# Supplementary material

Supplementary Table S1. Percentage of respondents having intergenerational support, by Hukou status (2011, 2013 & 2015) %

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Wave 1** |  | **Wave 2** |  | **Wave 3** |  |
| **Intergenerational support** | **Rural Hukou (n=5,868)** | **Urban Hukou (n=883)** | **Significance****(Chi-squared/ t test)** | **Rural Hukou (n=5,827)** | **Urban Hukou (n=924)** | **Significance****(Chi-squared/ t test)** | **Rural Hukou (n=5,824)** | **Urban Hukou (n=927)** | **Significance****(Chi-squared/ t test)** |
| %/ Mean | %/ Mean | %/ Mean | %/ Mean | %/ Mean | %/ Mean |
| Economic support from adult children | 41.8 | 27.2 | \*\*\* | 78.7 | 69.8 | \*\*\* | 86.0 | 75.0 | \*\*\* |
| Economic support to adult children | 18.9 | 26.5 | \*\*\* | 44.3 | 51.0 | \*\*\* | 36.5 | 52.3 | \*\*\* |
| Social support from adult children | 3.4 | 2.1 | \*\*\* | 8.5 | 5.8 | \*\*\* | 11.7 | 5.5 | \*\*\* |
| Grandchild care to grandchildren | 52.2 | 56.8 | \*\*\* | 56.8 | 63.1 | \*\*\* | 57.5 | 62.0 | \*\*\* |
| Weekly in-person contact | 81.6 | 87.5 | \*\*\* | 76.3 | 83.1 | \*\*\* | 76.9 | 83.9 | \*\*\* |
| Weekly distant contact | 58.7 | 72.0 | \*\*\* | 53.9 | 64.4 | \*\*\* | 54.7 | 58.9 | \*\*\* |
| Amount of economic support from adult children (Yuan) | 1,834 | 2,516 | \*\*\* | 3,677 | 5,640 | \*\*\* | 5,619 | 7,705 | \*\*\* |
| Amount of economic support to adult children (Yuan) | 783 | 2,334 | \*\*\* | 1,837 | 5,529 | \*\*\* | 2,681 | 6,567 | \*\*\* |

Note: only respondents who had a valid answer to intergenerational support at all three waves were included. Amount of economic support was measured within one year period.

Unit of analysis: RMB. 1GBP= 9.616CNY (2015)

Significance level: \*\*\*, showing that the characteristics of respondents significantly differ between the rural and urban sample at p<0.001 based on the Chi-squared/ t test.

Source: Authors’ analysis of the longitudinal CHARLS data, weighted percentage, unweighted sample count.

Supplementary Table S2. Regression of economic, social support and weekly contact on Living arrangements, by Hukou status (2011, 2013 & 2015) %

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6a** | **Model 7** | **Model 8 a** | **Model 9** | **Model 10** | **Model 11** | **Model 12 a** |
| **Dependent variables** | **Economic support from (grand)children** | **Economic support to (grand)children** | **Help with (I)ADLs from adult children** | **Care to grandchildren** | **Weekly in-person contact with adult children** | **Weekly distant contact with adult children** |
| **Independent variables** | **Rural Hukou** | **Urban Hukou** | **Rural Hukou** | **Urban Hukou** | **Rural Hukou** | **Urban Hukou** | **Rural Hukou** | **Urban Hukou** | **Rural Hukou** | **Urban Hukou** | **Rural Hukou** | **Urban Hukou** |
| **Co-residence (REF: no)****Living nearby (REF: no)** | 0.73\*\*\* | 0.49\*\*\* | 0.84\*\* | 0.74\* | 1.60\*\*\* | 2.46\* | 1.18\*\* | 1.73\*\* | 7.82\*\*\* | 4.90\*\*\* | 0.78\*\* | 0.49\*\*\* |
| **Marital Status (REF: married)** | 0.71\*\* | 0.96 | 0.86 | 0.73 | 1.14 | 0.46 | 0.96 | 0.74 | 1.48\*\*\* | 0.68 | 1.03 | 0.72\*\* |
| **Currently work REF: (no)** | 1.23\* | 1.01 | 1.26\*\*\* | 1.23 | 0.71\*\* | 0.86 | 1.18\* | 0.91 | 0.85 | 0.87 | 1.00 | 0.82 |
| **Individual earnings** | 0.99 | 0.99 | 1.23\*\* | 1.38\*\* | 0.87 | 0.79\*\* | 0.98\*\*\* | 1.21\*\* | 0.97 | 0.96 | 1.47\*\* | 1.38\*\*\* |
| **Year (REF: 11)** |  |  |  |  |  |  |  |  |  |  |  |  |
|  *13* | 10.09\*\*\* | 13.38\*\*\* | 3.63\*\*\* | 3.75\*\*\* | 2.92\*\*\* | 3.63\*\*\* | 1.49\*\*\* | 1.80\*\*\* | 0.67\*\*\* | 0.64\* | 0.83\*\*\* | 0.74\* |
|  *15* | 17.97\*\*\* | 16.45\*\*\* | 2.77\*\*\* | 3.68\*\*\* | 3.36\*\*\* | 4.08\*\*\* | 1.70\*\*\* | 1.59\*\*\* | 0.90 | 0.93 | 0.98 | 0.59\*\*\* |
| **Age (REF: 45-59)** |  |  |  |  |  |  |  |  |  |  |  |  |
|  *60-74* | 0.99 | 1.09 | 0.85\* | 1.30 | 1.65\*\*\* | 0.50 | 0.73\*\*\* | 0.60\*\* | 0.72\*\*\* | 0.58\* | 0.70\*\*\* | 0.74 |
|  *75 or over* | 0.72 | 1.85 | 0.92 | 0.97 | 3.14\*\*\* | 0.39 | 0.21\*\*\* | 0.16\*\*\* | 0.74 | 0.48 | 0.38\*\*\* | 0.59 |
| **Gender (REF: Male)** |  |  |  |  |  |  |  |  |  |  |  |  |
| *Female*  | 0.96 | 1.22 | 1.09\* | 1.08 | 2.14\*\*\* | 2.49\*\*\* | 1.02 | 1.08 | 0.94 | 1.89\*\* | 1.04 | 1.26 |
| **Education (REF: less than lower secondary)** |  |  |  |  |  |  |  |  |  |  |  |  |
|  *Upper secondary* | 0.81 | 0.97 | 1.15 | 1.60\*\*\* | 0.40\*\*\* | 0.41\* | 1.10 | 0.72 | 1.25 | 1.18 | 1.56\*\* | 1.44 |
|  *tertiary* | 0.86 | 0.69 | 1.30 | 1.32 | 0.37 | 0.57 | 1.30 | 1.22 | 0.64 | 1.870 | 2.07 | 1.43 |
| **Chronic illnesses (REF: none)** |  |  |  |  |  |  |  |  |  |  |  |  |
|  *One* | 1.07 | 3.77\* | 1.07 | 1.40 | 1.18 | 0.71 | 1.05 | 1.53\* | 0.84 | 0.81 | 0.91 | 1.38 |
|  *Two or more* | 0.92 | 3.57\* | 1.02 | 1.24 | 1.94\*\*\* | 2.18 | 1.00 | 1.10 | 0.82\* | 0.83 | 0.95 | 1.43 |
| **No. of children** | 1.53\*\*\* | 0.89 | 1.16\*\* | 1.29 | 1.10\*\*\* | 2.21 | 0.76\*\*\* | 0.69\*\*\* | 1.16\*\*\* | 0.97 | 1.02 | 1.05 |
| **N number** | 5,805 | 798 | 5,805 | 798 | 5,805 | 798 | 5,805 | 798 | 5,805 | 798 | 5,805 | 798 |
| **Pseudo R-square** | 0.63 | 0.42 | 0.45 | 0.35 | 0.52 | 0.43 | 0.32 | 0.39 | 0.73 | 0.79 | 0.52 | 0.57 |

Notes: Odds Ratio provided in the table. a: Models 6, 8 and 12 were estimated with random effects models based on the Hausman test results; all other models were estimated with a lagged hybrid method combining fixed and random effects. \* denotes significance at 5%; \*\* denotes significance at 1%; \*\*\* denotes significance at 0.1%.

Source: Authors’ analysis of the longitudinal CHARLS data.

Supplementary Table S3. Regression of respondents’ health on intergenerational support exchange, by Hukou status (2011, 2013 & 2015) %

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Model 13** | **Model 14** | **Model 15** | **Model 16** | **Model 17** | **Model 18** | **Model 19** | **Model 20** |
| **Dependent variables** | **Poor self-rate health** | **Poor ADL functioning** | **Low life satisfaction** | **Having depression** |
| **Independent variables** | **Rural Hukou** | **Urban Hukou** | **Rural Hukou** | **Urban Hukou** | **Rural Hukou** | **Urban Hukou** | **Rural Hukou** | **Urban Hukou** |
| **Receiving economic support (REF: no)** | 1.09 | 0.85 | 1.29\*\*\* | 0.91 | 0.87\*\* | 0.81 | 1.00 | 0.87 |
| **Providing economic support (REF: no)** | 0.89\*\*\* | 0.89 | 1.06 | 0.96 | 0.90\*\* | 0.88 | 0.94 | 0.88 |
| **Receiving informal care (REF: no)** | 1.73\*\*\* | 1.67 | 3.72\*\*\* | 4.08\*\*\* | 1.10 | 0.99 | 1.97\* | 1.37\*\*\* |
| **Providing grandchild care (REF: no)** | 1.02 | 0.82 | 0.94 | 0.85 | 0.95 | 1.26\* | 1.01\* | 1.11 |
| **Having in-person contact (REF: no)** | 0.78\*\*\* | 0.91\*\* | 0.83\*\* | 0.77 | 0.89\* | 0.84 | 0.81 | 0.65\*\*\* |
| **Having distant contact (REF: no)** | 0.89\*\*\* | 0.80\*\* | 0.93 | 0.83 | 0.79\*\*\* | 0.76\*\* | 0.86\* | 0.70\*\*\* |
| **Marital Status (REF: married)** | 2.34\*\* | 0.84 | 0.92 | 0.93 | 1.21\*\* | 0.93 | 1.40 | 0.83\*\*\* |
| **Currently work (REF: no)** | 0.62\*\*\* | 0.72 | 0.53\*\*\* | 0.82 | 1.07 | 0.90 | 0.98\*\*\* | 1.16 |
| **Year (REF: 11)** |  |  |  |  |  |  |  |  |
|  *13* | 0.84\*\*\* | 1.05\*\* | 0.78\*\*\* | 1.04 | 0.93 | 0.95 | 0.70 | 0.59\*\*\* |
|  *15* | 0.70\*\*\* | 0.82 | 0.88 | 1.18 | 0.44\*\*\* | 0.43 | 0.69 | 0.93\*\*\* |
| **Age (REF: 45-59)** |  |  |  |  |  |  |  |  |
|  *60-74* | 0.97 | 0.81 | 1.33\*\*\* | 1.23 | 0.89\*\* | 1.01 | 1.04 | 1.16 |
|  *75 or over* | 0.81\* | 0.54 | 1.51\*\*\* | 2.19\*\* | 0.54\*\*\* | 0.81 | 0.72\*\* | 1.48\*\* |
| **Gender (REF: Male)** |  |  |  |  |  |  |  |  |
| *Female*  | 1.29\*\*\* | 1.05\*\*\* | 1.25\*\*\* | 1.13 | 1.04 | 0.96 | 1.81 | 1.81\*\*\* |
| **Education (REF: less than lower secondary)** |  |  |  |  |  |  |  |  |
|  *Upper secondary* | 0.77\*\*\* | 0.7\*\*\* | 0.71\*\* | 0.90 | 1.05 | 0.93 | 0.71\*\* | 0.58\*\*\* |
|  *tertiary* | 0.56 | 0.66 | 0.00 | 0.64 | 0.68 | 1.13 | 0.23\* | 0.64 |
| **Co-residence (REF: no)** | 1.10\* | 1.09\*\*\* | 0.97 | 1.15 | 1.07 | 1.30\* | 1.03 | 1.56 |
| **Chronic illnesses (REF: none)** |  |  |  |  |  |  |  |  |
|  *One* | 1.92\*\*\* | 2.14 | 1.83\*\*\* | 1.74\* | 1.27\*\*\* | 0.99 | 1.63\*\*\* | 1.49\*\*\* |
|  *Two or more* | 4.95\*\*\* | 5.89\*\*\* | 3.89\*\*\* | 3.53\*\*\* | 1.55\*\*\* | 1.73\*\*\* | 2.87\*\*\* | 3.43\*\*\* |
| **No. of children** | 1.07\*\*\* | 1.08\* | 1.07\*\*\* | 1.13\* | 1.00 | 0.93 | 1.03 | 1.12\* |
| **N number** | 5,805 | 798 | 5,805 | 798 | 5,805 | 798 | 5,805 | 798 |
| **Pseudo R-square** | 0.74 | 0.73 | 0.56 | 0.48 | 0.28 | 0.39 | 0.61 | 0.73 |

Notes: Odds Ratio provided in the table. All models were estimated with a lagged hybrid method combining fixed and random effects.

\* denotes significance at 5%; \*\* denotes significance at 1%; \*\*\* denotes significance at 0.1%.

Source: Authors’ analysis of the longitudinal CHARLS data.