype content: Observations of groups' roles shape stereotypes. *Journal Of Personality And Social Psychology*, 107(3), 371-392. doi:10.1037/a0037215

- Kuruvilla, D., & SP, S. (2014). Attitude towards Women's Employment: A Review after 15 Years. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 19(9), 32-37.
Retrieved August 16, 2015, from www.iosrjournals.org
- Manea, C. (2013). The Influence of Hometown Size on the Development of Gender Stereotypes in Children. *Procedia - Social And Behavioral Sciences*, 92(Logos Universality Mentality Education Novelty (LUMEN 2013), Iasi, Romania, 10-13 April 2013), 501-505.
doi:10.1016/j.sbspro.2013.08.708
- Mast, M. S. (2005a). Interpersonal Hierarchy Expectation: Introduction of a New Construct. *Journal Of Personality Assessment*, 84(3), 287-295. doi:10.1207/s15327752jpa8403_08
- Mast, M. S. (2005b). The world according to men: It is hierarchical and stereotypical. *Sex Roles*, 53(11-12), 919-924. doi:10.1007/s11199-005-8310-6
- Mohsen, T., & Reg, D. (2011). Making sense of Cronbach's alpha. *International Journal Of Medical Education*, 53.
- Pettijohn, T. I., Ahmed, S. F., Dunlap, A. V., & Dickey, L. N. (2013). Who's got the upper hand? Hand holding behaviors among romantic couples and families. *Current Psychology*, (3), 217.
- Psychology Dictionary - Free Online Psychology Dictionary. (n.d.). Retrieved August 17, 2015.
- Ramu, G. N. (1988). Marital Roles and Power: Perceptions and reality in the Urban Setting. *Journal Of Comparative Family Studies*, 19(2), 207-227
- Richa, S., & Deepti, B. (2009). Gendered Career Patterns within Dual Career Couples. *Vikalpa: The Journal For Decision Makers*, 34(4), 83-85.

Sakalli-Ugurlu, N. (2003). How do romantic relationship satisfaction, gender stereotypes, and gender relate to future time orientation in romantic relationships? *The Journal of Psychology*, 137(3), 294-303. Retrieved from

<http://search.proquest.com/docview/213832023?accountid=8067>

Sanchez, D. T., Fetterolf, J. C., & Rudman, L. A. (2012). Eroticizing Inequality in the United States: The Consequences and Determinants of Traditional Gender Role Adherence in Intimate Relationships. *Journal Of Sex Research*, 49(2/3), 168-183.

doi:10.1080/00224499.2011.653699

Shukla, A. (2015). Attitudes towards Role and Status of Women in India: A Comparison of Three Generations of Men and Women. *Psychological Studies*, 60(1), 119-128.

doi:10.1007/s12646-015-0298-6

Shukla, A., & Kapoor, M. (1990). Sex Role Identity, Marital Power, and Marital Satisfaction Among Middle-Class Couples in India. *Sex Roles*, 22(11/12), 693-706

Simister, J., & Mehta, P. S. (2010). Gender-Based Violence in India: Long-Term Trends. *Journal Of Interpersonal Violence*, 25(9), 1594-1611.

Vogel, D. L., Wester, S. R., Heesacker, M., & Madon, S. (2003). Confirming gender stereotypes: A social role perspective. *Sex Roles*, 48(11), 519-528. Retrieved from

<http://search.proquest.com/docview/225371640?accountid=8067>

Weitzman, L. J. (1979). Sex role socialization: a focus on women. *Sex Role Socialization: A Focus On Women*

Bibliography

- Banase, R., Gawronski, B., Rebetez, C., Gutt, H., & Bruce Morton, J. (2010). The development of spontaneous gender stereotyping in childhood: relations to stereotype knowledge and stereotype flexibility. *Developmental Science*, 13(2), 298-306. doi:10.1111/j.1467-7687.2009.00880.x
- DiDonato, L., & Strough, J. (2013). Contextual Influences on Gender Segregation in Emerging Adulthood. *Sex Roles*, 69(11/12), 632-643. doi:10.1007/s11199-013-0312-1
- Eagly, A. H., & Steffen, V. J. (1984). Gender stereotypes stem from the distribution of women and men into social roles. *Journal Of Personality & Social Psychology*, 46, 735-754.
- Hussain, S., Habib, B., & Akhter, J. (2014). Computational Analysis of "Stereotypes as Cause of Gender Inequality": A Study of Universities of South Punjab, Pakistan. *Pakistan Journal Of Social Sciences (PJSS)*, 34(2), 473-484.
- Kazi, R. (2014). Women and weapons: Redressing the gender gap: An Indian response. *Bulletin Of The Atomic Scientists*, 70(5), 8-11.
- Kerr, P. S., & Holden, R. R. (1996). Development of the Gender Role Beliefs Scale (GRBS). *Journal Of Social Behavior & Personality*, 11(5), 3-16.
- Martin, C. L. (1990). Attitudes and Expectations About Children with Nontraditional and Traditional Gender Roles. *Sex Roles*, 22(3/4), 151-165.
- Steele, J., & Barling, J. (1996). Influence of maternal gender-role beliefs and role satisfaction on daughters' vocational interests. *Sex Roles*, 34(9/10), 637-648.
- Waheed, A., Sayeed, A., Masood, H., & Khanam, S. (2014). GENDER INEQUALITY AMONG INDIAN MUSLIMS: MYTH AND REALITY. *Pakistan Journal Of Women's Studies*, 21(1), 29-44.