

Parent-child Relationship and Filial Piety Affect Parental Health and Well-being

Hui-Chuan Hsu

Department of Health Care Administration, Asia University, Taiwan

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Abstract The purpose of this study is to examine the effects of parent-child relationship, filial piety and adult children's concept of family on the health and well-being of their parents. Data were obtained from the Panel Study of Family Dynamics in Taiwan, 2005-2011. The sample comprised parents with repeated measures and one wave data from their adult children (208 persons with 1,336 observations). The parent-child relationship predicted self-rated health for both fathers and mothers and predicted the life satisfaction of mothers. Filial piety was positively related to self-rated health of mothers but was negatively related to self-rated health of fathers.

Keywords Family Value, Filial Piety, Self-rated Health, Subjective Well-being, Parent-child Relationship

1. Introduction

The family relationship is related to the health and well-being of each family member [1-5]. At the same time, the cultural context forms the expectations of parents and children for the family relationship. Social norms in Asian culture, including Taiwanese culture, include filial piety and family-centeredness. However, social changes have been dramatic in recent decades, and the concepts of family and filial piety are not the same as they were traditionally. Yeh & Bedford [6] propose that the concept of filial piety for Taiwanese families has transformed into a dual concept model: authoritarian filial piety and reciprocal filial piety. The former is the traditional concept of filial piety in Chinese culture, and the latter has become more significant in recent decades. Traditional filial piety, which emphasizing compliance and manners to the parents, is no longer a defining characteristic of Taiwanese young cohorts. As the concept of filial piety and family values have transformed, the expectations and values of parents (the middle-aged cohort) and their children (the younger adult cohort) may differ. How such cultural changes may affect the self-rated

health and well-being of parents needs to be explored. The purpose of this study is to examine whether mutual parent-child relationships or filial piety and traditional family values matter more to parental self-rated health and subjective well-being.

1.1. Filial Piety

According to the Analects of Confucius, the traditional filial piety emphasizes compliance, courtesy manners, and supporting to the parents. Taiwanese culture is rooted in Chinese culture, and filial piety of the child-parent relationship is also observed in the Chinese population. Older Chinese expect and receive respect, care, greetings, and obedience at a high level, and older adults emphasize respect the most and financial support the least [7]. Filial piety affects adult children's interactions and life choices regarding their parents, further affecting their parents' health and well-being [8-10]. When married Chinese have stronger filial piety, they are more likely to live with their parents [11]. Stronger filial concerns and emotional solidarity early in the parent-child relationship may lead adult children to support their parents later on in life [12]. However, the concept of filial piety has been transforming in recent decades. The dual concept of filial piety, as authoritarian and reciprocal, has become the new perspective of younger Taiwanese adults [6]. Tsai, Chen, & Tsai [13] explored the perception of filial piety among Taiwanese university students. They found that the themes of filial piety are reciprocal parental love and care, loving parents, achieving intergenerational well-being and practicing filial piety, depending on the circumstances and without following cultural traditions. The reciprocal and emotional relationship between parents and children seem to be more important in filial piety than ever.

1.2. The Parent-child Relationship

Social exchanges between generations affect the parent-child relationship. When Chinese parents care for grandchildren and provide financial support to their adult children, their children are more likely to live with them,

2.2. Measures

2.2.1. Dependent Variable: Parents' Self-rated Health and Life Satisfaction

Self-rated health was rated from 1 to 5, indicating from very poor to excellent. Life satisfaction was coded as unsatisfied/satisfied (0/1). Life satisfaction measured in each wave from 2005 to 2011 was used as the dependent variable.

2.2.2. Independent Variables of the Parents

The parent's independent variables included age at baseline, gender (male/female), education (junior high school or lower, senior high school, college or above), marital status (having a spouse or not), working status (yes/no), body mass index (BMI), and the relationship with sons and with daughters at baseline. The relationship with sons and with daughters were assessed by rating the relationship with sons and with daughters respectively and scored from 1 to 7. Because the relationship with sons or with daughters did not indicate specific children, the parent's reported relationship with their children referenced the child respondent's sex. That is, when the child respondent was male, the parent-son relationship was applied; when the child was female, the parent-daughter relationship was applied.

2.2.3. Independent Variables of the Children

The independent variables of the respondents' children included age difference with the respondent parents, gender (male/female), education (senior high school or lower and college or above), self-rated health (score 1 to 5, indicating from poor to excellent), social exchanges with their father or mother, filial piety concepts and family concepts.

The children's relationship with their father and with their mother was rated separately. The score was from 1 to 5, indicating from very poor to very good.

The filial piety scale and the family concept scale were developed for Taiwanese people and validated in a previous study, "Taiwan Social Change Survey" [21]. Filial piety was measured by 9 items, rated from very unimportant to very important (score 1 to 5). The 9 items were: be grateful for parents' raising; always treat parents well even though they are not good to you; give up own desires to achieve parents' wishes; sons live with parents after getting married; support parents to live a comfortable life; say nice things to protect parents' dignity; have one son to carry on the family name; do things to make the family feel proud; and daughters visit parents after they get married.

Family concepts were rated from very unimportant to very important (score 1 to 5) and also included 9 items. The 9 items were: people should marry to have their own home; people should try to preserve their marriage; teaching children is primarily the family's responsibility; family has a good relationship; a couple should never divorce for their children's sake; family can help personal growth; people

should earn enough money for the family; family members should help each other in case of difficulty; and husband makes money while wife cares for family. The children's information was measured only once, and thus it was assumed that the characteristics of the children's variables were constant during the period analyzed.

2.3. Analysis

Descriptive analysis, factor analysis and generalized linear model were applied for the analysis. The filial piety concepts and the family concepts of the children were first analyzed by exploratory factor analysis based on the baseline data. The extracted factors were then reduced and named with responding items.

The years following the first wave were added to the model. The generalized estimating equation (GEE) modeling was applied for the analysis. Self-rated health (M1 & M3) was assumed to be a normal-distributed linear model, while life satisfaction (M2 & M4) was assumed to be a binomial distributed model.

3. Results

Table 2 shows the descriptive analysis of the parent samples from 2005 to 2011. Life satisfaction was stable across waves. Table 3 shows the dyad children's characteristics.

Filial piety and family concept were analyzed by factor analysis. The filial piety concept was extracted by 3 factors (see Table 4): reciprocal filial piety (be grateful for upbringing, treat parents well, and support parents); respecting filial piety (make family feeling proud, preserve parent's dignity, married daughters often visit parents); and family-centered filial piety (at least one son, son lives with parents after marriage, achieve parents' wishes). Family concepts were analyzed by factor analysis, and 3 factors were extracted (see Table 5): traditional marriage (never divorce, try to preserve marriage, husband makes money while wife cares for family, marriage makes a family); raising and support (teach children, good family relationship); and solidarity (family makes enough money, family helps personal growth). The scores of the 3 factors of filial piety and of family concepts were summarized as the measures of children's filial piety concepts and family concepts. Then, the factors were used as the independent variables in the following generalized linear model.

Table 6 shows the association of the children's social exchange, filial piety and family concepts with self-rated health and life satisfaction for men (M1 and M2) and for women (M3 and M4). Time was not significant for self-rated health, indicating that the self-rated health was stable across waves for both men and women. However, the time effect was negative for both men ($\beta = -0.233$, $p < 0.001$) and women ($\beta = -0.209$, $p < 0.001$), which means that life satisfaction diminished across waves for both men and women.

Table 2. Descriptive analysis of the samples (Mean (SD) or %)

Variables	2005 (n=208)	2006 (n=198)	2007 (n=198)	2008 (n=190)	2009 (n=186)	2010 (n=178)	2011 (n=161)
Age at 2005	48.62 (2.76)						
Gender (Female %)	61.1%						
Education							
<=junior high	50.0%						
senior high	34.6%						
college+	15.4%						
Relationship with sons	4.57 (0.65)						
Relationship with daughters	4.63 (0.60)						
Marital status (yes %)	94.2%	92.5%	91.4%	91.6%	91.9%	92.1%	91.5%
Work (yes %)	84.1%	78.5%	76.3%	72.1%	64.5%	67.4%	63.6%
Self-rated health	3.48 (0.89)	3.40 (0.78)	3.48 (0.80)	3.39 (0.86)	3.48 (0.80)	3.48 (0.87)	3.39 (0.9)
Life satisfaction (yes %)	85.1%	86.0%	60.1%	63.7%	59.7%	59.6%	67.0%

Note: Relationship with daughters/sons score 1-5, self-rated health score 1 -5, life satisfaction score 1-4. Missing data were deleted listwise.

Table 3. Dyad children's characteristics (n=208)

Variables	Mean (SD) or %
Children's age	25.42 (0.53)
Children's age difference with respondent parent	23.20 (2.81)
Children' gender: female	47.6%
male	52.4%
Children's education: <=senior high school	23.6%
College +	76.4%
Children's work (yes %)	74.5%
Children's marital status (yes %)	10.6%
Children having child (yes %)	7.7%
Reciprocal filial piety	13.47 (1.69)
Respecting filial piety	11.63 (2.35)
Family-centered filial piety	8.77 (2.68)
Family concept: traditional marriage	13.91 (3.75)
Family concept: raising & support	9.32 (0.98)
Family concept: solidarity	13.18 (1.66)
Relationship with father	3.95 (0.94)
Relationship with mother	4.33 (0.74)

Note: Relationship with father/mother score 1-5, Family-centered filial piety score 3-15, respecting filial piety score 3-15, reciprocal filial piety score 3-15, family concept traditional marriage score 4-20, family concept raising & support score 2-10, family concept solidarity score 3-15.

Table 4. Factor analysis of children's filial piety concepts based on year 2005

Variables	Factor 1: Reciprocal filial piety	Factor 2: Respecting filial piety	Factor 3: Family-centered filial piety
Grateful for parents' raising	0.857	0.110	0.087
Treat parents well even though they are not good to you	0.770	0.102	0.247
Support parents in comfort life	0.680	0.315	0.046
Make family proud	0.124	0.816	0.292
Protect parent's dignity	0.113	0.784	0.138
Married daughters visit parents often	0.398	0.616	0.005
At least have one son	-0.115	0.279	0.783
Married sons live with parents	0.230	-0.047	0.760
Achieve parent's wishes by giving up self's desires	0.193	0.183	0.496

Note: Extraction by Principal Component Analysis, Varimax rotation, explained variance=62.71. N=167.

Table 5. Factor analysis of children's family concepts based on year 2005

Variables	Factor 1: Traditional marriage	Factor 2: Raising & support	Factor 3: Solidarity
A couple should never divorce, for children's sake	0.799	0.152	-0.074
Try to preserve a marriage	0.729	0.297	0.148
Husbands make money; wives care for family	0.725	-0.131	0.067
Marriage makes a family	0.716	-0.074	0.222
Teaching children is family's responsibility	0.082	0.890	0.075
Family have good relationship	-0.050	0.803	0.306
Family should help each other	0.039	0.021	0.847
Family members should make enough money	0.113	0.252	0.758
Family can help personal growth	0.223	0.453	0.603

Note: Extraction by Principal Component Analysis, Varimax rotation, explained variance=66.18. N=167.

Table 6. Generalized estimating equation analysis of parent-child relationship and filial piety to health and well-being for the parents

Variables	Self-rated health (M1): male (fathers) <i>b</i> (SE)	Life satisfaction (M2): male (fathers) <i>b</i> (SE)	Self-rated health (M3): female (mothers) <i>b</i> (SE)	Life satisfaction (M4): female (mothers) <i>b</i> (SE)
Intercept	5.544 (3.363)	-4.015 (9.832)	-4.802 (2.684)	14.228 (7.628)
Age	0.035 (0.114)	0.004 (0.334)	0.197 (0.103)	-0.682 (0.288)*
Education: senior high school	0.260 (0.141)	0.611 (0.378)	0.279 (0.122)*	-0.274 (0.338)
Education: college +	0.265 (0.156)	1.377 (0.467)**	0.393 (0.180)*	0.528 (0.425)
Marital status (having spouse)	0.208 (0.323)	0.442 (0.635)	-0.012 (0.194)	-0.623 (0.583)
Work (yes)	0.117 (0.154)	0.097 (0.377)	0.089 (0.099)	-0.269 (0.255)
Self-rated health	---	0.735 (0.185)***	---	0.784 (0.185)***
BMI	-0.060 (0.027)*	-0.085 (0.051)	-0.034 (0.012)**	0.039 (0.035)
Relationship with child (sex-specific)	0.141 (0.102)	0.222 (0.247)	0.341 (0.078)***	0.480 (0.212)*
Age difference with child	-0.121 (0.110)	-0.019 (0.318)	-0.163 (0.101)	0.637 (0.290)*
Child's sex (male)	0.050 (0.144)	0.056 (0.410)	-0.040 (0.127)	-0.337 (0.294)
Child's education	-0.300 (0.243)	-0.155 (0.492)	0.227 (0.117)	-0.454 (0.347)
Child's work	-0.043 (0.115)	0.239 (0.498)	0.232 (0.151)	0.812 (0.463)
Child's rating of father relationship	0.148 (0.070)*	0.272 (0.222)	0.070 (0.060)	0.020 (0.163)
Child's rating of mother relationship	0.044 (0.085)	0.007 (0.204)	0.043 (0.079)	0.649 (0.220)**
Child's reciprocal filial piety	-0.036 (0.041)	0.153 (0.103)	0.004 (0.049)	0.053 (0.108)
Child's respecting filial piety	-0.049 (0.038)	-0.245 (0.104)*	0.072 (0.032)*	-0.032 (0.076)
Child's family-centered filial piety	0.001 (0.029)	0.077 (0.096)	0.031 (0.023)	0.062 (0.072)
Child's family concept: marriage form	0.008 (0.022)	-0.025 (0.062)	-0.024 (0.021)	0.070 (0.060)
Child's family concept: raising & support	0.047 (0.073)	0.129 (0.194)	-0.029 (0.061)	-0.151 (0.195)
Child's family concept: solidarity	-0.011 (0.043)	0.151 (0.097)	-0.008 (0.040)	-0.087 (0.111)
Time	0.005 (0.017)	-0.233 (0.051)***	0.001 (0.012)	-0.209 (0.054)***
QIC	319.075	583.933	456.071	774.538
QICC	295.219	550.923	435.456	738.693

Note: Life satisfaction was defined as a binomial model; self-rated health was defined as a normal distributed model. The reference groups: sex (female), parents' education (junior high school or lower), marital status (no spouse), work (no job). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Regarding self-rated health for fathers (M1), when the respondent child's rating of their relationship with the father was higher, the father's self-rated health was better ($\beta=0.148$, $p<0.05$). The father's rating relationship with the child was positively related to self-rated health, too, although not significant ($\beta=0.141$, $p>0.05$).

The parent-child relationship was not significant for the life satisfaction of fathers (M2), and filial piety and family concept were not significantly associated with fathers' self-rated health. A child's higher respecting filial piety was related to a father's lower self-rated health ($\beta=-0.245$, $OR=0.783$, $p<0.05$). In addition, having higher education and a lower BMI were related to better self-rated health and life satisfaction for men.

Regarding the self-rated health for women (mothers) (M3), when mothers had better relationships with their children ($\beta=0.341$, $p<0.001$), the respondent child had more respecting filial piety ($\beta=0.072$, $p<0.05$) and the mother's self-rated health was better. Having higher education and a lower BMI was related to better self-rated health for mothers. A child respondent's relationship with the father and mother were positively related to the mother's self-rated health, too, although not significantly.

The life satisfaction of mothers (M4) was positively related to the self-reported child relationship ($\beta=0.480$, $OR=1.616$, $p<0.05$) and the respondent child's rating relationship with them ($\beta=0.649$, $OR=1.914$, $p<0.01$). However, the filial piety and family concepts were not significant. Having higher education (college or above), better self-rated health, and a greater age difference with the respondent child predicted better life satisfaction for women.

4. Discussion

This study examines the effect of filial piety, family concept and the mutual parent and adult-child relationship on parental self-rated health and life satisfaction using longitudinal panel data concerning Taiwanese adults. The parent-child relationship predicted self-rated health for fathers and mothers as well as the life satisfaction for mothers. The dimension respecting filial piety was related to self-rated health for men and women, but in an opposite sense. Other dimensions of filial piety and family concept were not significant. It seems the parent-child relationship matters more than filial piety in the health and well-being of Taiwanese middle-aged and young adults.

4.1. The Parent-child Mutual Relationship and Self-rated Health and Life Satisfaction

Children's rated relationships with parents and the parents' rated relationships with children were positively associated with parents' self-rated health. However, children's rated relationship with their father was significant to the father's self-rated health, but not significant for the mother. The

mothers' rated relationship with children was significantly related to her health, but the children's rating was insignificant. Father's self-rated health was more sensitive to children's rating of their relationship than his own rating. It is possible that men and women have different ratings and expectations for the parent-child relationship: fathers perceive and expect the parent-child relationship using the adult children's feedback, such as offering instrumental supporting or showing respect. Mothers may perceive the parent-child relationship more based on daily interactions with children, so a mother's own feelings about the parent-child relationship explain more than her children's ratings. Fingerman et al. [19] find that, when grown children report greater ambivalence, mothers report poorer physical health. They explain that the poorer health of a mother may cause ambivalent feelings in children, especially when adult children need to help sick mothers, which may cause conflicting feelings in children and accordingly affect their mother's health.

The life satisfaction of mothers was significantly related to their rating of the parent-child relationship as well as the child's rating, but the mutual parent-child relationship was not significantly related to the life satisfaction of fathers. This gender difference is consistent with the previous study [16]. In their study, higher education is related to higher life satisfaction for fathers but not for mothers. The life satisfaction of fathers may be more affected by other factors, such as socioeconomic status. The parent-child relationship may be more closely related to the psychological well-being of mothers. Mothers may emphasize family care due to the traditional gender role, and children may be more sensitive to the relationship with their mother [22]. Therefore, mothers may care more about the parent-child relationship, which may affect mothers' own self-rated health and psychological well-being. In addition, the life satisfaction of fathers was significantly related to self-rated health. Thus, the child's feedback in the father-child relationship may affect self-rated health and indirectly affect life satisfaction.

4.2. Filial Piety and Family Concept with Self-rated Health and Life Satisfaction

The filial piety concept was extracted as three dimensions in this study: reciprocal, respecting and family-centered filial piety. Compared with previous research about the dual filial piety concept among the Taiwanese [6], reciprocal filial piety was identified as the same, while respect and family-centered filial piety were related to the authoritarian concept. Currently, in Taiwanese society most parents do not expect or need material support from their adult children. Thus, reciprocal filial piety is not significantly related to parental self-rated health and life satisfaction. However, parents usually expect much from their children and hope children will make them proud through their achievements and by having a good reputation.

In this study, the reciprocal concept and family-centered

filial piety were not significant, and only the child's emotional filial piety was significant for the health of fathers and life satisfaction of mothers. Previous research indicates that older people emphasize respect more than instrumental support [7, 18], and the perceived respect from younger generations affects older adults' well-being [9]. However, a child's emotional filial piety is negatively related to the self-rated health of fathers and positively related to the life satisfaction of mothers. It is possible that mothers appreciate children's efforts to make parents proud or visit them even when married. In addition, mothers may perceive the relationship more based on daily interactions because mothers interact more with their children. Thus, the children's relationships with mothers may be closer than with fathers. Fathers, however, may expect too much from children with regards to winning honor and distinction for the family, which causes great stress for the children. Thus, the tension between children and fathers is stronger for the children who have more respect for the concept of filial piety, which affects father's self-rated health. Although taking pride in a child's achievement is a traditional filial piety concept in Taiwanese culture, to "glorify the family gate", the unrealistic and divergent expectation of parents for child's life may be overwhelming for children and thus affect the parents themselves.

The family-centered filial piety concept was not significant. This finding implies that the traditional norm that children must first consider their family or parents' wishes may not be popular in the current Taiwanese society. Parents may no longer expect children to make all their decisions (living arrangement, giving birth or career choice) by first considering their parents' and family's wishes, as in traditional Taiwanese culture.

The family concepts were extracted as traditional marriage, raising and support, and solidarity. However, these concepts were not significantly related to parental self-rated health or life satisfaction. One reason for this finding is that the family concept has been changing for both middle-aged parents and young adult children. Another possibility is that parental self-rated health and psychological well-being are more affected by other factors but less influenced by the child's family concept.

Previous research indicates that families with daughters and younger adult children may have more tension in the parent and adult-child relationship because contact is more frequent [23]. The generational gap may cause disagreement in the parent-child relationship [24]. In this study, the larger age difference between parents and children predicted a higher life satisfaction for the parents, and gender was not significant. Based on the socioemotional selectivity theory [25], older parents may rate their psychological well-being higher and better tolerate differences with adult children.

4.3. Limitations

This study has some limitations. First, the data on adult

children were collected only once during the follow-up. Thus, the dynamic changes of the children's status and attitude were unavailable, and the interaction with parents across time could not be analyzed. Second, although the parents' data were repeated across waves, some variables were inconsistent or unavailable. For example, the parents' rated relationship with sons or with daughters was not specific to each child and could not be matched to the child respondent's answers. However, the longitudinal panel data provided repeated measures for the parents' data, and thus more observations could be included in the analysis, and long-term effects were observed. Third, some related issues were not considered, such as sibling issues. The interaction of siblings with parents or with other children may be complex but was not the main concern of this study. Fourth, the early parent-child relationship may affect current interactions and relationships, and the amount of children's interaction with mothers and with fathers may affect the relationship quality of parent-child relationship. However, these data were unavailable.

4.4. Conclusions

The parent-child relationship matters more than filial piety for parental self-rated health and life satisfaction, especially respecting filial piety, which may be a stressor for children. Rapid changes to the traditional family-centered society of Taiwan challenge the parent-child relationship and the social norm of filial piety. Parents may not expect traditional instrumental support from children anymore, but the parent-child relationship and appropriate expectation of children's responsibility to family may be the core of the family atmosphere and may affect parental health and well-being. Parents may not be able to ask adult children to follow their wishes, but a more harmonious parent-child relationship would make parents healthier and happier. Such reciprocal harmonious relationships need the investment of time and an empathic perspective of the other's needs from both parents and adult children. A new paradigm of filial piety or the parent-child relationship is evolving. In addition, the parents in this study were middle-aged, and most of them were in relatively stable health. When the parents grow old, their health problems may become more obvious, and the effects of the parent-child relationship on parental health and well-being may be different. Further changes in the older cohorts could be observed in future research.

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no potential conflicts of interest.

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