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Spiritual affection and support: Unique aging model of older adult Chinese who lost their only child

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This research aims to explore the mechanism of the online "spiritual solidarity" group for older adults who have lost their only child (*shidu* parents) in contemporary China. By examining a unique aging model of older adult Chinese who lost their only child, this study conducted an online survey in the "spiritual solidarity" group of the *shidu* parents through an ethnographic approach by interviews, questionnaires, participatory observation, and other methods. The findings can improve the "spiritually drawn together to old" process for the *shidu* parents to improve their quality of life and relieve their psychological stress. As a new pension model, the spiritual group takes a virtual information platform as the carrier to break through the limitations of regional activities, meet the various needs of the *shidu* parent, and provide them with an outlet for emotional energy. Understanding the mechanism of spiritual solidarity is of help to the *shidu* parents in obtaining spiritual comfort. It is also valuable for safeguarding their rights and interests to improve their quality of life on the spiritual and material levels.

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Introduction

hidu parents as a social problem is unique to China. China began to implement a "family planning" policy in the 1980s. The policy stipulates that each family can have only one child. This has resulted in a large number of one-child families in China. In these families, some older adults who have unfortunately lost their only child are called "shidu parents." According to statistics, as of 2020, the total number of shidu parents in China was 4,695,000, accounting for 5.7% of the aging adult population. In some impoverished areas of China, the proportion of shidu parents exceeds 10 percent. The issue of oldage care for the shidu parents has captured the attention of all sectors of Chinese society. As a supplement to old-age care activities, "drawn together aging" brings together older people with similar experiences to communicate, giving spiritual comfort to the *shidu* parents. This research aims to explore the mechanism of the online "spiritual solidarity" group for older adults who have lost their only child (shidu parents, this article uses 60 years and older *shidu* as "elderly *shidu* parents) in contemporary China. By exploring and searching for a unique aging model of older adult Chinese who lost their only child; it studies the mechanism of the "spiritually drawn together to old" model on the lives and behaviors of the shidu parents. The peer subsystem replaced the family subsystem to seek emotional belonging and realize selfworth. The results show that support from group members compensated for the lack of support from a child.

Losing one's only child is a complex, severe and unique social issue for some families in China today. In the traditional Chinese concept of the family, children support their parents in old age. Social support theory refers to maintaining social identity through contact with different groups in a particular social network to seek emotional support, material assistance, and information sharing. Social support is a system centered on the individual, including the individual and the people around him or her, and the social interactions between the individual and these people. In social support theory, children are essential nodes of social support in the family. However, Shidu's parents lack the support of their children, which causes a series of problems. This paper focuses on the psychological and social issues stemming from losing one's only child for various reasons (later expressed as the shidu parents). It will look closely at the pensions of the shidu parents in a sociological sense and put forward practical, concrete policy suggestions. The shidu parents refer to a social phenomenon in which parents of an only child, due to various reasons, such as disease, disaster, crime and suicide, lose their child forever when they are over their 50 s and unable to reproduce. China has implemented a family planning policy in the past two years to allow couples to have a second or even a third child to address serious problems caused by family planning. However, such a policy can only solve the issues of latecomers, and it has no practical significance for families who have lost their only child. There still exist problems caused by the loss of their only child, especially the problem of support for older adults (Feng & Fan, 2020).

In China's civil society, the group of *shidu* parents has begun to appear as a kind of spirit group pension mode. The so-called spirit group pension refers to the *shidu* parents in various natural and virtual environments, offering mutual comfort, encouraging each other, and appropriately helping each other solve difficulties in life. The *shidu* parents have more urgent needs for spiritual care because of their exceptional experience. Exploring the means of spiritual solidarity and the feasible scheme will help solve the problems resulting from China's Family planning policy during the late 1970s and 2010s (Feng, 2020).

In the operation process, the core feature of the "drawn together to become old" model is the spiritual aspect (Shen, 2020).

Scholars suggest that the word "spiritual" needs to be added to "drawn together to become old" and that spiritually getting old together is a possible practice. The key to the association is that they have similar interests and experiences; thus, the "drawing together" of older people who get along can be influential. Some scholars have put forward adding "spiritual" elements to group endowment. The so-called spirit group endowment is to get together spiritually to become old and live their lives in their old ages. This kind of spirit group pension mode should be generally practiced in the future China (Yu, 2020).

The "drawing together" of older people who get along can effectively compensate for the lack of spiritual comfort (Qing, 2018). Yang (2014) states that older people become old together spiritually as a form of solid support. This support helps the *shidu* parents divert their attention from "self" to the association with others through mutual encouragement to prevent themselves from being confined to their depressive experience.

Some scholars believe that the "spiritually drawn together to become old" model can effectively meet the vital psychological needs for spiritual solace among older people who have lost their only children (Feng, 2019). Other scholars believe spiritual group care can effectively meet the needs of the *shidu* parents at a deeper level (Qing, 2018). Given the differences of opinion over the role of the "drawn together to become old" in providing spiritual solace, this paper explores the critical part of the spiritually getting old together model and its mechanism among older people who have lost their only child. Specifically, it discusses the role of the "Lone Ranger" WeChat group in providing such solace. A questionnaire survey and in-depth interviews were conducted and analyzed in the "Lone Ranger" WeChat group to study the function of the spiritually getting old together model for the *shidu* parents.

Related work

The increase in the number of one-child families and the increased risk of creating *shidu* families is undeniable, as is the impact of social problems brought about by the design of *shidu* families (Yang, 2014). Many experts and scholars have begun to pay attention to the mental states of the older *shidu* adults and the aging problem. Scholars have mainly considered the following three aspects.

Shidu parents and the dilemma of spiritual comfort. In traditional Chinese culture, children inherit their parents' bloodline and provide spiritual and psychological support when their parents age. Based on their parents' hardship and affection while raising children, it is obligatory for children to take care of their parents in their old age. However, this social norm does not apply to older *shidu* parents. In China, there is a severe lack of policies and institutional safeguards concerning the admission of *shidu* parents into older adult care institutions. Some policies include unreasonable restrictions on the access of the *shidu* parents (Huang, 2013). In addition, many *shidu* parents are hindered from signing documents and paying fees, even if they want to join institutions (Ma, 2014).

A dilemma lies that the *shidu* parents are reluctant to live in nursing homes. Since they have lost their only child, their intimate relationships have been disrupted, which has created substantial psychological difficulties and a strong need for spiritual comfort. They would feel miserable at seeing the others' reception of children's occasional visits. It will be a second hurt to them. Therefore, they refuse to live in institutional care (Xie, 2016).

The satisfaction of spiritual needs is more important than material ones to the *shidu* parents (Zhang, 2017). Various societal parties have taken some voluntary actions. However, the social groups involved in the service of the *shidu* parents are still far from sufficient to meet the spiritual needs (Li, 2015).

Spiritually getting old together approach. Due to the bias of institutional care and the lack of policy protection, coupled with the imperfect home care service system (Zhang, 2017), the *shidu* parents face severe challenges. In addition, many *shidu* parents fail to afford the cost of private nursing homes. Moreover, the financial support provided by the government is far from enough to solve the aging problem. How can we take better care of the older *Shidu* parents?

Some scholars point out that due to the loss of the traditional pension foundation, mental pressure and severe psychological disorders, most *Shidu* parents prefer the way of aging together and supporting each other (Qin and Zhag, 2014). *Shidu* parents mainly seek psychological help from temporary relations. Therefore, support from peer groups is increasingly essential, as an institutional intervention provides financial assistance (Shen et al., 2013). In addition, the soothing effect of spiritually getting old together is impressive. To a certain extent, this older adult care model helps more *shidu* parents address the challenges in their lives. Still, more importantly, it will relieve their mental burdens (Lv, 2013).

Moreover, online communication has become popular since smartphones were manufactured to meet people's needs. It provides a basis for an online spiritually getting old approach among *shidu* parents. They join various spiritually getting together groups, such as WeChat and QQ groups, to seek warmth by associating with each other (Zhang and Li, 2017). In the QQ and WeChat groups, the older adults will have online video chat for companionship. Many *shidu* parents also hold spontaneous activities, such as sharing food pictures and mailing gifts to group friends. Such online communities may fulfill the spiritual needs of *shidu* parents, complementing the original support system with an informal relationship.

Drawn together to become old model. Recently, many scholars have paid attention to the spiritual model of getting old together for shidu parents (Zhang, 2017; Qing, 2018; Feng, 2019). Chinese scholars define "drawn together to become old" as an aging model in which a certain number of similar older people voluntarily come together to meet their spiritual needs and accompany each other (Qing, 2018). The older individuals can improve communication through the "drawn together to become old" aging model and engage in mutual communication to meet their needs for spiritual comfort and reduce loneliness and helplessness. Additionally, under the "drawn together to become old model," older people with the same experiences come together based on their similarities and commonalities, sharing recreational activities and satisfying the need for social interaction networks in old age (Zhang, 2017). Meanwhile, spiritual comfort needs are essential and must be addressed by assistance work for the shidu parents (Li and An, 2015). The word "spiritual" needs to be added to the "drawn together to become old" aging model (Feng, 2019). The "spiritually getting old and old-age care" model can unite Shidu parents. However, scholars have diverged in research on this topic with the widespread, increasing concern with the "spiritually drawn together" model for older adult individuals. Some scholars have suggested that the relaxing effect of the spiritually getting old together approach is limited. In contrast, other scholars have indicated its significant impacts (Cai, 2020).

Research method and process

In attempting to understand the effect of this approach on the *shidu* parents, it is difficult to control the two complex variables of the shidu parents, namely behavior and activities and mutual spiritual support, with quantitative research alone. In addition, many interfering variables of spiritually getting old together are approached among the *shidu* parents. Therefore, a qualitative research method is conducted in the paper based on multi-case interviews supplemented by questionnaires. In terms of the specific characteristics of the interviewees, it is essentially required that they maintain a sense of belonging to a spiritual support group emphasizing interdependence among the *shidu* parents through mutual encouragement and support online.

Selection of research methods and subjects. As the pension model based on the population of *shidu* parents is experimentative, the WeChat group of spiritually getting old together is still in its infancy, and there are few mature groups (Feng, 2019). Therefore, the population of potential interviewees was small. The "Lone Ranger" WeChat group was selected as the subjects for the questionnaire survey and in-depth interviews after online screening and fieldwork. The group has been established for four years and has 473 members, and its facilities and systems are relatively mature. The WeChat group serves as an online gathering place for the "spiritually drawing together to become old" of the *shidu* parents, relying mainly on the online encouragement and sharing support of WeChat members.

Older people share their lives in the WeChat group and help more *shidu* parents solve their problems. Because the WeChat group is virtual, the members do not physically live together. Therefore, they are grouped for warmth virtually. They mainly provide each other spiritual support and companionship, an arrangement called "spiritually drawing together to become old."

Fifty-one older people joined the Shidu WeChat group for less than a week as subjects for the questionnaire survey. Twelve representative shidu parents from the WeChat group were selected for in-depth interviews. Their selection was as follows: on the one hand, 51 newly joined older people were selected as respondents for the questionnaire because their transformations could more clearly demonstrate the effect of "group warmth." In addition, the 51 older people met the need for a diverse sample, thus making the data more rigorous and scientific. Twelve older people were selected as the subjects of in-depth interviews, which required continuous digging into past experiences. Shidu parents have suffered the pain of losing their loved ones. Although many are willing to cooperate with simple questionnaires and interviews, they are not necessarily ready to discuss and re-expose their sorrows for losing their only child. Therefore, the in-depth interviews are conducted on the principle of voluntariness by soliciting opinions from the group leaders and performing stratified sampling according to the number of years of loss experience. To generalize the study, the interviewees included older people representing possible ages, personalities, and living standards. However, this questionnaire was anonymously administered to participants.

Furthermore, the purpose of the study was clarified in the questionnaire to ensure that participants understood how their information would be used. The questionnaires and interviews were conducted voluntarily. The confidentiality of the data collection and storage process was confirmed during the interviews and questionnaires. Moreover, the questionnaire and interviews clearly specify the retention period of the data and delete or dispose of the data promptly when it is not needed.

Meanwhile, those who suffered the loss more than ten years ago are more likely to be in a period of stability and need the

Table 1 Research table of the interviewees.

| | Se | f-rating | g depres: | sion scale |
|--|----|----------|-----------|------------|
|--|----|----------|-----------|------------|

| Item | infrequent | now and then | frequent | sustainable |
|--|------------|--------------|----------|-------------|
| 1. I feel sullen and depressed | 1 | 2 | 3 | 4 |
| [*] 2. I think the morning is the best part of the day | 4 | 3 | 2 | 1 |
| 3. I burst into tears or want to cry | 1 | 2 | 3 | 4 |
| 4. I don't sleep well at night | 1 | 2 | 3 | 4 |
| *5. I eat as much as I usually do | 4 | 3 | 2 | 1 |
| *6. I feel as happy as ever when I am in close contact with the opposite sex | 4 | 3 | 2 | 1 |
| 7. I find that I am losing weight | 1 | 2 | 3 | 4 |
| 8. I have trouble with constipation | 1 | 2 | 3 | 4 |
| 9. My heart beats faster than usual | 1 | 2 | 3 | 4 |
| 10. I feel tired for no reason | 1 | 2 | 3 | 4 |
| *11. My mind is as clear as usual | 4 | 3 | 2 | 1 |
| *12. I don't find it challenging to do things regularly | 4 | 3 | 2 | 1 |
| 13. I feel restless and unsettled | 1 | 2 | 3 | 4 |
| *14. I have hope for the future | 4 | 3 | 2 | 1 |
| 15. I get angry and excited more quickly than usual | 1 | 2 | 3 | 4 |
| *16. I think it's easy to make decisions | 4 | 3 | 2 | 1 |
| *17. I feel useful and needed | 4 | 3 | 2 | 1 |
| *18. I've had an exciting life | 4 | 3 | 2 | 1 |
| 19. I think other people would have a better life if I were dead | 1 | 2 | 3 | 4 |
| 20. I remain interested in things that generally interest me | 4 | 3 | 2 | 1 |

* represents reverse-scored questions, standard score (Y) = total assessment score (A) 1.25Y < 53 means no depression, 53 ≤ Y < 62 means mild depression, 63 < Y < 72 means moderate depression, and Y > 73 means severe depression.

spiritually getting old approach for other reasons. This study combined semi-structured, open-ended, in-depth interviews with a questionnaire method. A depression self-assessment scale (Table 1) was administered twice, three months apart. The Geriatric Depression Scale (GDS) was created by Brank et al. in 1982 and is dedicated to screening for depression in older adults. It measures the most relevant feelings of older people over a week. The scale has multiple entries and includes the following symptoms: depressive mood, decreased activity, irritability, withdrawn distress, and unfavorable ratings of past, present, and future. In addition, the GDS is a depression scale created and standardized for and among older adults, and it has a higher concordance rate than other depression scales in the clinical evaluation of older adults, with the advantage being even more pronounced in older adults. One representative interviewee is adopted from the five age groups. The twelve in-depth interviewees had different living conditions, life experiences, surroundings and personalities, so it was expected that more diverse interview results could be obtained with this sample. Based on the research purpose, this paper does not capture all the content of the interviews and questionnaires.

Basic information on the study subjects within the WeChat group. The basic information of the 12 in-depth interviewees selected from the "Lone Ranger" WeChat group was as follows: their ages ranged from 57 to 69 years old, and their marital status, social status, household registration status, income status, and physical condition were all different (Table 2). It is worth noting that this age range is based on several reasons concerning the shidu parents. First, the term "shidu parents" refers to a social phenomenon that after reaching their 50 s, parents of an only child experience the permanent loss of their child, for they are no longer able to reproduce due to various factors such as illness, disasters, crime, and suicide. Second, this study's subjects are older individuals adept at using social applications like WeChat. This is because individuals aged 70 and above tend to use online social media less frequently. Within the 70 and above age group in online communities, the number of *shidu* parents is limited, and they often lack the willingness to participate in interviews. Therefore, the age range of interviewees in this study is between 57 and 69.

The basic information on the 51 respondents selected from the "Lone Ranger" WeChat group was as follows: all 51 respondents had been in the group for less than a week and were intensely aware of having just lost their only children. Sixteen respondents were 50–55 years old, 13 were 56–60, and 22 were over 60; 20% were not depressed, 51% were mildly depressed, 23% were moderately depressed, and 6% were severely depressed, according to the GDS. There were 26 female respondents and 25 male respondents. About 71% of them earned a living on a pension, 31% achieved a living on alms, and the rest had other income sources.

Motivations for and channels of enrollment of the study participants. According to the interview transcript, the various reasons seniors join the Spiritually Getting Old Together WeChat group. These include alleviating loneliness, making friends, recovering from losing their only child, learning about related policies, helping to overcome difficulties and recovering in society. Most of them were introduced to the group through friends or relatives. Only a few joined the group based on online information.

"I often woke up in the middle of the night recalling the days with my children and would often shed tears, which tortured me and failed to be understood. I suffered the pain until I learned from a friend by chance about this group, and I thought those who had the same experience would be able to understand me, so I joined the group."

During the interview process, the *shidu* parents frequently mentioned "friends," "loneliness," "network," "information," and other terms when discussing how they learned about the group and their motivations to join the group. Some words included "friend," with a relative occurrence of 34.57%; "lonely," with a relative occurrence of 67.98%; "network," with a relative occurrence of 20.43%; and "information," with a relative

| Table 2 | 2 Basic info | ormation on the | Table 2 Basic information on the interviewees. | | | | | | |
|--------------|--------------|-----------------|--|--|---|-------------------|----------------------------------|---------------------|----------------------------|
| | Age | Sex | Marital status | Housing status | Social status | Income sources | Years of loss of the child | Physical condition | GDS measurement results |
| Α | 64 | Male | Divorced | Living with his sister | Friends and his sister | Alms | 11 | Hypertensive | Normal |
| В | 09 | Female | Married | Living with her husband | Relatives and friends | Pension | 6 | Physically healthy | Normal |
| U | 69 | Male | Married | Living with his wife and granddaughter | No contact with relatives Has friends | Alms | ις. | Bronchitis | Mild depression |
| Ω | 57 | Female | Divorced | Living alone | Has relatives and friends | Pension | 2 | Physically healthy | Moderate depression |
| ш | 61 | Female | Married | Living with her husband | Has Relatives and friends, travels with her husband | Pension | 15 | High blood sugar | Normal |
| ட | 29 | Male | Married | Living with his wife | Communicate with relatives and friends | Pension | 15 | Physically healthy | Normal |
| ŋ | 65 | Male | Divorced | Living alone | Has infrequent contact with others | Alms | 4 | Physically healthy | Moderate depression |
| I | 59 | Female | Married | Living with her husband | Has no contact with people except her husband | Pension | _ | Hyperglycemic | Mild depression |
| _ | 63 | Female | Married | Living with her husband | Has occasional contact with friends but no contact | Pension | 2 | Bronchitis | Moderate depression |
| _ | 99 | Male | Married | Living with his wife | Participates in group activities with his wife | Pension | 6 | Physically healthy | Normal |
| \checkmark | 09 | Female | Divorced | Living with mother | Has little contact with people except for her mother | Alms | m | Left leg disability | Mild depression |
| _ | 58 | Male | Married | Living with his wife | Has no contact with people except his wife | Pension | 7 | Physically healthy | Mild depression |

occurrence of 29.65%. The high frequency of these emotionally oriented words in the interview process shows that the primary motivation for older adults to join the group originated from the need for emotional support and information. They accessed the group mainly with the help of the internet and friends.

Activities and feedback within the study population. Regarding activities and feedback, first, the group had weekly or daily fixed punch card activities initiated by the group leader or group members, with the voluntary participation of group members. Second, the group owner compiled weekly information on policies related to the older *shidu* adults within the group and sent the information fixedly every Wednesday. Third, there were no restrictions, so group members could always bring their current difficulties and surprises and ask for answers or share with others to feel companionship and growth through interaction.

Since joining the group, many seniors reported receiving help and improving their mental and spiritual states. The two sets of findings before and after the group activities showed that 21.57% fewer negative words emerged in the second conversation than in the first.

"I work out every day with the group to check in, share recipes and chat with friends, and I try to help out with ideas when someone has a problem, so I feel like I'm living every day to the fullest. My home is next to the park, but before, I rarely walked; after my child left me, I would not go out unless it was essential. Since joining the group, I have found that my friends live a tasteful life. Some people specifically share their daily walk photos. I joined in and felt very special and had a sense of accomplishment. Once, when the group held a holiday party, I went to help cook, and everyone said it was delicious and wanted me to teach them how to cook. I began to share recipes in the group daily, and so many people have learned to cook. I can be of help to everyone, and I become more and more cheerful. After joining the group, I am truly leading a new life."

"My life has become richer since I joined this group. I have more friends; I only had my sister keep me company before, and I talked only to her. Now, I feel like I have more friends to talk with."

Findings and Discussion

The findings indicate a mechanism of the spiritually getting old together model for the *shidu* parents in China. Analyzing the mechanism of action of the spiritually getting old together model includes theoretical support and functional utility. Analysis of this mechanism can help improve the model for the *shidu* parents. A summary of the experience of the model from multiple dimensions can allow it to be better applied in practice. In this paper, we analyze the model in terms of four aspects.

Peer support to compensate for lack of child support. In social support theory, peer support is a crucial component of the social support system. The most significant problem of the *shidu* parents is that with the loss of their only child, the family structure is crippled, and the support of their son or daughter, who is at the core of the family support network, is missing. According to the questionnaire survey data, compared with the first survey, three months after joining the spiritually getting old together group, the number of depressed older adults in the group decreased. The total number of moderate depressions decreased by 41.67%, and the total number of mild depressions decreased by 30.76% (see Table 3).

Therefore, peer support in spiritually getting old together group can alleviate the depression of the *shidu* parents. Furthermore, the information and resources shared by the group members can help the *shidu* parents pour out their sentiments, release pressure, and solve problems in their everyday life.

"After I joined the group, people actively helped me with my questions, and some of my peers even helped me contact the relevant staff to deal with my granddaughter's medical bills and school resumption. I am truly grateful to my fellows."

"It was truly lonely at times. I am thankful to the group for listening and talking to me. Without their support and companionship, I do not know how I would have gotten through this dark time."

"I share my life and routine with the group daily and post pictures of my workouts, and it feels like a much more fulfilling life with them."

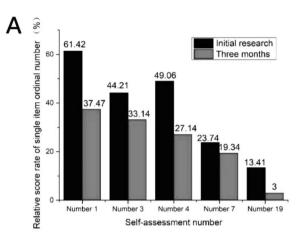
According to social support theory, we can classify the support of the partners in the spiritually getting old together WeChat group into two types: instrumental and support. Instrumental support includes guidance, assistance, tangible support and problem-solving actions. Expressive support includes psychological help, emotional support, self-esteem support, emotional support, recognition, etc. The WeChat group successfully helped the granddaughter of one of the members seek medical treatment and resume school through the information and channels provided by their peers, solving the member's practical difficulties and replacing the instrumental support that the member's child would have provided.

The members of the WeChat group received psychological support by chatting and talking in the group to relieve their emotional stress; they received an award for sharing their daily lives and hobbies and receiving feedback and support from many group members. Therefore, the WeChat group for mutual assistance for older adults based on the spiritually getting old together model makes up for the lack of child support to a certain extent and provides peer support.

Emotional support to compensate for the lack of family functioning. The structural-functional theory of sociology suggests that the structural differentiation of the extensive system and the functions of the subsystems formed after the differentiation are coupled to make the whole significant system function so that the overall effect is 1 + 1 > 2. Losing the only child would lead to the absence of family subsystems. It affects the spiritual comfort function of the family system. The emergence of the spiritually getting old together group can compensate for the lack of family subsystem function. The questionnaire survey results (Fig. 1A) show that after three months of spiritually getting together, the relative score rates of the positive scores on the self-rating scale decreased significantly. For example, the choices of option 1 (I feel unhappy and depressed) decreased by 37.18%, and the intentions of option 4 (I sleep poorly at night) decreased by 44.67%.

In addition, scores for negatively scored items on the self-assessment form increased significantly. For example, item 17 (I feel helpful and needed) increased by 210%. Those for item number 5 (I eat as much as usual) increased by 127%, indicating that the spiritually getting old together group effectively reduced the negative emotions and increased the positive emotions of the *shidu* parents. Through group chat, the *shidu* parents enjoyed more companionship and a place to relieve their stress; they no

| Table 3 Changes in the Number of Self-Assessment Depression. | | | | | | |
|--|---------------|-----------------|---------------------|-------------------|--|--|
| | No depression | Mild depression | Moderate depression | Severe depression | | |
| Initial research | 10 | 26 | 12 | 3 | | |
| Three months later | 23 | 18 | 7 | 3 | | |



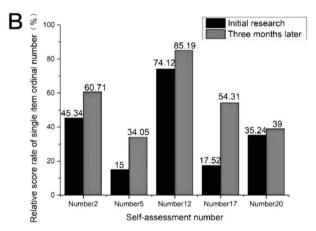


Fig. 1 Changes in Single Item Scores. The Depression Self-Assessment Scale for the *shidu* parents in the group. Note: A represents positive grading questions, and B represents negative. Higher scores on positively scored questions indicate higher levels of negative emotions, and higher scores on negatively scored questions indicate more heightened positive emotions.

longer worried about outsiders' prejudice and developed a sense of belonging to the group.

"After my son left, I have been caught in a spiritual loss. I was depressed until I met our 'Lone Ranger' group. The group members send messages daily, call me and often encourage me. I started to exercise and learned to cook again, and I felt that my life gradually enlightened, and I began to cheer up after their company and support."

The *shidu* elders in the spiritually getting together group can replace the spiritual consolation function of parent-child emotion. It makes up for the family function and facilitates the whole system to improve the quality of life of the *shidu* parents.

Information sharing to alleviate challenges for shidu parents. Most *shidu* parents are over their 50 s (Li 2020) and live in rural and urban areas. Well-educated urban older people can easily search for policies and benefits related to their interests through the internet with their accumulated knowledge. However, for

some older people who receive insufficient education, it is hard to search for information, as they are used to relying mainly on their children. With the loss of their child, they missed some information sources. How can we help those disadvantaged older adults find services and support more effectively? The WeChat group based on the spiritually getting old together aging model offers an excellent practical example.

We can take the stratified sampling survey of the lone knight group as an example. There are two rural older adults with poor information, two urban older adults with the essential scientific use of search engines and one urban older adult with a high education level and skilled use of various search engines. In the group, the older person who used the internet effectively collected and shared multiple policies related to the shidu parents every week and helped her peers collect information, which solved the information problems of the shidu parents. According to Table 2, Elder C was initially motivated to join the group to learn about policies for older people without a family. His most meaningful gain in the group was information and resources, which helped his granddaughter successfully resume school. These findings suggest that the group alleviated the information-seeking challenges of the shidu parents through the information-sharing mechanism and helped address their information deficit.

Sense of belonging and self-actualization in the group interaction. According to Maslow's hierarchy of needs, humans have five needs: physiological needs, safety needs, love and belonging, esteem, and self-actualization (Yu, 2013). Shidu parents have more significant needs for interaction, a sense of belonging and self-actualization. Self-actualization is the highest need for shidu parents' self-organization (Cai et al., 2014). Most interviewees indicated that they found companionship and a sense of belonging after joining the group. They can communicate with their peers without anxiety. It reflects the need for emotion and a sense of belonging in Maslow's hierarchy of needs, the need to establish an emotional connection or relationship with others.

"After joining the group, I keep on helping my partners search for and organize relevant online information weekly. I also helped the partners in the group to answer their questions every day. Many people, including my partner, think I am working very hard, and I have received sincere thanks and warm replies from the group. The slowly growing group support is truly a sense of accomplishment. I feel I am doing something meaningful, very worthwhile."

The questionnaire survey results (Fig. 1B) show a 210% increase in the negatively scored item number 17 (I feel helpful and needed). Moreover, the highest level of need, i.e., self-actualization, was also reflected in the group. Furthermore, the *shidu* parents gradually transcend their grief and recover in social life. They also hoped to use their resources and abilities to maximize their self-value, reflecting the self-actualization needs of the *shidu* parents (Liu 2016).

Results and Discussion. We constructed an initial model of the mechanism of the influence of the WeChat group based on the "spiritually getting old together to become old" aging model on the lives and behaviors of the *shidu* parents. The group mainly

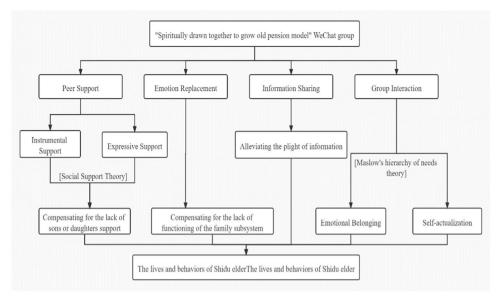


Fig. 2 Process Model of Action. The mechanism of action of the spiritually getting old together aging model on the life and behavior of shidu parents.

influences the lives and behaviors of the older *shidu* adults through those four main factors mentioned above. The details are shown in Fig. 2.

Given an estimated more than four million shidu parents, the spiritually getting old together model will become an effective form of emotional support to satisfy the spiritual needs of the shidu parents. However, the government must attach importance to this problem to truly fulfill their spiritual needs. On the one hand, the research results of this paper can provide a theoretical basis for the government to formulate laws and policies for the shidu parents; on the other hand, it can offer methods to social groups interested in helping the shidu parents. Moreover, the research has international significance. Researching the problems shidu parents face in China can help other countries deal with similar challenges. Such experience-sharing can be realized through international seminars, academic exchanges and policy dialogues. The results of this study and survey can contribute to a deeper international understanding of the needs of shidu parents. This can help to enhance global awareness of shidu and promote measures in the international community.

As *shidu* parents lack support systems, the current socialized assistance and support system, a social support system specifically for *shidu* parents, has not yet been established (Qu, 2020). Joining a WeChat group based on the spiritually getting old together aging model can help *shidu* parents seek their peer support. The *shidu* parents in this study lacked emotional and instrumental support due to the loss of their child. Still, after joining the group, they received information and emotional support from their friends and rebuilt their informal support system. Words such as "gratitude," "companionship," and "support" frequently appeared in the interview with Elder C.

The *shidu* parents can get support through contact with similar groups. This model is an effective way to receive maximum support, quickly transcend their grief, and self-recover in society (Xu, 2014). Therefore, it is essential to help *shidu* parents reconstruct their support systems and take advantage of social support networks established within groups based on the spiritually getting old together aging model. Communication between *shidu* parents and their peer groups is an emotional catharsis process that can help these individuals fulfill their need for interaction, realize their self-worth, and promote socialization (Xu, 2019). *Shidu* parents believe that people with the same experience can listen more sympathetically (Xie & Zhang, 2013).

Most are ready to interact with people with similar or the same experience. This study shows that the depression of *shidu* parents is effectively alleviated by supporting friends in such groups. As shown in the interviews in this paper, seniors said that the group's most significant gain was to fulfill their supportive companions.

Conclusion

In China's current social older adult care system, the material needs and convenience of older adults, such as clothing, food, housing, and transportation, are reasonably ensured. However, *Shidu's parents fail to receive* spiritual care from their families. This study found that "spiritual solidarity" enables older *shidu* adults to fulfill their needs for love and belonging, esteem, and self-actualization from support, peer, and information systems perspectives.

Firstly, "spiritual solidarity" transforms the *shidu* parents from isolated individuals into socialized partners. This model effectively helps them establish a rich social support network, contributing to the alleviation of anxiety and depression and facilitating social integration. Secondly, the "spiritual solidarity" model essentially constitutes a large family for the *shidu* parents, compensating for the absence of family care. In this organized form, peers of the same age share more common topics and interests. Since *shidu* parents and those with similar experiences are superior in empathetic listening, more attention should be given to the peer support of these *shidu* parents.

Nevertheless, this paper is developed with some limitations. First, there is a limitation in the sample selection. Only 63 shidu parents from the same WeChat group were studied; thus, there is much room for improving the interview sample. Second, due to the limited scope of research, the sample included only the older shidu adults who had joined a spiritually getting old group, and no control group was established for comparative study. Therefore, future research should consider researching the living conditions of the shidu parents who have not participated in such groups given comparative analysis. In addition, a standardized model of group eldercare should be elaborated on this basis.

Data availability

The data supporting this study's findings are available from the corresponding author upon reasonable request.

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Author contributions

Yuanxiong Tang: conducted the research, gathered important background information, and drafted the manuscript. Qianru Xu: conducted knowledge content conception, designing experiments and significant data collection, manuscript main content writing, data analysis, literature search, manuscript editing, and revising. Robert Guang Tian: performed research design, conceptualization, literature searches, data collection and analysis, manuscript review, editing, and revision.

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Competing interests

The authors declare no competing interests.

Ethical statements

According to institutional guidelines and national laws and regulations, ethical approval was not required because this study had no unethical behavior. We only administered the questionnaire, and since this study did not involve human clinical trials or animal experiments, no further approval was obtained from the ethics committee.

Informed consent

Informed consent was obtained from all participants or their legal guardians.

Additional information

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