

The Role of Social Media in Farmer's Perceived Social Support and Stress

Anchal Sharma* & Arun Kumar**

anchalpandit47@gmail.com

*PhD Scholar, Department of Psychology, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand

**Associate Professor, Department of Psychology, Gurukula Kangri (Deemed to be University), Haridwar, Uttarakhand

ABSTRACT

The rapid spread of smartphones and affordable internet has changed how farmers access agricultural knowledge. Many now rely on platforms like WhatsApp, YouTube, and Facebook not only for crop advice, weather updates, and market prices but also to stay connected with peers. While the economic value of these platforms is clear, their influence on farmers' psychological well-being has received less attention. This study examined whether social media use is linked with farmers' perceived social support and their levels of stress. Data were collected from 100 farmers, and results showed that social media users reported higher social support and lower stress compared to non-users. Regression analysis confirmed that perceived social support was the strongest predictor of reduced stress, while social media use also made a meaningful contribution. These findings suggest that digital platforms function not only as sources of information but also as supportive spaces that help farmers deal with uncertainty and lower stress.

KEYWORDS

uncertainty, contribution, Regression, supportive

Introduction

Agriculture has always carried with it a profound sense of uncertainty. Farming is tied closely to external forces beyond human control, unlike many other professions where outcomes are relatively predictable. A sudden change in rainfall, pest infestations, or fluctuations in global market prices can undo months of work. Rising input costs, debts, and limited bargaining power add to these pressures. These uncertainties affect not only the financial well-being of farmers but also their psychological health and family life (Viswanathan et al., 2019). Research across India has consistently shown links between farming-related distress and issues like depression, anxiety, and even suicide. Since agriculture remains the backbone of many rural economies, farmers' psychological well-being is not only a personal concern but a community and societal issue as well (Saju et al., 2024).

Shifting Sources of Support- Historically, farmers relied heavily on local networks for guidance and reassurance. Elders in the family, neighbors, and government agricultural officers were key figures in the transfer of knowledge and in providing encouragement. These traditional sources of support acted as a safety net during challenging times. However, over the years, social and economic transformations have weakened these networks. Urban migration of youth, declining trust in government services, and fragmentation of rural communities have reduced the strength of these traditional systems of support (Palanisamy, 2022). At the same time, the expansion of digital



infrastructure has introduced new opportunities for farmers to connect and support each other. Initiatives such as Digital India and affordable mobile technology have made internet access widely available in rural regions. Social media platforms like WhatsApp, Facebook, and YouTube have gradually transformed into tools for farming knowledge and community building. They serve as digital spaces where farmers share success stories, troubleshoot problems, and provide moral support to one another. These online forums function like modern village squares, enabling farmers to feel connected even when geographically isolated (Devanand et al., 2019).

Social Media as a Source of social support- Perceived social support refers to an individual's belief that reliable help, care, and encouragement are available from family, friends, and significant others (Zimet et al., 1988). Unlike objective support, which focuses on tangible resources, perceived support emphasizes the psychological sense of being valued and cared for. Research has shown that perceived social support plays a critical role in reducing stress, enhancing coping strategies, and improving overall well-being (Deegan & Dunne, 2022).

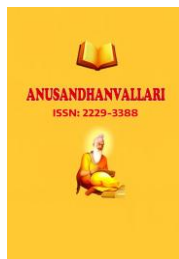
Social media platforms can significantly strengthen perceived social support in farmers' lives. First, they provide instrumental support, such as timely information on weather conditions, government schemes, or crop disease management. Second, they create emotional support, allowing farmers to connect with others who share similar struggles and to receive encouragement and empathy. Third, social media fosters motivational support through success stories, recognition from peers, and virtual communities that celebrate farmers' efforts. Taken together, these functions of social media enhance the perception that farmers are supported, thereby buffering the negative effects of stress.

Stress in farming- Stress is one of the most pressing psychological concerns among farmers. Studies in India show that factors such as crop failure, debt, and market instability are major stressors, often leading to depression, anxiety, and even suicidal ideation (Joshi & Bant, 2022; Viswanathan et al., 2019). For example, research in Karnataka reported that over one-fourth of farmers experienced suicidal thoughts in the past six months (Joshi & Bant, 2022). Similarly, drought-affected farmers in Tamil Nadu displayed high levels of depression and distress linked to financial hardship (Viswanathan et al., 2019). More recent qualitative findings confirm that while farming challenges heighten stress, supportive networks play a vital protective role (Saju et al., 2024). These insights highlight that stress in farming is not only an individual burden but a wider community issue requiring both economic and psychosocial solutions.

Empirical insights

Evidence from existing studies highlights the relevance of these ideas. For example, research in Haryana, India, demonstrated that information and communication technologies (ICTs) improved farmers' adaptive capacity to climate risks, thereby strengthening their sense of security and available support systems (Chetri et al., 2021). Similarly, a study in Karnataka found that farmers identified social connections and community-based support as essential for maintaining well-being under stress (Saju et al., 2024). Internationally, research with Irish farmers revealed that perceived social support had a significant buffering effect on stress and was closely associated with better psychological outcomes (Deegan & Dunne, 2022). These findings collectively underscore the importance of both access to timely information and strong social networks in promoting farmers' psychological health.

Yet, much of this research has focused either on ICT in general or on traditional offline social networks, leaving an important gap in understanding the specific role of social media platforms in shaping farmers' perceived social support. While there is robust evidence that social media enhances knowledge exchange and improves farming practices (Aker, 2011), its implications for farmers' mental health, particularly in the Indian context, remain underexplored. Despite growing recognition of mental health challenges among agricultural communities, limited scholarship has examined how digital connectivity influences perceived social support and stress. Most available studies emphasize technical outcomes such as productivity gains, market access, or climate adaptation. Far less



attention has been given to the ways in which online interactions foster a sense of belonging, reassurance, and shared identity among farmers. Considering the central role that perceived social support plays in reducing stress and sustaining farming communities, this research gap is both striking and urgent.

Methods

Objectives:

1. To explore the relationships between farmers' social media use, perceived social support, and stress.
2. To determine whether farmers' social media use predicts stress levels after accounting for perceived social support.

Hypotheses:

1. Farmers who use social media will show a significant correlation with perceived social support and stress.
2. Farmers' perceived social support and social media use together will predict their stress levels.

Sample:

The study included 100 farmers aged 25–50 years, all belonging to medium socioeconomic backgrounds. Participants were drawn from rural villages in Uttar Pradesh. About half reported using social media for farming purposes, while the others did not. A purposive sampling technique was applied to ensure balanced representation of users and non-users.

Measures:

Social Media Use. Farmers were asked whether they used WhatsApp, YouTube, or Facebook for agricultural information. Responses were coded as Yes (1) or No (0).

Perceived social support It was measured with the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988), a 12-item scale rated from 1 (very strongly disagree) to 7 (very strongly agree). Higher scores indicate greater perceived social support. Internal consistency was strong ($\alpha = .90$).

Stress. Stress was assessed with the 10-item Perceived Stress Scale (PSS-10; Cohen et al., 1983). Scores theoretically range from 0 to 40; in this sample, observed scores ranged from 13 to 28. Internal consistency was acceptable ($\alpha = .82$).

Procedure:

Data was collected through face-to-face interviews in villages. Farmers provided informed consent and were assured of confidentiality.

Analysis:

Data were analyzed using SPSS 26. Descriptive statistics, correlations, and regression analyses were conducted.

Results

Table 1: Descriptive Statistics of Study Variables (N = 100)

Variables	M	SD	Min.	Max.
Social Media Use (1 = Yes, 0 = No)	0.54	0.50	0	1
Perceived social support	48.6	8.2	32	68
Stress	21.4	4.6	12	32

Note. Social media coded as Yes = 1, No = 0.

Table 2: Correlations Among social media, Perceived social support and Stress Variables

Variables	Social Media use	PSS	Stress
Social Media use	—	.31**	-.29*
PSS	.31**	—	-.36**
Stress	-.29*	-.36**	—

*Note. **p < .01, p < .05.

Table 3: Regression Analysis Predicting Stress (N = 100)

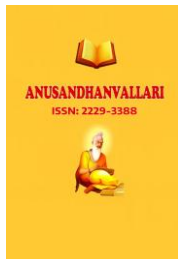
Predictor	B	SE B	β	t	p
PSS	-0.35	0.10	-0.34	-3.5	< .01
Social Media Use	-0.28	0.12	-0.28	-2.33	< .05

Note. $R^2 = .31$, $F(2,97) = 21.9$, $p < .001$.

Discussion

The results revealed that farmers who used social media reported significantly higher levels of perceived social support and lower stress compared to those who did not. This finding underscores the dual role of social media: it not only serves as a platform for agricultural knowledge exchange but also as a psychological resource that enhances farmers' well-being.

One possible explanation is that social media increases farmers' sense of connectedness and belonging. In rural settings where physical isolation is common, online groups provide constant reassurance that others are facing



similar problems. WhatsApp groups allow farmers to discuss immediate issues, while YouTube channels offer educational videos that reduce uncertainty and empower decision-making. These interactions foster a stronger perception of social support, which, in turn, buffers the impact of stress.

The regression analysis further highlighted that perceived social support was the strongest predictor of reduced stress, even more than social media use itself. This suggests that it is not merely the presence of technology that matters, but the quality of social connections and reassurance derived from it. This aligns with prior research showing that social support consistently acts as a protective factor against stress and poor mental health outcomes (Zimet et al., 1988; Deegan & Dunne, 2022). Social support enhances coping strategies, instills confidence, and reduces feelings of helplessness, all of which are crucial for farmers who face unpredictable challenges. However, the study also acknowledges risks. Social media can sometimes become a source of misinformation, leading to confusion or the adoption of ineffective farming practices. In addition, excessive reliance on online communities could potentially increase stress if farmers are overwhelmed by negative stories or unrealistic comparisons. Prior studies suggest that without digital literacy, farmers may not always critically evaluate the quality of information they encounter (Islam et al., 2020).

Conclusion:

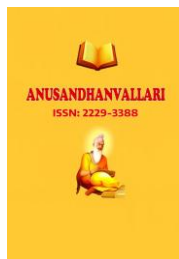
This study demonstrates that social media use is associated with higher perceived social support and lower stress among farmers. Importantly, perceived social support emerged as the strongest protective factor, highlighting the critical role of emotional and social reassurance in coping with farming challenges. Digital platforms enhance this sense of support by connecting farmers with peers, offering encouragement, and providing both instrumental and emotional resources.

Limitations:

1. The sample size was modest (100), limiting generalizability.
2. Self-report measures may include bias.
3. The cross-sectional design does not allow causal conclusions.
4. Future research could use larger, multi-state samples, longitudinal designs, or qualitative interviews to better understand farmers' experiences with digital platforms.

Practical Implications

1. Digital Extension Services: Government and agricultural agencies can use WhatsApp-based advisories and YouTube tutorials to reach farmers directly.
2. Farmer Training: Digital literacy programs should help farmers make effective and safe use of online resources.
3. Community Networks: Encouraging farmers to form peer WhatsApp groups may reduce isolation and stress.
4. Policy: Expanding rural internet infrastructure could improve both farming outcomes and mental well-being.



References

- [1] Aker, J. C. (2011). Dial “A” for agriculture: A review of information and communication technologies for agricultural extension in developing countries. *Agricultural Economics*, 42(6), 631–647. <https://doi.org/10.1111/j.1574-0862.2011.00545.x>
- [2] Chetri, P., Sharma, U., & Ilavarasan, P. V. (2021). Role of information and ICTs as determinants of farmer’s adaptive capacity to climate risk: An empirical study from Haryana, India. *arXiv*. <https://doi.org/10.48550/arXiv.2108.09766>
- [3] Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385–396. <https://doi.org/10.2307/2136404>
Deegan, A., & Dunne, S. (2022). An investigation into the relationship between social support, stress, and psychological well-being in farmers. *Journal of Community Psychology*, 50, 3054-3069. <https://doi.org/10.1002/jcop.22814>
- [4] Devanand, I. I., & Kamala, I. M. (2019). Innovative Extension Approach for Sustainable Agricultural Development: WhatsApp Groups for Farming Solution. *Current Journal of Applied Science and Technology*, 37(3), 1-8. <https://doi.org/10.9734/cjast/2019/v37i330292>
- [5] Joshi, A. R., & Bant, D. D. (2022). Perceived stress and suicidal ideation among the farmers: A cross sectional study from the rural field practice area of a medical college in Karnataka. *Healthline*, 13(1), 47–53.
- [6] Palanisamy, M., Ravichandran, T., & Bhupathy, P. (2022). Factors influencing youth in family farming: A study from Southern India. *Current Agriculture Research Journal*, 13(2).
- [7] Saju, S., Reddy, S. K., Bijjal, S., & Annapally, S. R. (2024). Farmer’s mental health and well-being: Qualitative findings on protective factors. *Journal of Neurosciences in Rural Practice*, 15(2), 307–312. https://doi.org/10.25259/JNRP_403_2023
- [8] Viswanathan, D. J., Veerakumar, A. M., & Kumarasamy, H. (2019). Depression, suicidal ideation, and resilience among rural farmers in a drought-affected area of Trichy district, Tamil Nadu, India. *Journal of Neurosciences in Rural Practice*, 10(2), 238-244.
- [9] Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52(1), 30–41. https://doi.org/10.1207/s15327752jpa5201_2