INTERGENERATIONAL RELATIONSHIPS AND EXCHANGES AND EMOTIONAL DISTRESS OF JAPANESE ADULTS

SHIRO FURUYA

Independent Scholar

Sociologists have examined relationships between parent-child relationships and emotional distress at childhood and adolescence, but we know little about how parent-child relationships are associated with emotional distress among adult child generation. This is an important limitation in settings like Japan where parent-child relationships are primary source of reciprocal support even during adulthood and intergenerational relationships have been more important due to demographic changes. To provide an empirical basis for understanding relationships between parent-child relationships and emotional distress among adulthood, I examined data from 2003 and 2008 rounds of the National Family Research of Japan survey. I also examined potential explanations for observed relationships, including support provided by adult child generation and parent generation and the socioeconomic status of the child generation. I find significant differences of emotional distress by global measure of parent-child relationships, but limited differences are observed by frequency of contacts.

Introduction

Alienation of which Seeman (1959) categorized into five major types (*i.e.* powerlessness, self-estrangement, isolation, meaningless and normlessness) consequences emotional distress (Mirowsky and Ross, 1986). Social relationships which are the source to reduce alienation, especially isolation, are, therefore, potentially associated with lower emotional distress. Among a variety of social relationships, people enjoy life-course reciprocity through spousal relationships and parent-child relationships[1] (Fyrand, 2010). Consistent findings of earlier studies examining the association between the quality of the relationship with spouse and emotional distress in the United States (French and Williams, 2007; Umberson *et al.*, 2006) show that the negative quality of the relationship with spouse is a potential indicator of a higher level of emotional distress.

Parent-child relationships are the other source of life-course reciprocity that might also be relevant to emotional distress. Although there are rich

reserve of empirical evidences of the importance of parent-child relationships during childhood and adolescence (review: Brumariu and Kerns, 2010), the parent-child relationships in midlife have gotten paid less attention (Hagestadt, 1987). I draw three possible scenarios, regarding to the association between parent-child relationships and emotional distress. In the first, the intergenerational positive relationships may be beneficial for adult children's emotional distress. In this scenario, I expect that positive parent-child relationships are significantly associated with adult children's lower emotional distress. This scenario is consistent with the findings that strong social relationships lower rates of health issues (see House *et al.*, 1988; Berkman *et al.*, 2000). This will lead me to the conclusion that parent-child relationships are significantly associated with emotional distress, similar to other types of social relationships.

The second scenario is that the relationship between parent-child relationships and emotional distress of adult children is attributed to a selection. Those maintaining positive parent-child relationships may receive support from parents which may also beneficially for reducing adult children's emotional distress. On the other hand, those providing caregiving may be emotionally distressed and present negative parent-child relationships. Similarly, I also consider socioeconomic status as a possible factor for selection stories based on findings of earlier studies indicating that lower socioeconomic status can be a predictor of harsh parenting and uninvolved and inconsistent childrearing practices (Conger and Conger, 2002; Conger *et al.*, 2002). Given the negative parent-child relationships due to behavioral problems of parents and the reproduction of socioeconomic status over the generations (Rumberger, 2010), children with fewer socioeconomic resource might have greater probability to have negative relationship with their parents in adulthood. The negative association between the quality of parent-child relationships and adult children's emotional distress may be, thus, explained by the selection story that those with less socioeconomic resources are less likely to maintain positive relationships with their parents.

The other scenario is a heterogeneity story – the association between parent-child relationships and adult children's emotional distress may be moderated by family environment. For instance, the association between parent-child relationships and emotional distress may differ by marital status because marriage provides the other type of life-course reciprocity which is also considerably influential on emotional distress (French and Williams, 2007; Umberson *et al.,* 2006). I expect that the magnitude of parent-child relationships is smaller for the married than for the non-married because spouse is potentially

an alternative provider of solid social relationship and they tend to be geographically closer to them[2]. If both processes take place simultaneously, the association between parent-child relationships and adult children's emotional distress would be moderated.

Japan is a particularly interesting setting to evaluate the parent-child relationships. In the first, the style of parent-child relationships is potentially different from that of American and Western European societies. Most importantly, it is a society in which parent-child relationships, especially when parents and children live together, are primary source of reciprocal support in Japan, while close friends and other relatives take the role of primary source of support in the United States and Western European countries (Nishioka, 2000). This international comparison leads me to speculate that parent-child relationships are more influential on emotional distress of Japanese adults than adults in Western societies. Additionally, Japan is a society in which the period that parent-child relationships last prolonged due to the unprecedented long life expectancy and healthy life expectancy in international level. This prolonged period has highlighted as the period in which both parents and children have matured enough to enjoy reciprocal relationships (Masaoka, 1993), therefore parent-child relationships are getting more important. Finally, similar to the United States, Japanese scholars have also overlooked the parent-child relationships in midlife (Tamazato, 1995; Fujisaki, 2000).

Parents provide unique and important social relationships to their children and, thus, parent-child relationships may be closely associated with emotional distress of child generation even if the adult child enjoys other social relationships, such as relationship with spouse. Although it is suspected that parent-child relationships may be associated with adult children's emotional distress as well as younger counterparts, few empirical evidences have been provided. My primary goal in this paper, therefore, is to evaluate the association between parent-child relationships and emotional distress of Japanese adults. In the process, I hope to shed light on potential implications for the difference of the magnitude of parent-child relationships on adult children's emotional distress by family environment. In doing so, I also consider gender differences because family matters, such as housework, are highly asymmetric. More specifically, I address following five research questions: (1) Are those who maintain positive relationship with parents have less emotional distress? (2) To what extent is the association between parent-child relationships and emotional distress explained by support from parents and socioeconomic status? (3) Does the association between parent-child relationships and emotional distress differ by their marital status? (4) Does the association

between parent-child relationships and emotional distress qualified by adult child's birth order? (5) Do the relationships in questions 1 to 4 differ by sex of adult children or parents?

Background

Parent-child relationships in midlife in Japan. Norms of Japanese parent-child relationships are different from those of Western nations. The traditional Japanese parent-child relationships was constructed upon the norm of the ideology of stem family in which most aged parents coreside with their married eldest child (*i.e.* eldest son, or eldest daughter who took a husband), and the married eldest child have to provide support for parents.

There are two contrasting theories to explain the family system in contemporary Japan. In the first, the Japanese traditional theoretical framework for parent-child relationships is no longer prevalent (Yamada, 2012) due to changes of social structure which made intergenerational relationships different (Lowenstein, 2005; Phillips *et al.*, 2010). Demographic changes made parent-child relationships last longer and become tighter. The long life expectancy, for instance, made family bonds last unprecedented duration, and the decline of fertility rate may make parent-child relationship more intense[3]. In the process of the decline of traditional family ideology, the Japanese family system has shifted from stem family to bilateral family (Ochiai, 1997). Further, the loss of the Japanese traditional family ideology under which the eldest child enjoyed intense parent-child relationships may enable those not eldest child enjoy benefits of parent-child relationships in midlife. Therefore, the association between parent-child relationships and emotional distress of Japanese adults may not differ by birth order.

In contrast, some family sociologists have questioned the loss of the Japanese traditional ideology. Shirahase (2005) and Kato (2006) argued that traditional family norms of stem family still remain because of the increase of the percentage of those coresiding with parents in several years after marriage. Shi (2008) and Suzuki (2012) have reported that stem family system and bilateral family system co-exist in contemporary Japan. The remaining, even partially, ideology of stem family implies that the association between parent-child relationships and emotional distress may differ by birth order. If the eldest child is still expected to stay in family in adulthood, I would expect to see considerable negative association between parent-child relationships and emotional distress among the eldest child, particularly the eldest son due to conflicts of ideas in contemporary Japanese society and actual practices. By contrast, if the eldest child is not expected to stay in family, I would see

slight negative association between parent-child relationships and emotional distress.

There are several possible differentials for the quality of parent-child relationships among the Japanese adults by their individual characteristics. Earlier studies are helpful to speculate the differentials by individual characteristics. The quality of parent-child relationships is possibly associated with child's age (Watanabe, 1997), living arrangements (Yang and Kuwa, 2006), child's birth order (Nishioka, 2000), and marital status (Kasugai, 1997). Although the focus is not on Japan, American studies provided empirical, furthermore, evidences for tighter relationships if the child generation has children (Aldous 1987; 1995).

Distress studies in Japan. Consistent with the findings of American studies that those with lower socioeconomic status possess higher emotional distress (Mirowsky and Ross, 1986), Japanese sociologists have reported the significant association between higher socioeconomic status, such as household income (Inaba, 1991; 1995a; 1995b; 2002), employed full-time job (Inaba, 1995a) and husband's higher educational attainment (Inaba, 1995b), and lower emotional distress.

The association between relationships with family members and emotional distress is, however, not always consistent with the findings in the United States. Inaba has paid attention to the association between marital status which is the source of relationship with spouse and possibly emotional distress in his series of research. In general, the married possess lower emotional distress than the never-married, divorced or widowed (Inaba, 2002), but this relationship is moderated by family environment. Inaba (1991), furthermore, found an exception that having spouse is significantly associated with men's higher emotional distress when respondents are heir apparent. His interpretation for this result is that having spouse is a source of intergenerational conflict[4]. Additionally, there are little differences of emotional distress between married women and never married women (Inaba, 2002). He interpreted this result that women have an alternative source of social support to their husband, and the quality of the support from husband is not considerable.

Studies examining the association between family relationships and emotional distress in adulthood in Japan have not well-expanded beyond spousal relationships. No studies directly examining parent-child relationships and emotional distress exist except for Kitamura and Mutou (2001) and Kitamura (2008) which examined the association between mother-daughter relationships and emotional distress. These studies provided an empirical

evidences for the significant positive relationship between current closeness and psychological well-being of single daughters and married daughters without children. However, these studies used survey with biased sample[5] and very low response rate (24.6%), therefore it is difficult to capture the general trend of the association between mother-daughter relationships and emotional distress among Japanese adults. Further, the study did not uncover the association between the other parent-child relationships – father-daughter relationship, mother-son relationship and father-son relationship – and psychological well-being and the selection or heterogeneity scenarios.

Selections of people and heterogeneities. Although there is good reason to believe that parent-child relationships may be associated with adult children's emotional distress, there are no national representative studies of Japan that directly examine this association. To evaluate the aforementioned research questions, I begin this paper by comparing emotional distress among Japanese adults by parent-child relationships.

I then proceed to evaluate possible explanations for any differences that I observe. One possible explanation comes from theories of social relationships and health (*e.g.* Kawachi and Berkman, 2001) which suggest that negative parent-child relationships in midlife may be of higher emotional distress among Japanese adults rather than the careful collection and evaluation of information regarding individual characteristics.

Another possible explanation for different emotional distress is selective of people with characteristics associated with a higher risk of circumstances that may be correlated with support from/for parents, such as educational background, income and occupation. Support from parents is a potential explanation for both positive parent-child relationships and lower emotional distress. If the provision of support from parents reduce the burden of the child generation, adult child may enjoy positive parent-child relationships and lower emotional distress. On the other hand, child generation may be more burdened and possibly possess negative parent-child relationships in the case that they provide support for their parents.

Results of previous research (Brown, 2000; Cockerham, 2014), furthermore, suggest that socioeconomic status can be a potential confounding variable of the association between parent-child relationships in midlife and emotional distress among child generation. Parent-child relationships among the Japanese adults may also differ by socioeconomic differentials. Lye (1996, p.92) noted that "adult children and parents who are in middle class occupations, are more highly educated, and have higher income are more likely to involved in exchanges of emotional instrumental support than are

their working class, less well educated, or lower income counterparts (Hogan *et al.* 1993; Goetting, 1990; Kulis, 1992; Lawton *et al.* 1994; Murtran and Reitzes, 1984; Rossi and Rossi, 1990)." Based upon results of these studies, I expect social status to be lower among those who have negative relationship with parents than those counterparts. If this association is also true among the sample in this paper, spurious relationships may be introduced with self-selection into parent-child relationships because lower-class people may be more likely to be emotionally distressed than the upper- or middle-class people. Additionally, consistency of educational and occupational background between parents and adult child is a possible indicator for perceived positive parental influence which was significantly associated with positive parent-child relationships in the United States (Welsh and Stewart, 1995). Although the sample is very biased[6], Kasugai (1996) provided a similar insight with Japanese samples that shared experience of roles in family was associated with positive mother-daughter relationships which was significantly related to emotional closeness. This study led me speculate that having shared background or experiences may be a key for positive parent-child relationships and perhaps lower emotional distress.

The implications from earlier studies led me to speculate that the positive parent-child relationships may be qualified by sex, socioeconomic status and position in family. To distinguish the moderations of individual characteristics, I examined how the association between parent-child relationships and emotional distress differ by individual characteristics. In this paper, I consider three heterogeneity scenarios. In the first, the association may differ by marital status. The association between parent-child relationships and emotional distress among the married may be not as significant as the never-married, divorced and widowed because they possess the alternative source of life-course reciprocity. The second possible heterogeneity scenario is that the association between parent-child relationships and emotional distress may be different by birth order. Because traditional family norms under which parent-child relationships are most influential on the eldest child may still exist in contemporary Japan, the impact of parent-child relationship is perhaps most significant for the eldest child. Finally, earlier studies which showed gender differences in a house (*e.g.* Ochiai, 1997; Iwai and Yasuda, 2008) led me to speculate gender differences of association between parent-child relationships and emotional distress may also be different by sex. I posit that the association between parent-child relationships and emotional distress is stronger for women than for men because parent-child relationships may be an alternative source to the relationship with spouse.

Method

Data. To evaluate the association between emotional distress and parent-child relationships, I used the data from the 2003 and 2008 rounds of the National Family Research of Japan (NFRJ) conducted by the Japan Society for Family Sociology. The NFRJ is a large, nationally representative survey of 28-77 years of age Japanese men and women in 2003 round and 28-72 years of age Japanese men and women in 2008 round. Response rates were 63% in 2003 round and 55% in 2008 round, respectively, and the total number of respondents to the two surveys are 11,505. In this study, I restricted my focus on those who are young or middle-aged adults, thus I excluded 63 years of age or above because those 63 years of age or above used questionnaire for elderly in the NFRJ08[7]. I also excluded respondents whose mother or father has already passed away to avoid the misleading results due to the difference of family environment across models. These restrictions left me with a base sample of 1,929 for men and 2,271 for women. Actual number were lower than total analytical sample size, reflecting missing data on the various covariates.

The data of the NFRJ contain following strengths. Most importantly, the NFRJ provides objective data for current parent-child relationships. The survey includes information on their current parent-child relationships beyond a simple measure of self-rated parent-child relationships, such as frequency of talk. Addition to parent-child relationships, the survey also includes the Center of Epidemiologic Studies Depression (CES-D) Scale, which is an index of emotional distress. Further the surveys provide not only respondents' health conditions but also covariates that should be taken into consideration as dimensions of stratification along which the relationship between parent-child relationships and health might be different, such as educational status, economic conditions and support from parents.

Variables. I considered a dependent variable of emotional distress measured by the CES-D Scale. The CES-D is a conventional measure of current depressive symptomatology with established validity among the Japanese (Wada *et al.,* 2007). Further, Kinoshita (2001) presented empirical evidences for the validity of the abridged CES-D Scale which the NFRJ surveys use.

For the CES-D Scale, respondents were asked how many days in the past one week they had felt annoyed, could not shake the blues, felt depressed, were distractedness, lacked appetite, felt that they were a burden, were scared, had insomnia, were untalkative, and felt lonely, happy and sad. The values for these responses ranged from 1 (never) to 4 (almost every day). The measure

for happiness is a reverse question and is, thus, rescored to fit with the other measurements. After reverse-coding the happiness measure so that higher scores reflect more emotional distress, I sum all the measures and subtract 12 to establish the minimum score as 1. The resulting value for emotional distress ranged from 1-36. Cronbach's alpha values was 0.87 for both men and women. I used ordinary least squares regression model for the emotional distress because the CES-D Scale is a continuous variable.

Two measures for parent-child relationships, global relationship quality and frequency of contact, were selected for analysis[8]. A dichotomous variable was constructed from the results of self-rated parent-child relationship ranged 1 to 4 with response options of negative, somewhat negative, somewhat positive and positive. Respondents answered positive or somewhat positive were categorized as positive, and the others are categorized as negative. Regarding mother-child relationship, the proportion of those categorized as "negative" is 4.3% for men and 2.9% for women. The proportion of those categorized as "negative" for father-child relationship is 7.5% for men and 6.4% for women.

In addition to global relationship quality, I also construct a variable for frequency of contact, which is a potential indicator for parent-child relationships (Lye, 1996). Frequency of talk was referred because this was only available data identifying the frequency of contact between parents and adult child across the NFRJ surveys. Values of frequency of talk with parents in the past one year ranged from 1 (never) to 6 (almost every day) – never, a few times per year, once or twice per month, once or twice per week, three or four times per week and almost every day. As followed the previous study examining parent-child relationships (Aquilino, 1994), frequency of talk was restructured into four categories – none, less than once a month, a few times a month[9] and once a week (reference).

I controlled respondents' age, but did not include the indicator of sex because I will use different models by sex. Previous research suggests that several characteristics that may confound the association between emotional distress and parent-child relationships. Three- category of variable of living arrangements – far (reference), proximate residence, coresidence – distinguished the distance of living places between respondents and their biological-, step- or adopted-mother or father. Marital status distinguished the married and single, which includes the never-married, the divorced and the widowed. I did not distinguish the never-married, the divorced and the widowed because the number of divorced and widowed were limited (approximately 4% for men and 7% for women) in the NFRJ surveys. I also

included a categorical variable of birth order to control for differences between one-child, eldest child having siblings and not eldest[10]. These variables were taken for control variables. Number of siblings were not controlled due to multicollinearity with birth order which was an indispensable variable because one of aims of this paper is to shed light on the differences of the association between parent-child relationships and emotional distress. Furthermore, the variable of number of children was also misleading because the sample of this paper includes the never-married of which most do not have child, though earlier American study provided an empirical evidence for significant association between parent-child relationships and having grandchild generation (Aldous 1987; 1995). Number of siblings and number of children were, therefore, not controlled in the analyses.

Further, I also incorporated information whether respondents received support from parents or provided support for parents as explanatory variables. Included measures of financial or instrumental support from parents distinguished support received from or provided to mother from received from or provided to father. Dichotomous measure of financial support was constructed by the question asking if respondents received financial support from father or mother in the past one year. Dichotomous measure of financial support from adult child to parents also constructed in the same way. For instrumental support, same ways to construct variables were employed. In models with a focus on mother-child relationships and frequency of talk with mother, measures of received support from mother and provided support for mother were included. Similarly, in the model focusing on father-child relationships and frequency of talk with father, measures of received support from father and provided support for father were included.

Additionally, I took explanatory variables indicating socioeconomic characteristics that may be associated with both emotional distress and parent-child relationships and posited to account for the relationship between parent-child relationships and emotional distress. Educational background was a three-category measure of highest level of education attended - high school or below (reference), junior college/vocational school and university. I employed four-category measure of occupation – professional, white collar job (reference), sales/clerk/blue collar job, and not working. Further, I also included equivalent household income (hundred thousand Japanese yen) which indicates economies of scale. Equivalent household income in the previous year is a linear variable constructed by using mid-points of eighteen options on the NFRJ03 survey and nineteen answer options on the NFRJ08 survey. There were no multicollinearities based upon results of variance inflation factor[11].

Models. I began by estimating baseline models that include only the indicator of parent-child relationships or frequency of contact, respondent's age, living arrangements, birth order, and marital status (Model 1). In Model 1, the coefficients for parent-child relationships indicate whether and to what extent emotional distress differs for respondents by the quality of parent-child relationships independently from family circumstances.

Then, I proceeded to estimate models that include potential explanatory variables of received instrumental support and financial support from parents and provided instrumental support and financial support for parents (Model 2). Results of Model 2 tell me that the differences of emotional distress by the quality of parent-child relationships and frequency of intergenerational exchanges can be explained by received support from parents or provided support for parents.

After establishing associations between the quality of parent-child relationships and frequency of intergenerational exchanges and emotional distress without socioeconomic variables, I estimated another model that includes socioeconomic covariates (Model 3). Model 3 allows me to assess the extent to which the established associations in Model 1 and 2 reflect individual socioeconomic characteristics that may be associated with both the selection of parent-child relationships and emotional distress. Finding that relationships observed in the regression analyses with socioeconomic covariates are no longer significant after including socioeconomic variables would be consistent with a scenario in which socioeconomic differentials in the quality of parent-child relationships are reflected in socioeconomic differentials in emotional distress. On the other hand, finding that coefficients of parent-child relationships observed in the regression analyses with socioeconomic covariates still maintain significant level net of other characteristics might be consistent with a scenario in which parent-child relationships might be related to emotional distress independent from socioeconomic status.

Finally, I estimated the possibility of moderations. I added interactions between parent-child relationships and marital status (Model 4) and birth order (Model 5) to Model 3. Results of these analyses will tell me whether the relationship between parent-child relationships and emotional distress differs by marital status or birth order. If the association between parent-child relationships or exchanges and emotional distress differs by marital status or birth order, the coefficient of the interactions would be significant and the significant differences observed in Model 1 to 3 might be moderated. The difference by sex would not be presented in tables because Model 1-3 examined the association by sex, but I conducted experiment including interactions of

parent-child relationships and sex to examine whether the gender difference of the association between parent-child relationships and emotional distress is statistically significant.

Results

Table 1 presents descriptive statistics for variables in my analyses for the entire sample and separately by sex and the global measure of parent-child relationships. Those with negative parent-child relationships tend to report higher score of CES-D Scale (*i.e.* higher emotional distress) than those maintaining positive parent-child relationships.

Table 1
Descriptive Statistics, By Gender and the Quality of Parent-child Relationships

| | Mother | | | | Father | | | |
| | Men | | Women | | Men | | Women | |
Variable	BG	Good	BG	Good	BG	Good	BG	Good
CES-D Scale	9.39	6.27	10.05	6.75	8.63	6.21	9.59	6.65
(s.d.)	7.78	5.29	8.27	5.34	6.86	5.26	7.62	5.25
Age	39.97	40.21	39.97	39.68	39.25	40.28	38.00	39.83
(s.d.)	9.66	8.51	7.94	8.08	8.75	8.54	7.34	8.13
Living Arrangement								
Living Far from Mother/Father	0.24	0.28	0.46	0.32	0.34	0.28	0.43	0.33
Living Proximate to Mother/Father	0.44	0.42	0.36	0.50	0.37	0.42	0.30	0.50
Living Together	0.32	0.30	0.18	0.18	0.28	0.30	0.26	0.17
Birth Order								
Eldest Child	0.21	0.19	0.21	0.15	0.27	0.19	0.25	0.15
One Child	0.46	0.48	0.56	0.52	0.43	0.49	0.54	0.52
Not Eldest	0.32	0.33	0.23	0.32	0.30	0.33	0.21	0.33
Marital Status								
Married	0.73	0.75	0.27	0.79	0.66	0.76	0.57	0.80
Single	0.27	0.25	0.28	0.21	0.34	0.24	0.43	0.20
Instrumental Support from Mother								
Enjoyed	0.90	0.68	0.84	0.45	0.94	0.71	0.95	0.63
Not Enjoyed	0.10	0.32	0.16	0.55	0.06	0.29	0.05	0.37
Financial Support from Mother								
Enjoyed	0.83	0.77	0.80	0.68	0.82	0.76	0.87	0.68
Not Enjoyed	0.17	0.23	0.20	0.32	0.18	0.24	0.13	0.32
Instrumental Support to Mother								
Provided	0.75	0.69	0.77	0.57	0.83	0.70	0.83	0.63
Not Provided	0.25	0.31	0.23	0.43	0.17	0.30	0.17	0.37

contd. table 1

Variable	Mother				Father			
	Men		Women		Men		Women	
	BG	Good	BG	Good	BG	Good	BG	Good
Financial Support to Mother								
Provided	0.95	0.96	0.92	0.97	0.83	0.96	0.97	0.98
Not Provided	0.08	0.04	0.08	0.03	0.07	0.04	0.03	0.02
Educational Attainment								
High School or Below	0.52	0.42	0.52	0.42	0.52	0.41	0.45	0.42
Junior College or Vocational School	0.24	0.15	0.26	0.42	0.21	0.15	0.34	0.42
Undergraduate or Above	0.24	0.43	0.21	0.16	0.27	0.44	0.22	0.16
Occupation								
Professional	0.20	0.30	0.10	0.13	0.19	0.31	0.18	0.13
White Collar	0.04	0.20	0.08	0.22	0.13	0.20	0.18	0.22
Sales/Clerk/Blue Collar	0.66	0.45	0.36	0.30	0.56	0.45	0.32	0.30
Not Working	0.10	0.05	0.46	0.34	0.11	0.05	0.33	0.34
Equivalent Household Income	31.39	38.09	29.13	35.07	34.05	38.18	30.73	35.19
(s.d.)	16.25	19.77	17.93	19.11	21.05	19.53	19.04	19.11
Educational Paring with Mother/ Father								
Child > Mother/Father	0.39	0.47	0.33	0.37	0.33	0.43	0.39	0.42
Homogamy	0.46	0.41	0.49	0.50	0.58	0.52	0.52	0.48
Child < Mother/Father	0.14	0.12	0.18	0.13	0.09	0.05	0.09	0.10
Survey Year								
NFRJ03	0.52	0.50	0.51	0.53	0.47	0.51	0.55	0.53
NFRJ08	0.48	0.50	0.49	0.47	0.53	0.49	0.45	0.47
N	71	1,635	61	1,943	134	1,569	125	1,872
Proportion of total N	0.04	0.96	0.03	0.97	0.08	0.92	0.06	0.94

* "BG" represents "Below Good."

Global relationship quality. Table 2 presents the results from an OLS regression model of relationship with mother and emotional distress. Results of the baseline models in column 1 (men) and 4 (women) show that the difference of emotional distress by mother-child relationships is significant for both men and women. Interestingly, the absolute value of the coefficient of relationship with mother is considerably higher than that of marital status. The magnitude of relationship with mother is approximately 4.2 times higher than that of marital status among women. The statistical significance remains and the coefficient stays around same level across Model 1 to 3 for both men and women. Although support from mother, support for mother and several individual socioeconomic characteristics posited to account for the association

between parent-child relationship and emotional distress are included in Model 2 and 3, these characteristics do not explain the difference between those with positive mother-child relationship and negative mother-child relationship. No statistical significant gender differences for mother-child relationships are observed (p=.81).

Results from an OLS regression models of father-child relationship and emotional distress are presented in Table 3. Similar to the association between mother-child relationship and emotional distress, father-child relationship is significantly associated with emotional distress across three models. However, the magnitude of father-child relationship on the emotional distress is somewhat smaller than that of mother-child relationship. Furthermore, consistent with the results of mother-child relationship, no significant gender differences of the magnitude of father-child relationship on emotional distress are observed (p=.58). To examine the extent to which the association between global relationship quality with parents and emotional distress differs by marital status and birth order, I now turn to results of models with interaction coefficients.

Table 2
Estimated Coefficients from an Ols Regression Model with
Relationship with Mother

Variable	Men			Women		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Relationship with Mother						
Positive	-2.78 **	-2.87 **	-2.86 **	-3.03 **	-3.25 **	-2.99 **
Negative (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
Age	-0.02	-0.01	-0.01	-0.02	0.00	0.01
Living Arrangement (Mother)						
Living Far from Mother (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
Living Proximate to Mother	-0.20	-0.25	-0.30	-0.08	-0.11	-0.18
Living Together	-1.03 **	-1.10 **	-1.22 **	-0.14	-0.15	-0.19
Birth Order						
Eldest Child (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
One Child	-0.05	-0.07	-0.11	0.23	0.21	0.49
Not Eldest	-0.02	-0.02	-0.03	0.47	0.50 #	0.56 #
Marital Status						
Married (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
Single	2.38 **	2.38 **	2.25 **	0.72 #	0.88 *	0.56

contd. table 2

Variable	Men			Women		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Instrumental Support from Mother						
Enjoyed		-0.26	-0.23		-0.44	-0.44
Not Enjoyed (omitted)		0.00	0.00		0.00	0.00
Financial Support from Mother						
Enjoyed		-0.84 #	-0.79 *		-0.94 **	-0.85 **
Not Enjoyed (omitted)		0.00	0.00		0.00	0.00
Instrumental Support to Mother						
Provided		0.11	0.10		-0.22	-0.26
Not Provided (omitted)		0.00	0.00		0.00	0.00
Financial Support to Mother						
Provided		-0.16	-0.11		0.58	0.66
Not Provided (omitted)		0.00	0.00		0.00	0.00
Educational Attainment						
High School or Below (omitted)			0.00			0.00
Junior College or Vocational School			0.24			0.01
Undergraduate or Above			0.05			0.56
Occupation						
Professional			-0.52			0.53
White Collar (omitted)			0.00			0.00
Sales/Clerk/Blue Collar			-0.23			0.27
Not Working			0.81			-0.22
Equivalent Household Income			0.00			-0.03 **
Educational Paring with Mother						
Child > Mother (omitted)			0.00			0.00
Homogamy			0.20			0.48
Child < Mother			0.01			0.85
Survey Year						
NFRJ03 (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
NFRJ08	0.56 #	0.54 #	0.57 #	-0.05	-0.10	0.07
Constant	9.36 **	10.04 **	10.07 **	10.24 **	10.66 **	10.37 **
N	1,535	1,535	1,535	1,878	1,878	1,878
df	8	12	20	8	12	20
Adj. R2	0.04	0.05	0.04	0.01	0.02	0.02

# p<.10, * p<.05, **p<.01

Table 3
Estimated Coefficients from an Ols Regression Model with Relationship with Father

Variable	Men			Women		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Relationship with Father						
Positive	-2.14 **	-2.32 **	-2.28 **	-2.68 **	-2.84 **	-2.71 **
Negative (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
Age	-0.02	-0.01	-0.01	-0.01	0.00	0.00
Living Arrangement (Father)						
Living Far from Father (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
Living Proximate to Father	-0.05	-0.05	-0.13	-0.14	-0.11	-0.17
Living Together	-0.87 *	-0.90 *	-1.04 **	0.01	0.01	-0.04
Birth Order						
Eldest Child (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
One Child	-0.13	-0.09	-0.17	0.03	0.01	0.29
Not Eldest	-0.03	-0.02	-0.03	0.54 #	0.55	0.63 *
Marital Status						
Married (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
Single	2.31 **	2.34 **	2.24 **	0.56	0.64	0.33
Instrumental Support from Father						
Enjoyed		-0.51	-0.53		-0.25	-0.22
Not Enjoyed (omitted)		0.00	0.00		0.00	0.00
Financial Support from Father						
Enjoyed		-0.83 **	-0.82 *		-0.68 *	-0.62 *
Not Enjoyed (omitted)		0.00	0.00		0.00	0.00
Instrumental Support to Father						
Provided		-0.03	-0.02		-0.24	-0.23
Not Provided (omitted)		0.00	0.00		0.00	0.00
Financial Support to Father						
Provided		-0.49	-0.45		0.34	0.33
Not Provided (omitted)		0.00	0.00		0.00	0.00
Educational Attainment						
High School or Below (omitted)			0.00			0.00
Junior College or Vocational School			-0.43			-0.30
Undergraduate or Above			-0.41			0.11
Occupation						
Professional			-0.43			0.46
White Collar (omitted)			0.00			0.00
Sales/Clerk/Blue Collar			-0.14			0.39
Not Working			0.53			-0.18

Variable	Men			Women		
	Model 1	*Model 2*	*Model 3*	*Model 1*	*Model 2*	*Model 3*
Equivalent Household Income			0.00			-0.03 **
Educational Paring with Father						
Child > Father (omitted)			0.00			0.00
Homogamy			-0.75 #			-0.14
Child < Father			0.94			-0.29
Survey Year						
NFRJ03 (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
NFRJ08	0.62 *	0.58 *	0.64 *	0.04	0.02	0.02
Constant	8.67 **	9.54 **	10.26 **	9.64 **	10.11 **	10.85 **
N	1,546	1,546	1,546	1,865	1,865	1,865
df	8	12	20	8	12	20
Adj. R2	0.05	0.05	0.05	0.01	0.02	0.02

# p<.10, * p<.05, **p<.01

Results in Table 4 and 5 present the interactions between parent-child relationships and marital status and birth order. Looking first at the results of the interaction between mother-child relationships and marital status for men (column 1) and women (column 3), I see that differences in emotional distress by the global relationship quality with mother varies for women, but not for men. Despite the consistent and significant negative association between the quality of mother-child relationships and emotional distress, the magnitude of the quality of mother-daughter relationships is more considerable for single women than married. Neither men nor women have significant differences of the association between father-child relationships and emotional distress by marital status. Results of the interaction between parent-child relationships and birth order for men (column 2 in Table 4 and 5) tell me that the magnitudes of the mother- or father-son relationships on son's emotional distress differ by birth order. Interestingly, mother-son relationships are significantly associated with emotional distress except for only child men (p=.94). This trend is less obvious, but detected the fact that the association between father-son relationships and emotional distress did not reach significant level among only child men (p=.20). There are no significant interactions by birth order for the association between parent-daughter relationships and daughter's emotional distress.

Frequency of talk with parents. The baseline model in Table 6 tells me that frequency of talk with mother is significantly associated with emotional distress for women, but not for men. Although not presented in Table 6,

Table 4
**Estimated Coefficients from an Ols Regression Model with Relationship with
Mother (Including Interactions)**

Variable	Men		Women	
	Model 4	Model 5	Model 4	Model 5
Relationship with Mother				
Positive	-3.53 **	-3.88 **	-1.99 *	-3.00 **
Negative (omitted)	0.00	0.00	0.00	0.00
Age	-0.01	-0.01	0.01	0.01
Living Arrangement (Mother)				
Living Far from Mother (omitted)	0.00	0.00	0.00	0.00
Living Proximate to Mother	-0.28	-0.30	-0.17	-0.18
Living Together	-1.23 **	-1.23 **	-0.12	-0.19
Birth Order				
Eldest Child (omitted)	0.00	0.00	0.00	0.00
One Child	-0.10	-4.13 *	0.51	1.18
Not Eldest	-0.01	-0.62	0.55 #	0.05
Marital Status				
Married (omitted)	0.00	0.00	0.00	0.00
Single	-0.17	2.27 **	4.11 *	0.57
Instrumental Support from Mother				
Enjoyed	-0.22	-0.23	-0.43	-0.43
Not Enjoyed (omitted)	0.00	0.00	0.00	0.00
Financial Support from Mother				
Enjoyed	-0.79 *	-0.78 *	-0.87 **	-0.85 **
Not Enjoyed (omitted)	0.00	0.00	0.00	0.00
Instrumental Support to Mother				
Provided	0.11	0.11	-0.24	-0.25
Not Provided (omitted)	0.00	0.00	0.00	0.00
Financial Support to Mother				
Provided	-0.11	-0.14	0.57	0.66
Not Provided (omitted)	0.00	0.00	0.00	0.00
Educational Attainment				
High School or Below (omitted)	0.00	0.00	0.00	0.00
Junior College or Vocational School	0.31	0.29	0.02	0.02
Undergraduate or Above	0.06	0.07	0.59	0.57
Occupation				
Professional	-0.52	-0.50	0.55	0.54
White Collar (omitted)	0.00	0.00	0.00	0.00
Sales/Clerk/Blue Collar	-0.22	-0.24	0.28	0.27
Not Working	0.82	0.74	-0.20	-0.23

Variable	Men		Women	
	Model 4	Model 5	Model 4	Model 5
Equivalent Household Income	0.00	0.00	-0.03 **	-0.03 **
Educational Paring with Mother				
Child > Mother (omitted)	0.00	0.00	0.00	0.00
Homogamy	0.20	0.23	0.48	0.48
Child < Mother	0.02	0.03	0.81	0.85
*Relationship with Mother*Marital Status*				
Positive*Single	2.51		-3.70 *	
*Relationship with Mother*Birth Order*				
Positive*One Child		4.17 *		-0.72
Positive*Not Eldest		0.61		0.52
Survey Year				
NFRJ03 (omitted)	0.00	0.00	0.00	0.00
NFRJ08	0.57 #	0.57 #	0.08	0.06
Constant	10.68 **	11.01 **	9.32 **	10.39 **
N	1,535	1,535	1,878	1,878
df	21	22	21	22
Adj. R2	0.05	0.05	0.02	0.02

# p<.10, * p<.05, **p<.01

Table 5
Estimated Coefficients from an Ols Regression Model with Relationship with Father (Including Interactions)

Variable	Men		Women	
	Model 4	Model 5	Model 4	Model 5
Relationship with Father				
Positive	-2.21 **	-1.56 *	-2.39 **	-2.37 **
Negative (omitted)	0.00	0.00	0.00	0.00
Age	-0.01	-0.01	0.00	0.00
Living Arrangement (Father)				
Living Far from Father (omitted)	0.00	0.00	0.00	0.00
Living Proximate to Father	-0.13	-0.14	-0.18	-0.18
Living Together	-1.04 **	-1.03 **	-0.03	-0.04
Birth Order				
Eldest Child (omitted)	0.00	0.00	0.00	0.00
One Child	-0.17	0.06	0.28	1.46
Not Eldest	-0.03	1.91 #	0.62 *	0.87
Marital Status				
Married (omitted)	0.00	0.00	0.00	0.00
Single	2.44 *	2.21 **	1.10	0.32

	Men		Women	
Variable	Model 4	Model 5	Model 4	Model 5
Instrumental Support from Father				
Enjoyed	-0.53	-0.53	-0.23	-0.23
Not Enjoyed (omitted)	0.00	0.00	0.00	0.00
Financial Support from Father				
Enjoyed	-0.82 *	-0.82 *	-0.62 *	-0.62 *
Not Enjoyed (omitted)	0.00	0.00	0.00	0.00
Instrumental Support to Father				
Provided	-0.02	-0.03	-0.23	-0.22
Not Provided (omitted)	0.00	0.00	0.00	0.00
Financial Support to Father				
Provided	-0.45	-0.44	0.31	0.32
Not Provided (omitted)	0.00	0.00	0.00	0.00
Educational Attainment				
High School or Below (omitted)	0.00	0.00	0.00	0.00
Junior College or Vocational School	-0.43	-0.43	-0.29	-0.30
Undergraduate or Above	-0.41	-0.40	0.12	0.11
Occupation				
Professional	-0.43	-0.42	0.46	0.45
White Collar (omitted)	0.00	0.00	0.00	0.00
Sales/Clerk/Blue Collar	-0.14	-0.15	0.39	0.40
Not Working	0.53	0.50	-0.19	-0.19
Equivalent Household Income	0.00	0.00	-0.02 **	-0.02 **
Educational Paring with Father				
Child > Father (omitted)	0.00	0.00	0.00	0.00
Homogamy	-0.75 #	-0.75 #	-0.14	-0.15
Child < Father	0.93	0.99	-0.30	-0.31
Relationship with Father*Marital Status				
Positive*Single	-0.22		-0.84	
Relationship with Father*Birth Order				
Positive*One Child		-0.23		-1.26
Positive*Not Eldest		-2.07 #		-0.26
Survey Year				
NFRJ03 (omitted)	0.00	0.00	0.00	0.00
NFRJ08	0.64 *	0.66 *	0.03	0.02
Constant	10.19 **	9.57 **	10.55 **	10.56 **
N	1,546	1,546	1,865	1,865
df	21	22	21	22
Adj. R2	0.05	0.05	0.02	0.02

# p<.10, * p<.05, **p<.01

significant gender differences of the association exist[12]. For women, those who talk less frequently with their mother tend to report higher emotional distress. This trend is consistent across models, therefore intergenerational reciprocal support and individual characteristics do not explain the difference of emotional distress of women by frequency of talk with mother. Similarly, as presented in Table 7, women who talk less frequently with their father are more likely to be emotionally depressed than those who talk frequently with their father, but this trend is not observed for men. Interestingly, the differences reach significant level ($p<.01$) if women talk with their parents less than once a month in both Table 6 and 7. It makes me speculate that talking less than once a month is the threshold of frequency of contact for the increase of emotional distress for women.

Table 6
Estimated Coefficients from an Ols Regression Model with Frequency of Talk With Mother

	Men			Women		
Variable	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Frequency of Talk with Mother						
Once a Week (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
One to Three Times a Month	-0.27	-0.23	-0.20	0.47	0.71 *	0.67 *
Less than Once a Month	0.12	0.30	0.34	1.29 **	1.66 **	1.57 **
None	0.79	0.99	1.01	4.33 **	4.88 **	4.52 **
Age	-0.02	-0.02	-0.02	-0.02	0.00	0.01
Living Arrangement (Mother)						
Living Far from Mother (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
Living Proximate to Mother	-0.11	-0.10	-0.14	0.27	0.32	0.24
Living Together	-0.93 *	-0.91 *	-1.02 *	0.41	0.50	0.44
Birth Order						
Eldest Child (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
One Child	-0.07	-0.11	-0.16	0.24	0.22	0.50
Not Eldest	-0.03	-0.02	-0.02	0.43	0.46	0.53 #
Marital Status						
Married (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
Single	2.35 **	2.36 **	2.22 **	0.74 #	0.94 *	0.64
Instrumental Support from Mother						
Enjoyed		-0.23	-0.20		-0.64 *	-0.63 *
Not Enjoyed (omitted)		0.00	0.00		0.00	0.00

	Men			Women		
Variable	*Model 1*	*Model 2*	*Model 3*	*Model 1*	*Model 2*	*Model 3*
Financial Support from Mother						
Enjoyed		-0.85 **	-0.79 *		-0.99 **	-0.88 **
Not Enjoyed (omitted)		0.00	0.00		0.00	0.00
Instrumental Support to Mother						
Provided		0.14	0.14		-0.08	-0.12
Not Provided (omitted)		0.00	0.00		0.00	0.00
Financial Support to Mother						
Provided		0.20	0.25		0.68	0.77
Not Provided (omitted)		0.00	0.00		0.00	0.00
Educational Attainment						
High School or Below (omitted)			0.00			0.00
Junior College or Vocational School			0.36			0.00
Undergraduate or Above			0.13			0.61
Occupation						
Professional			-0.44			0.51
White Collar (omitted)			0.00			0.00
Sales/Clerk/Blue Collar			-0.14			0.26
Not Working			0.99			-0.10
Equivalent Household Income			0.00			-0.03 **
Educational Paring with Mother						
Child > Mother (omitted)			0.00			0.00
Homogamy			0.26			0.44
Child < Mother			0.02			0.83
Survey Year						
NFRJ03 (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
NFRJ08	0.55 #	0.54 #	0.56 #	-0.04	-0.14	0.03
Constant	6.77 **	7.26 **	7.15 **	6.89 **	6.95 **	6.88 **
N	1,541	1,541	1,541	1,882	1,882	1,882
df	10	14	22	10	14	22
Adj. R2	0.03	0.04	0.04	0.01	0.02	0.03

# p<.10, * p<.05, **p<.01

The association between frequency of talk with parents and emotional distress is not moderated by marital status or birth order for men as Table 8 and 9 presents. The results for women tell me that the threshold of frequency of talk with father for the significant association with emotional distress is more frequent among single women than married women. There are also moderation stories by birth order for frequency of talk with mother and father

Table 7
Estimated Coefficients from an Ols Regression Model with Frequency of Talk with Father

Variable	Men			Women		
	Model 1	*Model 2*	*Model 3*	*Model 1*	*Model 2*	*Model 3*
Frequency of Talk with Father						
Once a Week (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
One to Three Times a Month	0.20	0.22	0.27	-0.17	-0.06	-0.02
Less than Once a Month	0.32	0.47	0.48	0.97 **	1.14 **	1.11 **
None	0.19	0.43	0.37	2.17 **	2.52 **	2.42 **
Age	-0.02	-0.01	-0.01	-0.02	-0.01	0.00
Living Arrangement (Father)						
Living Far from Father (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
Living Proximate to Father	0.03	0.10	-0.01	0.14	0.21	0.15
Living Together	-0.67	-0.61	-0.78 #	0.36	0.43	0.40
Birth Order						
Eldest Child (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
One Child	-0.09	-0.08	-0.15	0.05	0.03	0.31
Not Eldest	-0.02	-0.01	0.00	0.47	0.47	0.56 #
Marital Status						
Married (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
Single	2.41 **	2.44 **	2.30 **	0.73 #	0.82 *	0.49
Instrumental Support from Father						
Enjoyed		-0.40	-0.41		-0.32	-0.29
Not Enjoyed (omitted)		0.00	0.00		0.00	0.00
Financial Support from Father						
Enjoyed		-0.89 **	-0.85 **		-0.67 *	-0.61 *
Not Enjoyed (omitted)		0.00	0.00		0.00	0.00
Instrumental Support to Father						
Provided		-0.03	-0.02		-0.13	-0.11
Not Provided (omitted)		0.00	0.00		0.00	0.00
Financial Support to Father						
Provided		-0.08	-0.04		0.37	0.37
Not Provided (omitted)		0.00	0.00		0.00	0.00
Educational Attainment						
High School or Below (omitted)			0.00			0.00
Junior College or Vocational School			-0.26			-0.26
Undergraduate or Above			-0.37			0.22

	Men			Women		
Variable	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Occupation						
Professional			-0.40			0.52
White Collar (omitted)			0.00			0.00
Sales/Clerk/Blue Collar			-0.03			0.33
Not Working			0.86			-0.15
Equivalent Household Income			0.00			-0.03 **
Educational Paring with Father						
Child > Father (omitted)			0.00			0.00
Homogamy			-0.68 #			-0.08
Child < Father			1.02			-0.20
Survey Year						
NFRJ03 (omitted)	0.00	0.00	0.00	0.00	0.00	0.00
NFRJ08	0.59 *	0.59 *	0.65 *	0.02	0.00	0.01
Constant	6.45 **	7.01 **	7.61 **	6.75 **	6.96 **	7.75 **
N	1,554	1,554	1,554	1,868	1,868	1,868
df	10	14	22	10	14	22
Adj. R2	0.03	0.04	0.04	0.01	0.01	0.02

# p<.10, * p<.05, **p<.01

Table 8
Estimated Coefficients from an Ols Regression Model with Frequency of Talk with Mother (Including Interactions)

	Men		Women	
Variable	Model 4	Model 5	Model 4	Model 5
Frequency of Talk with Mother				
Once a Week (omitted)	0.00	0.00	0.00	0.00
One to Three Times a Month	-0.27	-0.24	0.64 #	1.03 *
Less than Once a Month	0.33	0.37	1.52 **	1.51 **
None	0.51	1.11	5.31 **	1.78
Age	-0.02	-0.02	0.01	0.01
Living Arrangement (Mother)				
Living Far from Mother (omitted)	0.00	0.00	0.00	0.00
Living Proximate to Mother	-0.13	-0.14	0.24	0.26
Living Together	-0.99 *	-1.01 *	0.48	0.41
Birth Order				
Eldest Child (omitted)	0.00	0.00	0.00	0.00
One Child	-0.17	-0.28	0.49	0.62
Not Eldest	-0.02	0.02	0.53	0.68 #
Marital Status				
Married (omitted)	0.00	0.00	0.00	0.00
Single	2.12 **	2.25 **	0.58	0.70 #

Variable	Men		Women	
	Model 4	Model 5	Model 4	Model 5
Instrumental Support from Mother				
Enjoyed	-0.20	-0.19	-0.63 *	-0.64 *
Not Enjoyed (omitted)	0.00	0.00	0.00	0.00
Financial Support from Mother				
Enjoyed	-0.79 *	-0.80 *	-0.88 **	-0.88 **
Not Enjoyed (omitted)	0.00	0.00	0.00	0.00
Instrumental Support to Mother				
Provided	0.14	0.15	-0.13	-0.12
Not Provided (omitted)	0.00	0.00	0.00	0.00
Financial Support to Mother				
Provided	0.26	0.27	0.74	0.79
Not Provided (omitted)	0.00	0.00	0.00	0.00
Educational Attainment				
High School or Below (omitted)	0.00	0.00	0.00	0.00
Junior College or Vocational School	0.35	0.35	-0.02	0.05
Undergraduate or Above	0.13	0.10	0.61	0.67
Occupation				
Professional	-0.44	-0.44	0.50	0.50
White Collar (omitted)	0.00	0.00	0.00	0.00
Sales/Clerk/Blue Collar	-0.14	-0.15	0.28	0.29
Not Working	1.02	1.00	-0.10	-0.10
Equivalent Household Income	0.00	0.00	-0.03 **	-0.03 **
Educational Paring with Mother				
Child > Mother (omitted)	0.00	0.00	0.00	0.00
Homogamy	0.25	0.25	0.42	0.44
Child < Mother	0.00	0.01	0.79	0.88
*Frequency of Talk with Mother*Marital Status*				
A Few Times per Month*Single	0.40		0.29	
Less than Once a Month*Single	-0.04		0.58	
None*Single	1.58		-4.72	
*Frequency of Talk with Mother*Birth Order*				
A Few Times per Month*One Child		0.74		-1.31
A Few Times per Month*Not Eldest		-0.17		-0.65
Less than Once a Month*One Child		-0.12		0.46
Less than Once a Month*Not Eldest		-0.01		0.08
None*One Child		-0.59		10.53 *
None*Not Eldest		0.14		2.80
Survey Year				
NFRJ03 (omitted)	0.00	0.00	0.00	0.00
NFRJ08	0.56 #	0.58 #	0.01	0.03
Constant	7.20 **	7.14 **	6.95 **	6.74 **
N	1,541	1,541	1,882	1,882
df	25	28	25	28
Adj. R2	0.03	0.03	0.03	0.03

# p<.10, * p<.05, **p<.01

Table 9
Estimated Coefficients from an Ols Regression Model with Frequency of
Talk with Father (Including Interactions)

	Men		Women	
Variable	*Model 4*	*Model 5*	*Model 4*	*Model 5*
Frequency of Talk with Father				
Once a Week (omitted)	0.00	0.00	0.00	0.00
One to Three Times a Month	0.27	0.46	-0.23	-0.03
Less than Once a Month	0.31	0.40	1.09 **	1.08 *
None	-0.23	-0.24	2.56 **	1.07
Age	-0.01	-0.01	-0.01	0.00
Living Arrangement (Father)				
Living Far from Father (omitted)	0.00	0.00	0.00	0.00
Living Proximate to Father	-0.04	-0.03	0.16	0.14
Living Together	-0.75	-0.79 #	0.58	0.38
Birth Order				
Eldest Child (omitted)	0.00	0.00	0.00	0.00
One Child	-0.15	-0.32	0.30	0.25
Not Eldest	-0.01	0.11	0.56 #	0.44
Marital Status				
Married (omitted)	0.00	0.00	0.00	0.00
Single	2.07 **	2.37 **	0.11	0.49
Instrumental Support from Father				
Enjoyed	-0.42	-0.40	-0.30	-0.29
Not Enjoyed (omitted)	0.00	0.00	0.00	0.00
Financial Support from Father				
Enjoyed	-0.86 **	-0.85 **	-0.60 *	-0.61 *
Not Enjoyed (omitted)	0.00	0.00	0.00	0.00
Instrumental Support to Father				
Provided	-0.05	-0.01	-0.11	-0.11
Not Provided (omitted)	0.00	0.00	0.00	0.00
Financial Support to Father				
Provided	-0.04	-0.04	0.34	0.35
Not Provided (omitted)	0.00	0.00	0.00	0.00
Educational Attainment				
High School or Below (omitted)	0.00	0.00	0.00	0.00
Junior College or Vocational School	-0.21	-0.26	-0.27	-0.24
Undergraduate or Above	-0.32	-0.38	0.21	0.24
Occupation				
Professional	-0.40	-0.43	0.52	0.49
White Collar (omitted)	0.00	0.00	0.00	0.00
Sales/Clerk/Blue Collar	-0.03	-0.05	0.34	0.31
Not Working	0.87	0.82	-0.13	-0.16

contd. table 9

Variable	Men		Women	
	Model 4	Model 5	Model 4	Model 5
Equivalent Household Income	0.00	0.00	-0.03 **	-0.03 **
Educational Paring with Father				
Child > Father (omitted)	0.00	0.00	0.00	0.00
Homogamy	-0.65	-0.70 #	-0.10	-0.07
Child < Father	1.02	1.03	-0.22	-0.20
Frequency of Talk with Father*Marital Status				
A Few Times per Month*Single	-0.24		1.63 #	
Less than Once a Month*Single	0.90		-0.02	
None*Single	2.61		-0.35	
Frequency of Talk with Father*Birth Order				
A Few Times per Month*One Child		-0.11		-0.31
A Few Times per Month*Not Eldest		-0.54		0.09
Less than Once a Month*One Child		0.86		-0.21
Less than Once a Month*Not Eldest		-0.11		0.11
None*One Child		0.35		3.39 #
None*Not Eldest		1.44		1.95
Survey Year				
NFRJ03 (omitted)	0.00	0.00	0.00	0.00
NFRJ08	0.63 *	0.65 *	0.02	0.01
Constant	7.66 **	7.61 **	7.85 **	7.80 **
N	1,554	1,554	1,868	1,868
df	25	28	25	28
Adj. R2	0.04	0.04	0.02	0.02

# p<.10, * p<.05, **p<.01

for women, but these significant association is possibly due to the scarce of sample in the category[13].

Discussion

The objective in this paper is to enhance the understandings of the association between parent-child relationships and emotional distress among young or middle-aged Japanese adults. I posited that those maintaining positive parent-child relationship and frequent contact with parents tend to report lower emotional distress. Results support the association between global measure of parent-child relationships and emotional distress. However, I found that frequency of talk with mother and father was significantly associated with emotional distress for women, but no significant associations between intergenerational exchanges and emotional distress were observed for men.

The descriptive statistics in Table 1 suggest that positive parent-child relationship is associated with lower emotional distress for men and women. These patterns are confirmed in the multivariate regression analyses, consistent with the findings from earlier studies indicating that those with lower quality of social relationships are more emotionally distressed (Mirowsky and Ross, 1986). Nevertheless, because frequency of talk with parents did not show significant difference for men, the quality of perceived parent-child relationships is a potential indicator for emotional distress, rather than actual exchanges.

I also posited that financial and instrumental support from parents would contribute to lower emotional distress among those who maintain positive parent-child relationship and frequent contact with parents, but no empirical evidences for this hypothesis were found. I also found no support for the hypothesis that selection into negative parent-child relationships among those with fewer socioeconomic resources might explain higher emotional distress for respondents with lower quality of parent-child relationship. Controlling for possible explanatory socioeconomic characteristics does little to explain the evidence of lower emotional distress among men and women maintaining positive relationship with parents and women talking frequently with mother. These findings provided explanatory power of the importance of parent-child relationship on lowering emotional distress among Japanese adults.

A moderation story for the difference of the association between parent-child relationships and emotional health by birth order exists for men, whereas there are no moderation stories by birth order for women. A possible explanation for mother-son relationships is that the one child son may be more emotionally burdened by the expectation from his mother than the other types of birth order because they do not have alternative siblings that can satisfy mother's expectation. As a result, the benefit of positive mother-son relationship is moderated, and no significant differences of emotional distress by the quality of mother-son relationship exist.

Although no moderation stories for the association between emotional distress and global measure of parent-child relationships by marital status are seen for men, a moderation story by marital status exists for mother-daughter relationships. Consistent with my expectation, relationship with spouse might be an alternative to mother-daughter relationship because the difference of emotional distress by global measure of parent-child relationships was smaller among the married than the non-married. Furthermore, I found a moderation story for the association between emotional distress and frequency of talk with father by marital status among women. The difference of the thresholds

of frequency of talk for the increase of emotional distress between the married and the non-married implicates, again, that frequency of talk with father is less influential on emotional distress of the married women than that of the non-married women. Although I could not observe heterogeneity stories for global measure of father-daughter relationships and frequency of talk with mother, these results provide a basis for speculation that relationship with spouse might be a possible alternative source to parent-daughter relationships, but not to parent-son relationships.

The results in this paper provide an empirical basis for better understanding the association between parent-child relationships and emotional distress among Japanese adults, but the study is limited in several ways. First, my ability to fully evaluate my hypotheses is limited by possibility that other unobserved characteristics of respondents and their parents may account for any remaining relationships. For example, characteristics such as personality, maturity, interpersonal skills, parental marital status, substance emotional conditions, more detailed measures of support from parents, and other risky behaviors might be associated with both the quality of parent-child relationships and emotional distress of Japanese adults, but are not available in survey data. Additionally, the cross sectional nature of the NFRJ data prevent me from observing the inferences about the direction of the association between parent-child relationships and emotional distress. Longitudinal data is, thus, necessary to cover this important aspect of the relationship.

Despite these limitations, this study contributes to the expansion of the understandings of the association between parent-child relationships and emotional distress. Findings in this paper provide a basis speculation for the association between the positive parent-child relationships and lower emotional distress among Japanese adults. Subsequent research with longitudinal data, potential explanatory measures which are not available in the NFRJ surveys and research on other countries characterized different formation of parent-child relationships will provide additional evidence with which to further develop the understandings of the association between parent-child relationships and emotional distress.

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E-mail: shiro-furuya@shikon.meiji.ac.jp

Notes

1. Parents in this paper indicate biological, step, and adopted parents. Parents-in-law are not taken into consideration because the focus of study does not limit to the married Japanese.

2. The proportion of the married who live with parents have constantly been decreasing in Japan. Adult children living with aged parents had decreased from 52.5% in 1980 to 17.5% in 2010 (Ministry of Health, Labour and Welfare, 2012).

3. It can be inferred from the American study that expected the more intense parent-child relationships under family condition of smaller number of children (Skolnick, 1978).

4. For example, difficult relationships between married women and their husband's mother (*yome-shutome mondai*) is a feature of the Japanese family (DeVos and Wagatsuma, 1961).

5. The population of this study was restricted to the alumnae of two four-year female universities and one female high school near Tokyo area and their mother.

6. In her study, the sample was restricted to the graduates of a four-year university and a two-year junior college and their mother.

7. There was no distinction between elderly and middle-aged respondents in the NFRJ03.

8. Although the set of variables for parent-child relationships in this paper was not exhaustive intergenerational solidarity measures (Rossi and Rossi, 1990), these are the available source of parent-child relationships on the NFRJ surveys. Living arrangements were available on the NFRJ, but adult child may be unable to select living proximate to or coreside with parents due to, for example, their job opportunities. Therefore, living arrangements were counted as a control variable for parent-child relationships. Further, reciprocal instrumental and financial support were considered as potential explanatory variables of the association between parent-child relationships and emotional distress, rather than parent-child relationships.

9. Aquilino (1994) study has a category of 'one to three times per month,' but the exact category could not be constructed by using the NFRJ surveys because the NFJR surveys asked whether respondents talk with their parents one to two times per month. Therefore, I constructed a category of 'a few times per month' in the lieu of 'one to three times per month.'

10. Only alive siblings are counted in these variables because the questions on the NFRJ surveys did not clarify siblings who have passed away. Further, the NFRJ surveys did not have information of birth month of siblings either. I categorized respondents who have siblings born in same year as 'not eldest child.'

11. The highest variance inflation factor is 3.08 for men and 2.32 for women in Model 3.

12. Three of two coefficients of the interactions are statistically significant with the level of p<.10 (a few times per month*women) and p<.05 (none*women), respectively.

13. N=12 for only child women who had never talked with mother for an annual and N=30 for one child women who had never talked with father for an annual.

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