

Migration of working-age adults from rural to urban areas in China separates the elderly persons remaining in rural regions with their adult children physically, and therefore has altered traditional patterns of intergenerational support exchange between them. This investigation examined reciprocal relationship between depression and intergenerational support, i.e., how intergenerational support to and from children influenced the depression of older parents, and how the depression influenced the support from children.

Data derived from a two wave longitudinal survey of 1,324 parents aged 60 and over living in rural areas of Anhui Province, China. Intergenerational support was measured by financial transfers from and to children, and emotional closeness with children. Depression scale used in this paper had 5 items, abstracted from a nine item CESD scale tailored to the target population.

We used the longitudinal study design to set up the cause-effect relationship. Specifically we propose four sets of hypotheses based on four research questions:

1. How does depression influence intergenerational support from children? We hypothesized that baseline depression reduced financial support from children and emotional closeness with children over time.
2. How does intergenerational support influence the depression? When taking the exchange theory into consideration, which emphasized the importance of giving as well as receiving intergenerational transfers on the older people's psychological well-being, we hypothesized that baseline financial support to and from children and emotional closeness with children all contributed negatively to residualized depression, i.e. depression of the follow-up when baseline depression was controlled.

3. How do changes in intergenerational support over time influence changes in depression.

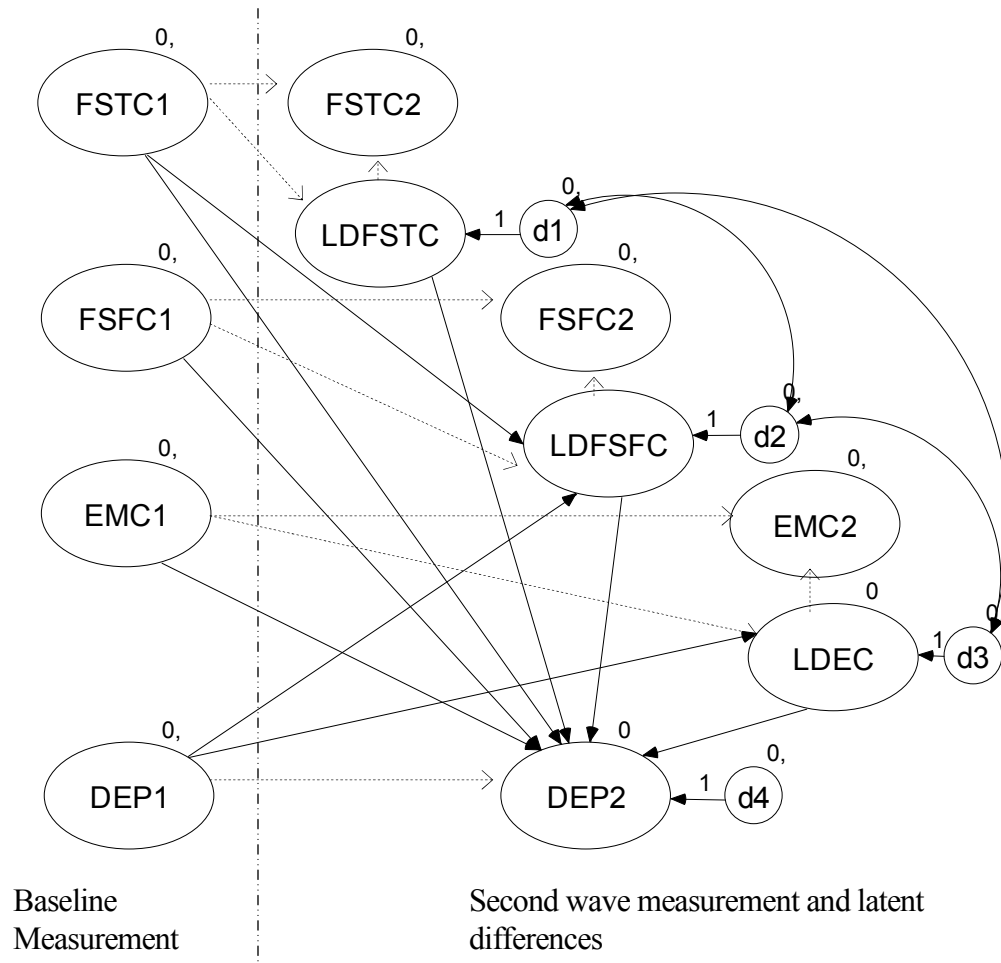
We hypothesized that changes in financial support to children, financial support from children and emotional closeness with children were associated negatively with the residualized depression;

4. How does parents transfer to children influence children's transfer to parents in the later time? Since some theories explained the motivation for intergenerational transfers from parents as the expectation for being paid back, we hypothesized that baseline financial support to children was associated positively to the increase in financial support from children in the follow-up.

Structural Equation Modeling is used to estimate the proposed model (AMOS, 2002), as seen in Figure 1, which is a simplified illustration of the proposed structural mode. The key features of this model is “the unit-weighted formation and explicit definition of the latent difference score” (MarArdle, 2001), i.e., the second wave measurements of financial support to and from children and emotional closeness are completely explained by the first wave measurements and latent differences, and both the first wave measurements and latent differences score have loading “1” on the second wave measurements. Instead of using the latent difference score, the depression is constructed as a two variables system with an arrow linking the first wave and second wave depression. In this way the effect of other variables on the second wave depression are the effect on the residualized depression when the first wave depression is controlled.

As seen in Figure 1, the dashed lines reflect the construction of latent difference scores of financial transfers and emotional closeness, and the residualized depression discussed above. FSTC1, FSTC2, and LDFSTC represent financial support to children in

the first wave, second wave, and latent differences between these two waves respectively; correspondingly, EMC1, EMC2, and LDEMC represent emotional closeness with children in the first wave, second wave, and latent differences between these two waves respectively; DEP1, DEP2 represent depression of the elderly in the first wave and second wave.



**Figure 1 Proposed Structural Model**

Results showed that older parents who had higher level of depression in the baseline experienced reduced financial support from children and reduced emotional closeness with children in the follow-up. Baseline financial support to children and emotional closeness with children, but not financial support from children, showed the

lagged effect on reducing depression over time. The increases in financial support to children and emotional closeness with children across two waves, but not financial support from children, contributed to reducing depression over time. Baseline financial support to children was not reciprocated by children because it did not contribute significantly to the increase in financial support from children over time. The first set of hypotheses are completely supported. The second and third set of hypotheses are partly supported. But the fourth set of hypotheses are not supported.

There are two major findings that are policy relevant. First, emotional support is most important social support in helping older people out of depression, so depression has self-reinforcing characteristics because the older people who have depression alienate children emotionally, which in turn aggravates the depression of the older people. Second, the benefits from giving financial support to children, and the lack of benefit from receiving financial support from children raise the question of how to increase the older people's ability to give instead of being a recipient in the intergenerational financial exchanges.