

EVOLUTION and DIFFERENTIATION of INFLUENCE of THE MIDDLE-AGED and OLDER ADULTS "CEASELESS WORK" on DEPRESSION in RURAL CHINA

In rural China, aging degree is higher and basic pension security is relatively weak. The interweaving of livelihood pressure and family responsibilities has a serious negative impact on middle-aged and older adults, leading to depression, anxiety and some mental problems. For the middle-aged, they have to face the pressure of employment brought by industrial upgrading, as well as the dual pressure of supporting and caring for the young. For the younger-old-adults, with the weakening of family support function, the risk of “no country for the elderly” increases, “ceaseless work” has become one of the main ways of self-support. Long-term effects of unstable employment on mental health are complex and may contribute to depression through cumulative effects. Under the background of urbanization, industrial transformation and upgrading, and the weakening of family pension, labor participation has an important and complex impact on the depression level of rural middle-aged and older adults in China. Avoiding the negative impact of ceaseless work on mental health is not only key to ensuring a good life for rural middle-aged and older adults, but also a necessary condition for the rational utilization of their human resources, which is crucial for achieving healthy and positive aging in China.

THEORETICAL FOCUS

Based on continuity theory and ecosystem theory, this paper analyzes the realistic situation in rural China, pays attention to the static characteristics and dynamic evolution of the impact of ceaseless work on depression, and constructs a theoretical analysis framework applicable to the impact of labor participation on depression of the middle-aged and older adults in rural China.

Continuity Theory holds that, middle-aged and older adults attempt to preserve and maintain existing internal and external structures. Continuity in psychological characteristics and social circumstances influence an individual's mental health and well-being. According to the Continuity Theory, focusing on the impact of time on individual development, longitudinal studies are essential. The impact of labor participation on depression can be divided into static characteristics and dynamic characteristics.

Ecosystem theory conceptualizes a nested systems ranging from micro to macro, to evaluate unanticipated effect of the environment in terms on individual's future development. Stability, consistency, and predictability over time in any element of the systems is critical for human development. Socialization and social class shape the life course of individuals through time and space. According to Ecosystem Theory, the influence factors, such as individual, family, social support and social environment, can be integrated into macro-medium-micro system.

Through in-depth analysis of qualitative interview data, this paper reveals the unique impact of

ceaseless work on the mental health of rural older adults in China. It shows that family responsibility is a primary motivation for labor among this demographic, and that labor decisions and purposes evolve with aging, leading to changes in how labor participation affects depression. This framework addresses the shortcomings of previous studies, which often overlooked macro factors, lacked longitudinal analysis, and neglected the changing nature of labor purposes and individual concepts. It offers a new perspective for systematically analyzing the relationship between moderate labor and mental health among rural older adults amidst social change and the weakening of family support systems. Furthermore, it represents a beneficial attempt to integrate Continuity Theory and Ecosystem Theory in the context of rural China.

DATA

This paper establishes panel data through China Health and Retirement Longitudinal Study (CHARLS), matches the macro regional data of the survey year using the *CHINA CITY STATISTICAL YEARBOOK*, and refine the theoretical framework and explain the characteristics of rural China using interview data.

CHARLS is a longitudinal survey that aims to be representative of the residents in main-land China aged 45 and older, with no upper age limit. The national baseline survey was conducted in 2011-12, with wave 2 in 2013, wave 3 in 2015, wave 4 in 2018 and wave 5 in 2018. The baseline survey covered 150 countries/districts, 450 villages/urban communities, across the country, involving 19395 individuals, reflecting the mid-aged and older Chinese population collectively.

The qualitative interview was conducted in 2022, in Henan province, which is one of the major agricultural provinces and major provinces of population outflow, providing 35 interview cases aged 45 and older, including different types of labor participation.

RESEARCH METHODS

First, analyzed the situation of rural older adults' depression and labor participation. Then calculated the net treatment effect of labor participation on depression among younger-old-adults and old-old-adults through Hierarchical Linear Model and Propensity Score Matching.

Second, analyzed the dynamic evolution of the influence of labor participation on depression through the Growth Curve Model, and compared dynamic patterns of different work types and inter-group dynamic differentiation.

Expected Findings

The impact of non-agricultural labor and agricultural labor on depression differs, primarily due to the significant differences in income levels and labor intensity between the two modes of work.

Rural older adults engaged in non-agricultural labor have lower initial levels of depression, but their depression levels rise more quickly; those engaged in agricultural labor have higher initial levels of depression, but the change in depression levels is smaller, similar to the trajectory of depression levels among the elderly not participating in labor. Due to the dynamic evolution of the impact of labor participation, the differences in depression levels among the middle-aged and older adults in different types of labor are gradually narrowing.

The preference for non-agricultural labor is evident, and the direction of the impact of non-agricultural labor and agricultural labor on depression are different, which does not mean that the rural elderly 'rejects' agricultural labor. Whether out of long-term farming habits, strong willingness to work, or to reduce living costs and provide food, the rural middle-aged and older adults, especially older adults over 60 years old, are willing to continue agricultural labor as long as their health conditions permit. However, the relatively weak rural basic security and insufficient pension savings for the elderly, coupled with the income and intensity differences between non-agricultural and agricultural labor, lead to a clear preference for non-agricultural labor.

The “family benefit maximization” labor participation is a common phenomenon among rural middle-aged and older adults. The purpose of family responsibility in labor can strengthen the protective effect of labor participation on mental health in the short term, but cannot avoid the negative impact of ceaseless work on depression.

The rural elderly from low-consuming families have a strong income-generating purpose and higher expectations for non-agricultural labor. Agricultural labor does not lead to an increase in their depression levels, but long-term health depletion can result in higher depression levels. When choosing to return to agriculture to take care of their grandchildren, the depression levels of the middle-aged group are significantly lower when they can balance intergenerational care with non-agricultural employment. While the depression levels of the older adults, who have limited access to non-agricultural labor opportunities, could be quite high when they need to juggle agricultural labor and intergenerational care. In addition to these direct impacts, different family situations also lead to divergent growth trajectories of depression. When children have unstable employment, limited income, and high childcare costs, rural elderly people are more likely to continue working to alleviate the burden on their children. With the risk of overwork, the loss of labor ability and cessation of work can significantly increase the depression levels. When children are all established in their careers and have relatively stable jobs, rural elderly are more likely to engage in labor to fulfill spiritual needs. At this time, a decrease in labor income and a decline in labor ability do not lead to significant changes in depression levels.

Family responsibilities and individual needs are not synchronized, leading to differences in the impact of labor participation on depression levels. Women have higher depression levels and lower levels of labor participation than men, and the negative impact of labor participation is more significant. “Work-family” conflict has gender differences. Men are more likely to choose non-

agricultural labor with more flexible hours or shorter working hours, while women are more likely to switch from non-agricultural labor to agricultural labor or cease working. Taking care of parents and taking care of grandchildren have different impacts on labor decisions. Parents are present, adults may still go out for works, but with grandchildren, older adults may return home. Due to the “sense of responsibility”, rural elderly do not reject taking care of grandchildren and may not directly experience an increase in depression levels due to role conflicts. However, those in poor family economic conditions, who need to continue working and has poor health status, have significantly higher depression levels.

Social changes interact with family transformations, leading to a divergence in the long-term impact of ceaseless work on depression.

Family dispersion has disrupted the family support function but has not weakened the support of the rural elderly for their children. The urbanization process has encouraged rural young and middle-aged adults to move to cities for development. According to Chinese marriage culture and gender ratio conditions, men bear more marriage costs, such as the cost of a wedding house and the amount of the bride price, which determine whether rural young men can settle in the city. Helping children get married is one of the main family responsibilities of the rural elderly. Therefore, the gender of the offspring and the marital status of children can affect the depression levels of rural elderly populations and lead to different evolutionary trajectories in the impact of labor participation on depression levels. Due to the costs of marriage such as bride prices and wedding houses, the labor pressure on rural elderly populations with unmarried or divorced sons is greater, especially when the son is of an older unmarried age; they are more likely to engage in high-intensity labor to increase their income, and when their health level is average and labor income decreases, their depression levels rise significantly. When there are more sons, the fluctuation in depression levels is more pronounced. For families without sons, the increase in the number of daughters does not increase the labor pressure, but due to the notion that “a daughter married out is like water splashed out”, the rural elderly are more likely to work to support themselves, thus having higher depression levels in their later years. Overall, in families with sons, the depression levels of the middle-aged and older adults are higher before their sons get married, with greater labor pressure and more significant fluctuations in mental health due to labor participation; after the sons are married, the depression levels decrease significantly. In families without sons, the marriage of daughters has a relatively smaller impact on the labor participation of the middle-aged and older adults but may encourage the elderly to extend their working age, facing the risk of overwork in their later years.