

Using Mixed Methods to Examine Symptoms of Depression among Cooperative Dairy Farmers

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Introduction

Farmers experience high risks of stress, depression, and suicide.¹ Risk factors are well documented but protective factors are seldom examined.²

Agricultural cooperatives are founded by farmers to retain markets, access services, and participate in decision-making.³

It is unknown whether participation in cooperative programs can mitigate symptoms of depression. Furthermore, the impact of social support on stress is inconclusive and its effect on farmers is less known.⁴

The project goal is to examine the impact of cooperative resources and social support on symptoms of depression among Midwest dairy farmers.



References

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Methods

Semi-structured interviews with farmers, cooperative leaders, and agriculture educators were used to design a survey to examine whether using cooperative services and engagement activities and having social support impact symptoms of depression among dairy farmers.



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| <ul style="list-style-type: none"> • Cooperative structures • Programs offered • Farmers' interactions • N = 12 | <ul style="list-style-type: none"> • Programs used • Social support • Symptoms of depression • N= 45 |
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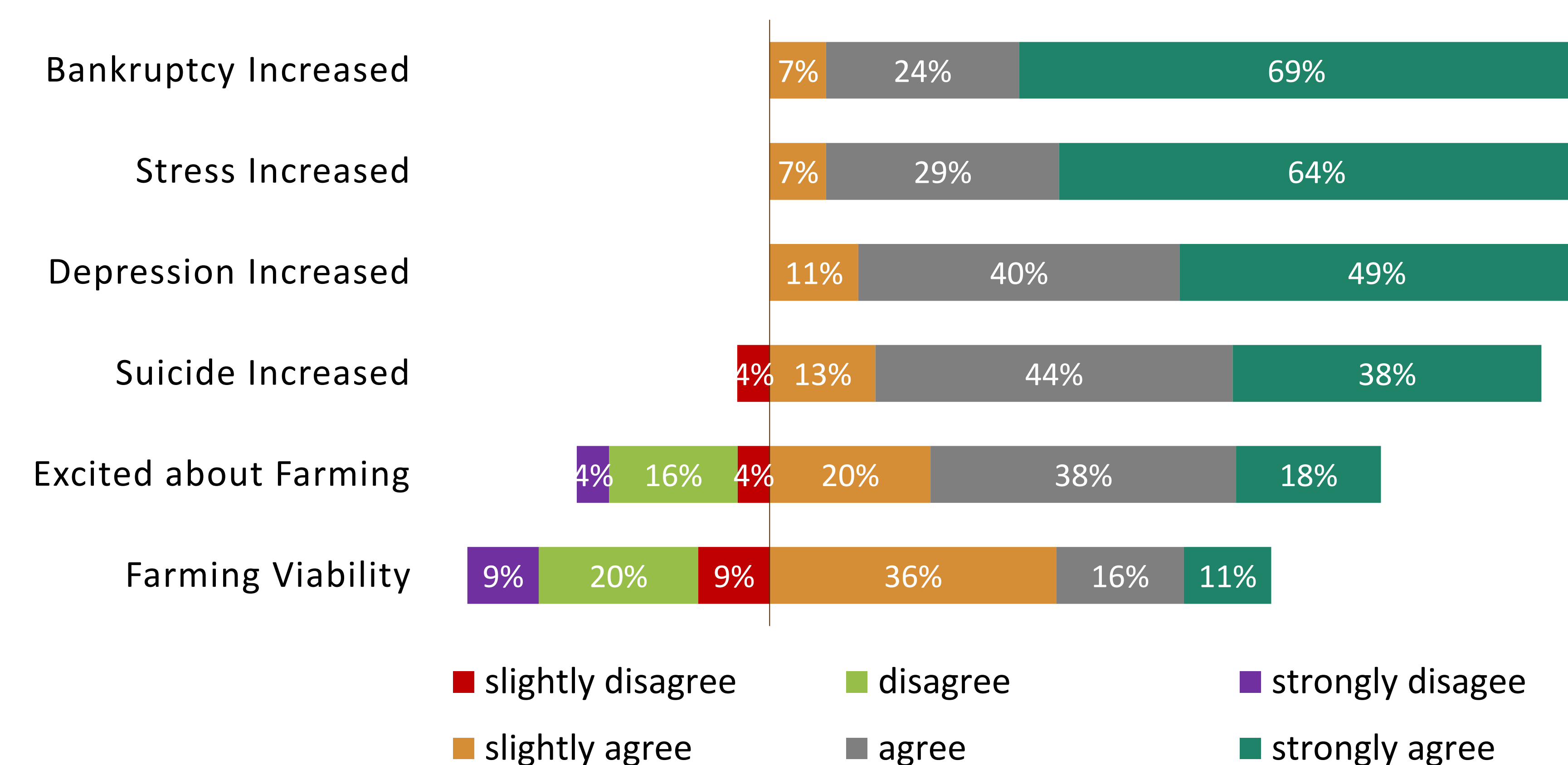
Instrument Development

Themes	Core Survey Items
Stress among farmers	<ul style="list-style-type: none"> • Perceived increases in farm bankruptcy and stress, depression, and suicide among farmers • Perceived farming outlook (strongly disagree to strongly agree)
Cooperative resources	<ul style="list-style-type: none"> • Services used • Engagement attended (number of use)
Cooperatives' role in farmers' mental health	<ul style="list-style-type: none"> • Perceived protectiveness of cooperative market stability, services, and engagement in mental health (strongly disagree to strongly agree)

Key Findings

Farm bankruptcies, stress, depression and suicide have increased.

Table 1. Perceptions of Mental Health and Farming Outlook



Using cooperative services such as educational opportunities, mentorship programs, and advice from staff and having social support such as someone who will listen to them or provide them emotional, informational, and tangible assistance were significantly associated with fewer symptoms of depression ($p < 0.05$).

Engaging in most cooperative activities was insignificantly associated with fewer symptoms of depression ($p > 0.05$). Attending cooperative policy discussions was significantly associated with increased symptoms of depression ($p < 0.05$).

Discussion

Findings on cooperative resources were mixed. Although services such as educational opportunities, mentorship programs, and advice from staff shown reduced symptoms of depression, engagement such as policy discussions was associated with increased symptoms of depression. Future research with a large sample size should examine which engagement activities reduce symptoms of depression.

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