

Research on Financial Fraud Prevention for Rural Elderly Groups in the Context of Digital Finance

Jiayi Zhang *

School of Economics and Law, University of Science and Technology Liaoning, Anshan Liaoning, 114051, China

* Corresponding author: Jiayi Zhang

Abstract: Against the backdrop of the accelerated penetration of digital finance into rural areas, ensuring rural financial security is crucial for stabilizing people's well-being and promoting sustainable rural development. In this process, the research focus should be on the elderly in rural areas. Through an analysis of the practical difficulties in improving the awareness of rural elderly people in preventing financial fraud from the perspective of digital finance, it is pointed out that factors such as the weakened risk identification ability due to the widened digital divide among the elderly, the lack of localized anti-fraud educational resources, the ineffectiveness of traditional propaganda and education models, and the insufficient supply of rural financial services are important obstacles to enhancing the financial fraud prevention awareness of rural elderly people. Based on this, this paper proposes a system for improving the anti-fraud awareness of rural elderly people featuring "precision education, diversified coordination, and long-term guarantee" to address the current issue of weak anti-fraud awareness. Specifically, it includes: developing anti-fraud educational content and channels suitable for the elderly; innovating immersive propaganda and education models integrated with local culture; and improving policy guarantees, talent support, and evaluation mechanisms. This study provides theoretical references and practical paths for solving the problems in financial safety education for the elderly in rural areas.

Keywords: Anti-fraud Awareness; Rural Revitalization; Rural Elderly; Financial Security; Digital Divide.

1. Introduction

The rapid development of digital finance has broken through the temporal and spatial boundaries of traditional financial services, accelerating the extension of financial resources to rural areas. Financial products and services such as mobile banking, mobile payments, and internet wealth management are increasingly covering rural regions, injecting new momentum into the development of rural inclusive finance. However, while digital finance brings convenience to people, it has also given rise to a large number of diverse new forms of financial fraud, with the digitization, concealment, and professionalization of fraud methods continuing to deepen.

Rural elderly groups have become key targets of digital financial fraud due to their narrow access to information, insufficient financial knowledge reserves, and weak ability to operate smart devices. After studying relevant literature, the author found that existing studies have conducted many discussions on the characteristics, causes, and anti-fraud publicity and education models of rural financial risks. X.Y. Wang et al. (2017) [1] started from the perspective of risk prevention and governance, summarizing the common means of rural financial fraud and the limitations of traditional governance measures; J.H. Li (2019) [2] explored the causes, characteristics, and governance strategies of rural financial fraud risks; Y.K. Fan et al. (2022) [3] focused on the protection of the rights and interests of rural vulnerable groups, pointing out that there are obvious gaps in the risk resistance capabilities of different groups; L.J. Zhou et al. (2022) [4] discussed the path of digital inclusive finance to help rural revitalization, emphasizing that the sinking of financial services needs to be supported by risk prevention and control mechanisms; Z.Z. Wu et al. (2024) [5] conducted an in-depth analysis of the formation mechanism of rural

vulnerable groups, pointing out that the elderly are easily marginalized in accessing digital financial services. These studies have laid a theoretical foundation for the field of rural financial anti-fraud. However, on the whole, existing achievements mostly focus on the macro level of rural groups. Research on the financial anti-fraud awareness of rural elderly, a special group in the context of digital finance, is still superficial. The combination and analysis of the digital divide issues, new forms of fraud, and inducements for being deceived faced by the elderly are not specific enough, and the proposed countermeasures are also stereotyped.

In view of the deficiencies in existing research, this paper focuses on the rural elderly population in the context of digital finance. It mainly analyzes the specific forms and harms of financial fraud faced by this group, explores the causes of their being deceived under the dual effects of their own characteristics and the external environment, and puts forward targeted solutions. By addressing the research gaps in financial fraud prevention for rural elderly groups in the era of digital finance, this study provides practical and feasible solutions to enhance elderly groups' risk resilience and safeguard the property security of rural elderly populations.

2. The Main Forms and Harms of Financial Fraud Faced by Rural Elderly People

(1) Main Forms of Financial Fraud Targeting Rural Elderly People

1) Fraud using fake pension financial management schemes

Fraudsters use short video platforms, WeChat official accounts and other channels to post advertisements for pension investment projects with "low risk and high returns" or lure the elderly to attend offline lectures by offering free

rice, flour and cooking oil. They fabricate false projects such as nursing home renovation and pension security investment, induce the elderly to invest funds through mobile banking transfers, scan code payments and other methods, and finally abscond with the money. The elderly, being unfamiliar with the risk verification procedures for online transfers, are very likely to fall victim to such scams.

2) Fraud by impersonating relatives or public officials

Fraudsters obtain elderly people's family information and their children's employment information through illegal channels. They use digital communication tools such as WeChat video and voice calls to impersonate their children, grandchildren, village cadres, or social security staff. They fabricate urgent scenarios like "urgent surgery fees needed for a car accident", "payment required for social security card upgrade", and "collecting old-age subsidies", urging the elderly to transfer money via mobile phones or provide bank card verification codes to carry out fraud. Due to elderly groups' weak ability to distinguish the authenticity of communication tools, they often easily trust the identity of the other party.

3) Fraud involving fake health products and medical devices

Such frauds combine online and offline tactics. Online, they exaggerate the efficacy of health supplements and physiotherapy devices through short video platforms, claiming that they can "completely cure chronic diseases in the elderly". Offline, they set up free experience points in rural markets and community activity centers, and vigorously promote benefits such as receiving eggs by attending lectures to induce the elderly to participate in activities and purchase overpriced products. Some fraudsters also guide the elderly to pay fees in installments through online loan platforms, leading them into debt traps. Rural elderly people, generally with low educational levels and unfamiliar with the operation rules of online loan platforms, are easily misled into signing unreasonable agreements.

4) Fraud in the form of agriculture-related digital financial services

Fraudsters impersonate staff from banks and insurance companies, using pretexts such as "handling agricultural insurance", "claiming online grain subsidies", and "upgrading rural endowment insurance" to send fake links via text messages, luring the elderly into purchasing fake insurance and obtaining their personal privacy information.

(2) Multiple Harms of Financial Fraud to Rural Elderly People

1) Causing property losses in old-age security

The income sources of rural elderly mainly include pensions, alimony from children and a small amount of income from farming. Their savings are limited and their ability to resist risks is weak. Once they encounter digital financial fraud, they often lose all their pension savings, which directly leads to difficulties in their later life. Some elderly people even cannot afford medical expenses due to property losses, which exacerbates the hardship of their lives.

2) Causing physical and mental health problems for the elderly

After the elderly are deceived, they often fall into intense self-blame and anxiety, thinking that they "have become a burden to their children" and thus suffer from enormous mental pressure. Some elderly people, unable to accept the reality of property loss, experience problems such as insomnia and loss of appetite, and may even trigger chronic

diseases like hypertension and heart disease, which seriously endanger their physical and mental health.

3) Undermining family harmony and social relations

Property loss is likely to trigger conflicts between the elderly and their children. Children may resent the elderly for trusting fraudsters easily, which undermines the harmony of family relationships. If multiple elderly people fall victim to the same fraud case, it may also lead to group appeals, lawsuits and other issues, increasing the pressure on rural grassroots governance and people's courts.

4) Impeding the development and construction of rural inclusive finance

Frequent digital financial fraud cases can make rural elderly groups develop a resistance to formal digital financial services. Due to the fear of being scammed, they may refuse to use convenient tools such as mobile banking and mobile payments, and even hold a skeptical attitude towards low-risk wealth management products launched by banks. This rejection directly hinders the rooting of digital inclusive finance in rural areas.

3. Analysis of the Causes of Frequent Financial Fraud Against Rural Elderly People

(1) Internal Causes: The Unique Characteristics of the Elderly Group and Insufficient Rural Control Capabilities

1) Low educational level and poor risk identification ability

Most elderly people in rural areas have a low level of education and little knowledge of financial matters. They find it difficult to distinguish the falseness of "high-return" investment projects and are not familiar with the operation procedures and risk points of digital payments. When faced with the sweet talk and small favors from fraudsters, they are easily tempted by immediate interests and lack the ability to make rational judgments. Against the backdrop of the digital divide among rural elderly people, this group has a lagging understanding of new digital fraud methods and weak awareness of prevention.

2) Lack of spiritual needs leading to vulnerability to emotional manipulation

With the acceleration of urbanization, a large number of young and middle-aged rural laborers have gone out to work, leading to an increase in the number of elderly people left behind in rural areas. These elderly people lack the company and care of their children, and their spiritual life is relatively empty. Fraudsters take advantage of this by regularly visiting them in person, chatting with them, or showing concern online to gain their trust, and then seize the opportunity to commit fraud. The elderly often lower their vigilance against fraudsters because they feel "emotional care".

3) Insufficient intensity and accuracy of anti-fraud publicity at the grassroots level

Rural grassroots organizations mostly use traditional methods such as hanging banners, distributing leaflets, and holding villagers' meetings for anti-fraud publicity. The content is vague and the forms are single, lacking personalized designs for the elderly. The publicity language is mostly written expressions, which do not conform to elderly population's elderly groups' resulting in low publicity frequency and difficulty in forming a continuous warning effect. Some village cadres do not pay enough attention to anti-fraud work, thinking that fraud cases are far from their villages, lacking subjective initiative and having a fluke

mentality, leading to the publicity work becoming a mere formality.

4) Weak Digital Literacy and Foundations among the Elderly Group

The digital technology usage ability of rural elderly people is generally low. Most of them can only use the call and text message functions of mobile phones, and are not familiar with operations such as WeChat transfers and APP downloads on smart phones. This lack of digital ability prevents the elderly from obtaining formal financial knowledge and anti-fraud information through online channels, and also makes them more likely to fall into traps when facing online inducements from fraudsters due to operational errors or lack of understanding of risks.

(2) External Causes: The Dual Impact of the External Environment and Fraudulent Means

1) Increased precision of fraud due to information leakage

In the digital age, the problem of personal information leakage is becoming increasingly serious. Some illegal merchants or platforms illegally sell the collected information of rural elderly people, such as names, addresses, phone numbers, and family situations, to fraudsters. Based on this information, fraudsters tailor fraud scripts and carry out precise fraud targeting the needs and weaknesses of the elderly, which greatly increases the success rate of fraud.

2) Diverse fraud methods lead to great difficulty in supervision

The methods of financial fraud are showing a trend of becoming more professional, concealed, and digital. Fraudsters are constantly changing their tactics, evolving from traditional offline lecture fraud to complex fraud that combines online and offline approaches. At the same time, the characteristics of cross-regional and gang-related crimes are obvious, which pose great difficulties for the police in investigation and evidence collection. In addition, some rural areas are remote, with limited police resources, and insufficient capabilities in early warning and crackdown on fraud cases, making it difficult to form effective control.

3) The supply of rural financial services remains insufficient

In some rural areas, there is a scarcity of formal financial institution branches, resulting in a narrow coverage of financial services and inconvenience for the elderly in handling businesses such as deposits and wealth management. Meanwhile, staff at some financial institutions lack a strong sense of service towards elderly customers: they fail to provide patient and detailed explanations of financial knowledge, nor do they offer tailored services that align with elderly groups' digital literacy levels. This leads to insufficient understanding of formal financial products among the elderly. When formal financial services cannot meet their needs, the elderly are more likely to be misled by the false propaganda of fraudsters.

4. Countermeasures and Suggestions for Improving the Financial Fraud Prevention Ability of Rural Elderly People

(1) Improving Elderly Groups' Own Anti-Fraud Literacy and Digital Adaptability

- 1) Carry out targeted financial knowledge popularization. Join hands with local police stations, banks, law firms and

other institutions to form an "Elderly Financial Knowledge Popularization and Legal Publicity Group" and carry out lectures in rural areas. The content of the lectures should be in line with the cognitive level of the elderly, avoiding the use of professional terms. Professionals can use "plain language" to explain common fraud methods, identification methods and rights protection channels. For example, through the form of "explaining the law with cases", tell the local elderly fraud cases, so that the elderly can intuitively understand the tricks of fraudsters; explain the precautions for using bank cards and mobile phone transfers, and remind the elderly not to easily disclose personal information, not to click on unfamiliar links at will, and not to transfer money to strangers.

2) Filling the emotional gap with cultural life

Grassroots village committees and social organizations should take the initiative to build social and activity platforms for the elderly, provide materials such as newspapers and chess that the elderly often need, and regularly organize popular cultural activities such as square dance performances and chess competitions, so that the elderly can enrich their daily lives, gain a sense of belonging, and alleviate spiritual loneliness. Village cadres need to regularly sort out information about elderly groups whose children work outside for a long time and lack companionship. Through regular visits, heart-to-heart talks, etc., they can also link up with professional psychological service institutions and volunteer teams to regularly carry out door-to-door psychological counseling services in villages. For emotions such as loneliness and anxiety that the elderly may experience, one-on-one communication, companionship and emotional counseling should be provided to accurately meet their psychological needs.

3) Launch basic digital skills training courses

In response to the shortcomings of rural elderly people in digital skills, a special training program on "Mobile phone Use and Fraud Prevention" has been carried out. The training content focuses on basic operations such as the safe use of WeChat and the identification of regular financial apps, with the key aim of helping the elderly avoid online fraud traps. The training adopts a "one-on-one" assistance model, organizing returning young people, rural teachers, and college student volunteers as "digital helpers" to teach the elderly how to use mobile phones hand in hand. At the same time, an illustrated and easy-to-understand "Manual on Mobile Phone Fraud Prevention for the Elderly" has been compiled and distributed to the elderly for them to consult at any time.

(2) Strengthen the Adaptability of Grassroots Anti-Fraud Propaganda to the Elderly Group

1) Innovate anti-fraud publicity forms

Abandon the "flood irrigation" style of publicity and carry out anti-fraud publicity in forms that the elderly like. For example, integrate anti-fraud knowledge into folk performances such as short videos, clapper talks, and local operas, and perform them at rural fairs and squares; produce anti-fraud publicity posters and cartoons and post them in places where the elderly often go, such as village committees, clinics, and canteens; use rural radio to broadcast anti-fraud reminders regularly every day, and broadcast local fraud cases in dialects to enhance the intimacy and warning effect of the publicity.

For the elderly group with relatively high digital literacy, a "fraud prevention knowledge points ranking" is set up in the village affairs WeChat group. Farmers can accumulate points by participating in activities such as watching short plays and

offline lectures, with clear point rules, such as 2 points for watching a short play once. Points can be exchanged for agricultural materials or daily necessities, aiming to transform farmers from being passively unwilling to learn to actively participating in fraud prevention learning with interest.

2) Consolidate the Responsibilities of Grassroots Cadres

Incorporate the work of preventing fraud against rural elderly people into the daily work assessment of grassroots village committees, and clarify the publicity responsibilities of village cadres. Village cadres are required to conduct regular visits to the elderly in the village, especially empty-nest elderly and those with weak digital literacy, to explain anti-fraud knowledge to them one-on-one. Establish a three-level anti-fraud early warning system consisting of "village cadres - grid workers - village representatives" to timely investigate suspicious persons and activities in the village, and report any signs of fraud immediately. At the same time, regularly organize the elderly to participate in activities such as anti-fraud knowledge quizzes and simulated fraud scenario responses to improve their practical response capabilities.

3) Improve the Supply of Rural Financial Services

Promote formal financial institutions to set up more service outlets in rural areas, adding ATMs and financial service stations to provide the elderly with convenient services such as deposits, withdrawals, and financial consulting. Staff of financial institutions should take the initiative to visit the elderly to explain financial products, and recommend low-risk and stable financial management and insurance products according to elderly groups' risk tolerance. At the same time, set up "elderly anti-fraud consulting windows" in service outlets to provide the elderly with free anti-fraud consulting and rights protection guidance, and arrange special personnel to assist the elderly in operating digital financial tools such as mobile banking to reduce operational risks.

(3) Strengthen the External Anti-Fraud Prevention and Control Governance System

1) Strengthen efforts to crack down on fraud

Public security organs should strengthen cooperation with rural grass-roots organizations, establish a rapid response mechanism for fraud cases, promptly accept fraud reports from the elderly, and intensify the investigation of financial fraud cases involving the elderly. For cross-regional and gang-related fraud cases, special crackdown operations should be carried out to severely punish fraudsters. At the same time, typical fraud cases should be publicly exposed, and regular legal publicity should be conducted to prevent fraudsters from easily targeting rural elderly people.

2) Strengthening Personal Information Protection

Relevant departments should strengthen supervision and crackdown on personal information leakage, and severely punish the acts of illegally collecting and selling the personal information of the elderly. They should urge e-commerce platforms, medical institutions, rural service institutions, etc. to strengthen information security management, establish and improve personal information protection systems, and prevent the leakage of elderly groups' information. Village cadres should vigorously publicize the importance of personal information protection to the elderly and remind them not to arbitrarily disclose sensitive information such as ID card numbers, bank card numbers, and home addresses to strangers.

3) Establishing a Collaborative Guarantee Mechanism

Establish an anti-fraud collaborative working mechanism led by grassroots governments and involving departments such as public security, finance, civil affairs, and justice.

Regular joint meetings should be held to analyze the new trends and characteristics of fraud against rural elderly people and formulate targeted prevention and control measures. Encourage social organizations and volunteers to participate in anti-fraud work for rural elderly people and carry out public welfare activities caring for the elderly. Establish a green channel for elderly people's fraud rights protection, simplify the rights protection process, provide legal aid and psychological counseling for defrauded elderly people, and help them recover losses and get rid of psychological shadows.

5. Conclusion

While the wave of digital finance has injected new momentum into rural development, it has also subjected financial security to new challenges. This article focuses on the elderly rural population in key assistance areas for rural revitalization, and deeply analyzes the multiple practical difficulties they encounter in enhancing their awareness of financial fraud prevention in the context of digital finance. The study finds that the interweaving of issues such as the weak risk identification ability of the elderly group due to the deepening digital divide, the lack of localized educational resources adapted to their cognitive characteristics, the declining effectiveness of traditional propaganda and education models, and the insufficient supply of formal financial services in rural areas has exposed the personal property of elderly farmers to risks, hindering the effective implementation of inclusive financial policies and the sustainable process of rural revitalization.

Based on this, this paper argues that improving the financial fraud prevention capabilities of rural elderly groups cannot rely on single or short-term intervention measures, but must shift towards a systematic and sustainable governance mindset. Internally, efforts should focus on fostering the elderly groups' own literacy: popularizing financial knowledge tailored to their cognitive levels, enriching their spiritual and cultural lives to resist emotional fraud, and implementing "one-on-one" digital skills support to bridge the digital divide. Externally, it is necessary to strengthen the adaptive services and publicity innovation of grassroots organizations, consolidate the responsibilities of cadres, improve the supply of rural financial services, and enhance the elderly groups' trust in formal channels.

Given that college students are concerned about social hot issues, the author intends to break through the "sameness" of existing countermeasures and provide suggestions that are "down-to-earth" and "operable". These discussions aim to contribute practical and inspiring solutions to solving the problem of financial safety education for the elderly in rural areas. Safeguarding the "money bags" of rural elderly is not only a micro-need to ensure their well-being in old age and maintain family harmony, but also an indispensable part of the macro task of consolidating the foundation of rural financial security, ensuring that the dividends of digital finance truly benefit the people, and promoting the comprehensive revitalization of rural areas, so as to build a rural digital financial environment that is friendly, safe and credible for the elderly.

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References

- [1] X.Y. Wang, S.E. Liu: Analysis on Risk Prevention and Governance of Rural Financial Fraud, *Journal of Financial Education*, Vol.30 (2017) No.06, p.21-25.
- [2] J.H. Li: Analysis and Governance of Rural Financial Fraud Risk Prevention, *Modern Marketing (Late Issue)*, Vol. (2019) No.30, p.42-43.
- [3] Y.K. Fan, Y. Zhang: Research on the Protection of Basic Rights of Vulnerable Groups in the "Digital Divide", *Journal of Hubei University of Economics (Humanities and Social Sciences Edition)*, Vol.19 (2022) No.12, p.89-92.
- [4] L.J. Zhou, L. Han, and J. Xiu: How Digital Inclusive Finance Helps Rural Revitalization: From the Perspective of Industrial Development, *South China Finance*, Vol. (2022) No.04, p.70-78.
- [5] Z.Z. Wu, K.D. Zhu: The Formation Mechanism and Assistance Paths for Rural Digital Vulnerable Groups, *Anhui Rural Revitalization Research*, Vol.3 (2024) No.02, p.31-40.