

Organizational Resources and Social Support Influences on Stress and Depression: A Comparison among Cooperative and Non-Cooperative Farmers

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Background

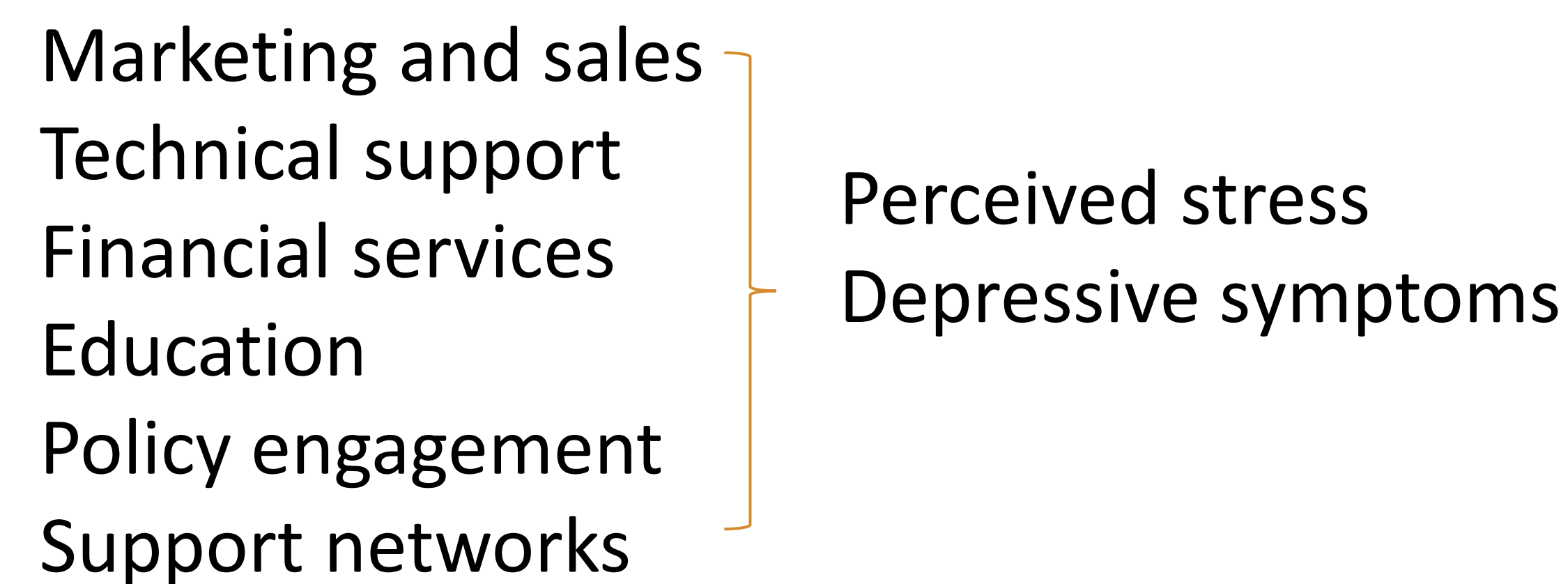
Agriculture

4th


industry with the highest suicide rates

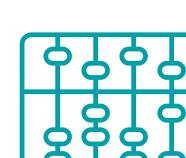
Risk factors are well-documented, but protective factors are less known.


Research objective: examine organizational resources impacts on mental health among Midwest farmers.

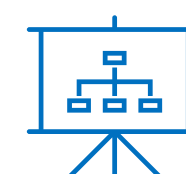


Methods

 **Survey:** demographics, farming characteristics, program participation, stress, depression

 **Exposures:** programs used (never/ever), program satisfaction (dissatisfied/satisfied)

 **Outcomes:** perceived stress (PSS-10, score 0-40), depressive symptoms (CES-D-10, score 0-30)

 **Analysis:** Chi-square tests, t-tests, multiple linear and logistic regressions

Results

The sample included 307 farmers (197 co-op, 110 non-co-op). Using educational programs was associated with decreased perceived stress.

Satisfaction with all programs except for education was associated with decreased perceived stress.

Satisfaction with marketing and sales, technical support, financial services, and educational programs was associated with decreased depressive symptoms.

| Program | Use – PSS Mean (SD), β (SE) | | Use – CES-D Mean (SD), β (SE) | Satisfaction – PSS Mean (SD), β (SE) | | Satisfaction – CES-D Mean (SD), β (SE) | |
|----------------------------|-----------------------------|----------------------------|-------------------------------|--------------------------------------|-----------|--|---------------|
| | Co-op | Non-Co-op | All | Co-op | Non-Co-op | Co-op | Non-Co-op |
| Marketing and sales | | | | | | | |
| Never | - | - | - | Unadjusted: ↓ | - | Unadjusted: ↓ | Unadjusted: ↓ |
| Ever | - | - | - | - | - | - | - |
| Dissatisfied | - | - | - | 18 (4.67) | - | 9 (4.73) | 10 (4.30) |
| Satisfied | - | - | - | 14 (6.21) | - | 7 (4.35) | 7 (5.04) |
| | | | | Adjusted ↓: β = -2.54, SE = 0.91 | | Adjusted ↓: β = -2.37, SE = 0.71 | |
| Technical support | | | | | | | |
| Never | Unadjusted: ↓ 18 (4.57) | Unadjusted: ↓ 20 (3.22) | - | Unadjusted: ↓ | - | Unadjusted: ↓ | Unadjusted: ↓ |
| Ever | 14 (6.63) | 18 (5.83) | - | - | - | - | - |
| Dissatisfied | - | - | - | 17 (5.94) | - | 9 (4.43) | 13 (3.53) |
| Satisfied | - | - | - | 14 (6.23) | - | 7 (4.25) | 7 (4.22) |
| | | | | Adjusted ↓: β = -1.94, SE = 0.97 | | Adjusted ↓: β = -2.62, SE = 0.67 | |
| Financial services | | | | | | | |
| Never | - | Unadjusted: ↓ 20 (3.40) | - | Unadjusted: ↓ | - | Unadjusted: ↓ | Unadjusted: ↓ |
| Ever | - | 17 (6.30) | - | - | - | - | - |
| Dissatisfied | - | - | - | 18 (4.73) | - | 11 (4.66) | 13 (3.68) |
| Satisfied | - | - | - | 14 (6.09) | - | 7 (3.58) | 5 (3.08) |
| | | | | Adjusted ↓: β = -3.19, SE = 1.43 | | Adjusted ↓: β = -4.56, SE = 0.95 | |
| Education | | | | | | | |
| Never | - | Unadjusted: ↓ 20 (4.30) | - | Unadjusted: ↓ | - | Unadjusted: ↓ | Unadjusted: ↓ |
| Ever | - | 18 (5.41) | - | - | - | - | - |
| Dissatisfied | - | - | - | 17 (5.58) | - | 9 (4.50) | 11 (6.34) |
| Satisfied | - | - | - | 14 (6.57) | - | 7 (4.68) | 7 (3.73) |
| | | | | Adjusted ↓: β = -1.34, SE = 0.57 | | Adjusted ↓: β = -1.90, SE = 0.82 | |
| Policy engagement | | | | | | | |
| Never | - | - | - | Unadjusted: ↓ | - | - | - |
| Ever | - | - | - | - | - | - | - |
| Dissatisfied | - | - | - | 17 (4.78) | - | - | - |
| Satisfied | - | - | - | 14 (6.41) | - | - | - |
| | | | | Adjusted ↓: β = -2.50, SE = 1.10 | | - | |
| Support networks | | | | | | | |
| Never | Unadjusted: ↑ 14 (6.68) | Unadjusted: ↑ 18 (5.02) | - | - | - | - | - |
| Ever | 16 (6.05) | 20 (4.71) | - | - | - | - | - |
| Dissatisfied | - | - | - | - | - | - | - |
| Satisfied | - | - | - | - | - | - | - |
| | | | | Adjusted ↓: β = -3.07, SE = 1.04 | | - | |

Discussion

Organizational resources' impacts on mental health are program-specific. Organizations are potential partners in promoting farmers' mental health.

Acknowledgements

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