# Family, health, and wellbeing: the lives of Chinese immigrants in the Netherlands

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# Chapter 4

# Filial Piety and Mental Health Among Older Chinese Immigrants in the Netherlands

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**ABSTRACT**

Filial piety is important to Chinese adults and is associated with mental health among older Chinese immigrants in the United States. However, it is unclear whether filial piety is linked to the mental health of Chinese immigrants in European countries. Therefore, this study aims to gain insights into the association between mental health and filial piety of first-generation Chinese immigrants in the Netherlands. A random sample of 143 participants took part in the study. A cross-sectional design was used. Data were collected through a postal survey conducted in the Chinese language between January 2021 and March 2021. The survey included a Mental Health Continuum-Short Form (MHC), and expected and perceived filial piety scale. The results indicated that in general, perceived filial piety exceeded expected filial piety ("filial piety sufficient"). Regression analysis revealed that "filial piety sufficient" is associated with a higher emotional MHC (B =.498, $p$ =.035). This study provided new insights into the wellbeing of older Chinese immigrants in the Netherlands and showed accordance with the literature that filial piety remains an important factor for mental health.

## INTRODUCTION

Caring for one's parents and filial piety are important values throughout Chinese culture (Yeh et al., 2013). However, in the case of Chinese immigrants living in a Western environment, cultural values are prone to modification due to acculturation to the host culture (Laidlaw et al., 2010; Lan, 2002). Filial piety has gained interest among scholars who have highlighted the contemporary understandings and the effects of filial piety in Chinese migrant communities, for example, in the US (Dong et al., 2014; Hsueh et al., 2008; Lan, 2002). Yet, additional research could advance the current understanding of familial dynamics seeing that filial piety is essential to individual and intergenerational relationships in the Chinese culture. In terms of filial care, filial piety is shown to be relevant to depression and wellbeing (Cheng & Chan, 2006; Lai, 2010; Li & Dong, 2018). Further, as the importance attached to filial piety differs with each generation, it is conceivable that the expressed filial piety by the children may not match the expectations regarding filial piety that are held by the older Chinese parents, resulting in intergenerational filial discrepancies (Dong et al., 2014). However, it is unknown whether this is the same case in the broader international Chinese community. Therefore, more research is needed in terms of geographic variety of Chinese migrants, such as in Europe.

The study of cultural dynamics regarding filial piety among older Chinese immigrants has been widely reported in literature, mainly in the US, Canada, and Australia. These studies comprise the tensions between their cultural values and their children growing up in a Western society, which is contradictory to traditional Chinese values such as filial piety. It has been reported that the importance of filial piety remains a high priority for Chinese older parents, on the other hand, traditional care practices (e.g., cohabiting with children, financial support) have become less important (Lo & Russel, 2007). However, in a comparative study, the importance of filial piety was valued by Chinese immigrants in the UK more similarly to the older adults from mainland China, than the native older adults in the UK (Laidlaw et al., 2010). Moreover, expectations of Chinese immigrants regarding filial piety receipt from their children have adjusted accordingly (Dong et al., 2014; Lieber, 2004; Pang et al., 2003). More importance is placed on the intangible aspects of filial piety, such as maintaining contact, showing emotional care, and living in geographical proximity (Dong, et al., 2012a). This indicates that older Chinese immigrants' cultural and social context is adjusted to meet the expectations of filial piety in the younger generation.

It is established that migration status and living in an individualistic culture has a significant impact on the mental health of older Chinese immigrants, e.g., loneliness (Dong et al., 2012b). As the younger generation adjust to a non-Confucian society, the unmet filial piety expectation of the older parents can cause conflicts between generations and place a strain on their psychological wellbeing. Scholar literature have previously reported on the relationships between filial piety and mental health. The gap between expected and fulfilled filial piety is also referred to as filial piety discrepancy. In the US, a lack of filial piety raises health concerns among the older Chinese immigrants, such as emotional distress and social isolation (Dong et al., 2012a). The absence of filial piety from children is detrimental to the older Chinese parent's psychological and social wellbeing, loneliness, and depression (Kim & Silverstein, 2021; Li & Dong, 2018). Therefore, it is important to study the relationship between filial piety and mental health among older Chinese immigrants.

While it is widely reported that a lack of filial piety or discrepancy is associated with worsening mental health, it remains concentrated to the US Chinese immigrant population. However, it is currently unclear whether filial piety is associated with the mental health of Chinese immigrants in European countries with different social care systems. Therefore, this study aims to gain insight into familial associations in the Chinese community in the Netherlands by examining the relationships between filial piety and the mental health of older first-generation Chinese migrants.

First, we aim to examine to what extent filial piety expectations and perceptions differ in older first-generation Chinese immigrants.

Second, we aim to examine the relationship between filial piety discrepancies and the mental health of older Chinese immigrants in the Netherlands.

## METHODOLOGY

### Study design

The study used a cross-sectional design. A random selection of participants was made by Statistics Netherlands in the national personal records database. The selection of 980 older first-generation Chinese immigrants was based on the following criteria: 60 years or older; and a birth country in mainland China, Hong Kong, Taiwan, or Macau.

### Participant recruitment and data collection

The study sample was approached by postal mail in January 2021. A letter in written Chinese introduced the research study and included the survey. Participants were requested to fill in the survey and return it free of charge between January 2021 and March 2021. The survey was administered in written Chinese. As mother tongue is more representative of an individual's cultural background than their birth country, a control question regarding their mother tongue was included in the survey to exclude any individuals whose mother tongue did not include any of the Chinese languages or dialect (Stronks et al., 2009). The survey contained questions regarding demographic background, and it administrated the Mental Health Continuum-Short Form scale (MHC-SF) as well as the perceived and expected filial piety scale. Participants without children were excluded from further analysis.

### Covariates

General background variables including gender, age, birth country, years of residence in the Netherlands, number of children, living arrangements and education level were collected.

Self-reported data on health, financial situation, and the quality of relationships with children were collected (Krause et al., 1991; Kunzmann et al., 2000). These items were phrased as "How would you rate your health/financial situation/relationship with your children?". The responses included five ordered answer categories for each item (1 = very bad, 2 = bad, 3 = not good, not bad, 4 = good, 5 = very good).

### Mental Health

The Chinese version of the MHC-SF, which contained 14 questions regarding positive mental health, was used and is validated in China (Guo et al., 2015; Keyes, 2009). It is based on positive mental health with reference to the presence of positive emotions. The MHC-SF conceptually

contains three components of mental wellbeing: emotional (3 items), psychological (6 items) and social wellbeing (5 items). Together, these components reflect positive mental health. Responses to each item were given by the participants on a frequency scale ranging from 0 to 5 points (0 = never, 1 = once or twice in the past month, 2 = about once a week, 3 = about 2 or 3 times a week, 4 = almost every day, 5 = every day). MHC (overall MHC, emotional, psychological, and social) outcomes were mean scores ranging from 0 to 5.

Mental health continuum (MHC) outcomes can be distinguished in three categories: flourishing refers to high levels of emotional wellbeing and positive functioning. This is assigned to cases when 5 (every day) or 4 (almost every day) points is scored on at least one of the three emotional wellbeing items, and at least six items of psychological and social wellbeing items.

Languishing contrastingly exhibits low levels of wellbeing. These comprise cases that score 0 (never) or 1 (once or twice in the past month) on at least one of the three emotional wellbeing items, and on at least six items of psychological and social wellbeing items. Those who do not meet the criteria for flourishing nor languishing are considered moderately mentally healthy (Keyes, 2002; 2009). The internal reliability of the MHC-SF was .85.

**Expected and perceived filial piety**

The expected and perceived filial piety was measured on the basis of the six components of filial piety: care, respect, greeting, happiness, obedience and financial support (Gallois et al., 1999). The scale was previously validated among older Chinese immigrants in the US (Dong et al., 2014). Care refers to all aspects of caring provided by the children to their parents. Respect includes respect by children towards their parents. Greeting refers to showing concerns about the wellbeing of the parent by the children. Happiness entails the children's effort to make their parents happy. Obedience refers to the obedience of the children to their parents. Financial support is the monetary support given by the children to their parents.

Items concerning expected filial piety were phrased as: "How much do you expect your children to care for you?" Perceived filial piety was respectively phrased as: "How much do your children care for you?" Expectation and perceived filial piety were assessed, with five ordered answer categories for each item (1 = very little, 2 = rather little, 3 = average, 4 = rather a lot, 5 = very much. The internal reliability according to Cronbach's alpha was .86 for the whole scale.

Filial piety discrepancy

The overall filial piety discrepancy was calculated and grouped by subtracting the scores of expected filial piety from perceived filial piety. The theoretical minimum–maximum ranged between -24.0 and 24.0. Positive values indicated that perceived filial piety exceeded expected filial piety and vice versa; the negative values indicated that perceived filial piety was lower than expected filial piety.

Filial piety category dummy variables

The filial piety category dummy variables were based on the continuous filial piety discrepancy variable. The dummy "filial piety deficit" was assigned "1" in cases where the perceived filial piety was lower than the expectation (perception–expectation $\leq -1$). The dummy "filial piety sufficient" was assigned "1" when the amount of perceived filial piety was equal to or higher than expected filial piety (perception–expectation $\geq 0$), and zero otherwise.

### Data analyses

Basic descriptive statistics were used to summarise the study sample characteristics. The paired *t*-test was used to determine the significance of the filial piety discrepancy.

The linear regression analyses including the minimum AIC approach were performed in R. The dependent variables were taken as the four MHC domains (MHC, emotional, psychological and social). Independent variables included all covariates, the filial piety sufficient dummy with filial piety deficit as reference dummy. A second regression model was entered using covariates and filial piety discrepancy continuous variable. After estimating a full linear regression model, a model selection was applied based on minimum Akaike information criterion (AIC) values with the MASS library in R (Konishi & Kitagawa, 2008; Ripley et al., 2013). Model selection based on AIC provides stronger evidence for a correct predictive model (Anderson & Burnham, 2002).

A $p < 0.05$ was considered significant for all analyses.

### Ethical considerations

Permission for this study was given by the ethical advisory board of the Hanze University of Applied Sciences with the approval number: heac.2020.015. The random selection sample was carried out by Statistic Netherlands. The study was approved by the National Office for Identity Data and the Dutch Data Protection Authority. The invitation letter sent to participants contained information about the study, the right to withdraw from the study and contact information for further questions. Written informed consent was given by the participants.

Table 1.
Study sample characteristics

| Study sample (n) | 143 |
|---|---|
| Age (mean, SD) | 67.6 (5.0) |
| Gender (female, %) | 42.7 |
| Years lived in the Netherlands (mean, SD) | 36.8 (12.5) |
| Country of birth (%) | |
| Mainland China | 54.5 |
| Hong Kong | 42.7 |
| Taiwan | 2.8 |
| Number of children (mean, SD) | 2.13 (1.0) |
| Education level (%) | |
| No education | 4.2 |
| Elementary school | 18.2 |
| Middle school | 34.3 |
| High school | 25.9 |
| Bachelor's or higher | 17.5 |
| Living arrangements (%) | |
| Alone | 15.4 |
| With spouse | 58.0 |
| With children | 4.9 |
| With spouse and children | 21.0 |
| Other | 0.7 |
| Self-rated health (mean, SD) | 3.41 (.92) |
| Self-rated financial situation (mean, SD) | 3.22 (.64) |
| Quality of relationship with children (mean, SD) | 4.01 (.76) |
| MHC score (mean, SD) | 2.83 (.82) |
| MHC categories (%) | |
| Languishing | 10.1 |
| Moderate | 52.9 |
| Flourishing | 37.0 |

## RESULTS

### Study sample characteristics

A total of 950 individuals were approached, of which 143 participated in the study (response rate of 15.0%). The study sample comprised 42.7% of females, was aged 67.6 years on average, birth country was mainly mainland China (54.5%) or Hong Kong (42.7%), had attended middle- (34.3%) or high school (25.9%) and were cohabiting with spouse (58.0%). The mean MHC was 2.83, and majority of the study sample had a moderately (52.9%) or flourishing mental health (37.0%).

### Expectations and perceptions of filial piety

The measured expected and perceived filial piety are presented in Table 2. For all dimensions, except financial support, the means differences between expected and perceived filial piety are significant. The filial piety discrepancy means were consistent positive values over all dimensions and ranged from .54 (care) to .25 (obedience). The discrepancy based on the total scale is significant with 2.07 ($p < .001$). In general, the degree of perceived filial piety exceeds expected filial piety ("filial piety sufficient"). Discrepancy for financial support is insignificant, indicating that there is no difference between perceived and expected financial support.

Table 2.
Mean expected, perceived filial piety and the mean filial piety discrepancy with the significance level.

| Filial piety | Expectation mean *(SD)* | Perception mean *(SD)* | Discrepancy mean *(SD)* | *p* filial piety discrepancy |
|---|---|---|---|---|
| Care | 2.63 (1.10) | 3.18 (1.21) | .54 (1.17) | < .001 |
| Respect | 3.57 (1.00) | 3.86 (1.15) | .28 (1.20) | .008 |
| Greet | 3.15 (1.08) | 3.62 (1.20) | .46 (1.24) | < .001 |
| Happiness | 3.20 (1.03) | 3.61 (1.15) | .40 (1.12) | < .001 |
| Obedience | 2.71 (1.13) | 2.97 (1.08) | .25 (1.33) | .031 |
| Financial support | 1.82 (.95) | 1.96 (.99) | .14 (.88) | .069 |
| Total scale | 17.09 (4.34) | 19.21 (5.24) | 2.07 (4.84) | < .001 |

After the filial piety discrepancy continuous variable was examined, filial piety category dummy variables were created based on the respective continuous discrepancy variable. As presented in Figure 1, a minority have reported filial piety deficient (21.9%). Filial piety sufficient was prevalent with 78.1%

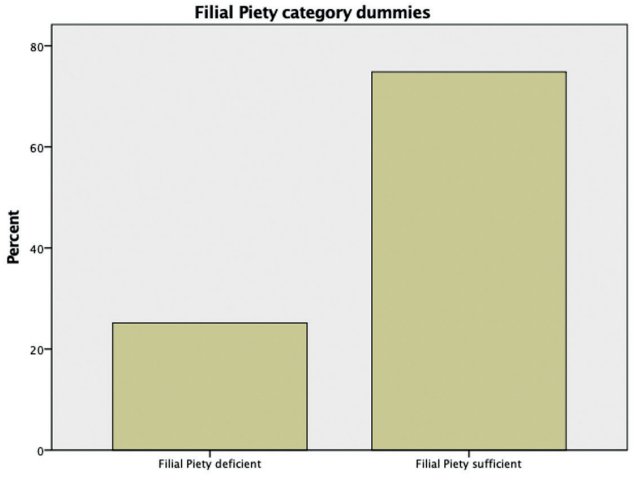


Figure 1.
Frequencies of filial piety category dummy variables.

### Filial piety discrepancy on mental health

The regression models with the filial piety categories based on minimum AIC values are presented in Table 3. Results from regression models with filial piety discrepancy are described below.

#### MHC

Filial piety "sufficient" was not significantly ($p$ = .109) associated with the MHC score. This indicates that there is no significant difference on the total MHC score between participants with filial piety "deficit" and filial piety "sufficient".

Filial piety "discrepancy" score as a continuous variable appeared also not to be associated with a higher MHC score, confirming that filial piety does not contribute to the MHC score.

#### Emotional wellbeing

Filial piety "sufficient" is significantly ($p$ = .035) associated with a higher emotional MHC score. This indicates that participants with filial piety "sufficient" on average have a higher emotional wellbeing score with .498 points, than those with filial piety "deficit".

Filial piety "discrepancy" score as a continuous variable showed a significant association with emotional MHC score, confirming that filial piety contributes to a higher emotional MHC score. An increase of the filial piety "discrepancy" score indicated an increase of emotional wellbeing (B =.051, $p$ =.010)

#### Psychological wellbeing

Filial piety is not associated with psychological wellbeing. This indicates that there is no significant difference on the total psychological MHC score between participants who have reported filial piety "discrepancy" and filial piety "sufficient".

Filial piety "discrepancy" score as a continuous variable appeared also not to be associated with a higher psychological MHC score, confirming that filial piety does not contribute to the psychological MHC score.

Table 3
Linear regression with selected AIC models of covariates and filial piety categories on the MHC score

| | MHC (AIC model) | | Emotional (AIC model) | | Psychological (AIC model) | | Social (AIC model) | |
|---|---|---|---|---|---|---|---|---|
| Background variables and filial piety discrepancies | B | *p* | B | *p* | B | *p* | B | *p* |
| Gender (female) | .289 | .028 | .323 | .093 | - | - | .270 | .038 |
| Number of children | -.137 | .039 | -.158 | .114 | - | - | -.114 | .081 |
| Age | .035 | .008 | .031 | .114 | - | - | .061 | .000 |
| Financial situation | .240 | .042 | - | - | - | - | .427 | .000 |
| Self-rated health | .158 | .048 | .290 | .009 | .143 | .115 | .126 | .117 |
| Education | | | | | | | | |
| Years in the Netherlands | .120 | .062 | - | - | .204 | .009 | - | - |
| Quality of relationship with children | - | - | - | - | -.011 | .109 | - | - |
| Filial piety | - | - | .236 | .085 | - | - | - | - |
| sufficient* | .241 | .109 | .498 | .035 | - | - | - | - |
| $R^2$ | .221 | | .175 | | .111 | | .252 | |
| Adjusted $R^2$ | .181 | | .138 | | .092 | | .225 | |

*Reference is filial piety deficient

Social wellbeing

Filial piety is not associated with social wellbeing. This indicates that there is no significant difference on the social MHC score between participants who have reported filial piety "discrepancy" and filial piety "sufficient".

Filial piety "discrepancy" score as a continuous variable appeared also not to be associated with a higher social MHC score, confirming that filial piety does not contribute to the social MHC score.

## DISCUSSION

This is the first study to investigate filial piety among older Chinese immigrants in the Netherlands, and it has demonstrated that filial piety is relevant to their mental health. Further, it shows that perceived filial piety is significantly higher than the expectation. The regression analyses show that filial piety sufficient is a significant contributor to emotional wellbeing Moreover, this is confirmed with the second regression model with filial piety discrepancy as a continuous variable.

The findings in this study regarding the indication that filial piety is important to the mental health of older Chinese immigrants in the Netherlands is in agreement with findings in older Chinese populations in the US (Dong et al., 2012a; Kim & Silverstein, 2021; Li & Dong, 2018). Specifically, Specifically, filial piety sufficient (when perceived filial piety exceeds or equals to expectations) is found to be associated with a higher MHC and emotional MHC. The distinction of filial piety discrepancies – deficit and sufficient – allows a deeper understanding of the influence of filial piety. As existing literature generally focuses on the lack of filial piety receipt, this study has demonstrated that the approach to examining filial piety deficit and sufficient, leads to novel insights. These findings suggest that this approach of categorising "filial piety discrepancy" could be beneficial in future research for examining filial piety in conjunction with general overall discrepancy measures.

The findings show that "respect" was expected the most and "financial support" the least, and they are coherent with the findings of the same measures (Dong et al., 2014). Moreover, the findings suggest that, similar to other literature, intangible support is more important among older Chinese adults than among US Chinese immigrants (Dong et al., 2012). However, the shift of expected tangible to intangible support may be due to the fact that such support is no longer necessary as the Netherlands has a pension system and affordable healthcare.

Family support and thus, filial piety, is considered to be a form of social capital and an important resource that is relevant to the mental health of individuals (Nyqvist et al., 2012). However, it shows that as social capital can consist of different elements, such as the family and community, they can compensate for each other to maintain the mental health and wellbeing of Chinese older adults (Jiang & Lu, 2018; Lu et al., 2016). Simply put, in the case of filial piety discrepancy, support from the community may fulfil the discrepancy gap instead. As the findings of this study do not indicate that a filial piety discrepancy is associated with a lower mental health, the social capital theory could explain this phenomenon. Accordingly, as the filial piety sufficient is associated with better mental health, it confirms that family support is preferred above community support (Lu et al., 2016).

This study utilised the MHC-SF. Therefore, a positive mental health approach is used instead of the clinical depression or anxiety approach in contrast to previous literature. This is in accordance with the World Health Organization's (WHO) conceptualisation of mental health as an essential component of health, which is defined as *"...a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*" (World Health Organization, 1948). Moreover, the MHC reflects the core components of mental health as defined by the WHO: wellbeing, effective functioning for both the individual and for the community (World Health Organization, 2004). Using the MHC approach, this study provided crucial insights into the importance of filial piety to the mental health of older Chinese immigrants.

This is the first study to report on the mental health of older Chinese immigrants in the Netherlands, and in particular their relationship with filial piety. There are a few limitations to be considered in the interpretation of the findings. First, out of 950 individuals invited to take part in the survey, only 15% responded. These findings may reflect a specific subset of the population, and as a result they may be prone to selection bias. It is possible that individuals who had a better relationship with their families and greater filial piety receipt were more likely to participate. Moreover, as there is a relatively high rate of illiteracy within this population, it is possible that individuals with either no education or primary education were underrepresented.

Second, the data collection took place in the second lockdown during the COVID-19 pandemic. These extraordinary circumstances may have influenced the data as personal contact or support was limited during these times. The reported MHC measurements were lower than the native Dutch sample during the first lockdown (Mana et al., 2021). This may suggest that Chinese immigrants in the Netherlands had a lower mental health than the native population during the pandemic. Although there can be many factors that contribute to the worsening of mental health, the lack of support and the absence of receipt of filial piety may have contributed to a lower mean MHC score. On the other hand, a filial piety sufficient is beneficial to the mental health.

To conclude, this study demonstrates that filial piety is a significant contributor to the mental wellbeing of older Chinese immigrants in the Netherlands. In addition, it suggests that the importance of intangible support is increasing, which corresponds with studies conducted in Asia and in older Chinese immigrants in the US. Further, as this is the first study to report on filial piety and mental wellbeing instead of mental illness among Chinese immigrants, it provides insights into the associations between filial piety and mental health.

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