Coping Mechanisms Used by Farmers to Encounter Psychosocial Problems: Literature Review

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Abstract:
Psychosocial problems in farmers are big problems that are often experienced by farmers and can have a significant impact on their overall welfare. Psychosocial problems often found in farmers are climate change, industrial restructuring, crop failure, and even family responsibilities. This study aims to analyze the description of the coping mechanisms used by farmers in dealing with psychosocial problems. The method used in this study was a literature review article from article search engines such as PubMed, Google Scholar, and Science Direct which was analyzed using the PRISMA technique by including articles published in the last five years. The results of the study found that the impact of psychosocial problems experienced by farmers has stress, worry, and fear at work, which can cause burnout and even threats of suicide because of the demands of the head of the family. Therefore, an appropriate coping mechanism for solving psychosocial problems experienced by farmers is necessary. The forms of coping strategies applied are problem-focused coping strategies and emotion-focused coping strategies.

Keywords:
coping; farmers; psychosocial

INTRODUCTION

Agriculture is a form of production activity based on the growth process of plants and animals, which includes plantations, forestry, fisheries, and animal husbandry. The agricultural sector is still the mainstay of the Indonesian state to support the people's economic recovery because of the significant absorption of labor and foreign exchange generated (Kusumaningrum, 2019). Agronursing is the management of nursing care and service management that focuses on clients (individuals, families, groups, and communities) and is holistic and comprehensive in the agricultural sphere. Agronursing is very suitable for implementation in Indonesia as an agricultural country because most of the Indonesian population works in the agricultural sector (Kurniyawan et al., 2023a). Farmers are at high risk of developing high levels of mental health distress and may suffer stress (Kurniyawan et al., 2023b).

Psychosocial problems are defined as changes in an individual's life, both psychological and social, that have a reciprocal influence and are considered the cause of mental disorders or health problems in reality (Muzakki et al., 2019). Psychosocial problems experienced by farmers can have a significant impact on their overall well-being. Prolonged stress can lead to declining mental health, depression, anxiety, and sleep disturbances. In this issue, it is crucial to understand the
coping mechanisms used by farmers in dealing with the psychosocial challenges they face (Wurarah et al., 2020).

Coping mechanisms are strategies that individuals use to manage stress sources and those problems (Wuryaningsih et al., 2019). In the farmer context, coping mechanisms can include practical strategies such as finding alternative solutions, collaborating with fellow farmers, using humor to unravel tensions, or adapting to changing situations. In addition, coping mechanisms can include social support from family or related institutions (Fitria & Riyadi, 2022). In this article, the findings analyzed will identify research deficiencies and practical implications in developing more effective intervention programs, including agronursing.

METHOD

The method used is a literature review. The literature review was chosen because it produced outcomes in the form of evidence from several studies conducted by previous researchers regarding the psychosocial problems experienced by farmers after crop failure. Search for articles using article search engines, namely PubMed, Google Scholar, and Science Direct. Article search was carried out using the Boolean operator (AND and OR) method with the keywords harvest failure, farmers, and psychosocial problems. The articles found were then analyzed using the PRISMA technique with the inclusion of articles published in the last five years, and the articles provided full text, the languages used were English and Indonesian.

RESULT

After searching for articles using article search engines, namely PubMed and Google Scholar, 112 articles matched the keywords. Then a feasibility assessment was carried out using the PRISMA technique, and ten articles were taken for literature analysis. Ten articles were published from 2019-2023—eight in Indonesian and two in English. Three articles discuss psychosocial problems and their impact on farmers. Five articles discuss the coping strategies farmers use to reduce stress, and two articles discuss the relationship between resilience towards the level of distress of farmers.
### Table 1. Results of the Selected Literature

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<tr>
<td>Wuryaningsih, E. W., Holivia, T. M., &amp; Kurniyawan, E. H.</td>
<td>Relation of Resilience with Psychological Distress on Tobacco Farmers in Kalisat District, Jember Regency.</td>
<td>This study aims to analyze the relationship between resilience and distress psychology of tobacco farmers in Kalisat District, Jember Regency.</td>
<td>The population of this study are tobacco farmers as the primary job in the tobacco season and also workers agricultural land owners with exclusion criteria aged &lt;17 years. The sample used is 96 respondents in 6 villages in Kalisat District, Jember Regency.</td>
<td>This study used a cross-sectional study design with a cluster random sampling technique. The instrument used in this study was a resilience scale-14 to measure resilience. Researchers use the SPSS 20.0 application for data processing and data analysis statistics.</td>
<td>Tobacco farmers are prone to various physical, psychological, or mental health problems due to several problems such as Green Tobacco Sickness (GTS), crop failure, and weather Anomalies. The results of this study are expected to help to improve occupational health services, especially for the mental health of farmers, through health services that are promotive, preventive, curative, and rehabilitative with a nursing care approach in the community to a particular group of agricultural workers.</td>
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<tr>
<td>Wuryaningsih, E. W., Kurniyawan, E. H., &amp; Faiza, W. M.</td>
<td>Overview of The Coping Strategy of Farmers in The Flood Disaster Area of Wonoasri Village, Tempurejo District, Jember Regency.</td>
<td>This study aims to analyze overview of farmer characteristics and strategies coping with farmers in the face of flooding in Wonoasri Village, Tempurejo District.</td>
<td>The population of this research is all farmers, the total sample are 290 participants in Wonoasri Village, Tempurejo District. Jember Regency.</td>
<td>This study used a quantitative descriptive design with measuring tools in the form of questions for participant characteristics and brief cope with 28 question items assessment using a Likert scale.</td>
<td>Disaster flooding in agricultural areas can cause losses, especially crop failures, such as declining farmer economic conditions and declining productivity levels of crops in the agricultural sector; this will affect the coping management of farmers in dealing with these problems. The results of this research dimension coping strategy used by farmers are Emotional-focused coping with a median value of 36.00, and the highest indicators of coping strategies are active coping, religious coping, behavioral disengagement, and substance use.</td>
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Table 1: Community Service Activities to Strengthen the Mental Health of Elderly Farmers

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<tr>
<td>Kurniyawan, E. H., Dewi, E. I., Wuryaningsih, E. W., Deviantony, F., &amp; Fitria, Y.</td>
<td>Strengthening the Mental Health of Elderly Farmers After the COVID-19 Pandemic</td>
<td>Community service activities to strengthen the mental health of elderly farmers in Sukoreno Village, Jember Regency.</td>
<td>The population of this community service activity is elderly farmers, with a total sample of 30 people in Sukoreno Village, Jember Regency.</td>
<td>Counseling on improving the mental health of elderly farmers was carried out for 60 minutes using the media of leaflets, x-banners, and banners with the lecture method followed by discussion, questions, and answers.</td>
<td>Elderly farmers need to get family and community support to increase self-efficacy, resilience, and coping mechanisms in order to reduce the stress they experience. Therefore, community service activities are carried out to strengthen the mental health of elderly farmers. The material presented to elderly farmers was entitled mental health for the Elderly, a Mental Health Media Kit from the Ministry of Health of the Republic of Indonesia. The community service activity ended with the distribution of groceries to elderly farmers.</td>
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| Author : Behere, P. B., Chowdhury, D., Behere, A. P., & Yadav, R | Psychosocial Aspect of Suicide in the Largest Industry of Farmers in the Vidarbha Region of Maharashtra | This study aims to determine the psychosocial causes of suicide in the largest agricultural industry in Maharashtra's Vidarbha District. | The population of this study was family members of farmer suicide victims, with a total sample of 98 people in Wardha District, Vidarbha Region. | The study involved compiling psychological autopsy reports from family members of deceased victims. Then the report results from the sample were collected and analyzed regarding age, and occupation-matched controls from the same village were included. | Farmers and the agricultural industry are considered to be the financial backbone of India's GDP. Unfortunately, farmers face many financial hurdles and psychosocial problems that make them feel weak and powerless. They secure loans to ensure bountiful profitable returns and get stressed when they cannot repay the loan due to losses. Psychosocial pressures such as alcohol dependence, problematic interpersonal relationships, and mental illness only compound their difficulties and tempt them to end their lives. Therefore, there is a need for sympathy and support for survivors and dependents of suicide victims from psychosocial pressure. |

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<td>Fitria, D. A., &amp; Riyadi, M. I.</td>
<td>Stress Coping Strategies for Post-Harvest Melon Farmers in Maguwan Village, Sambit District, Ponorogo Regency</td>
<td>This study explains (1) the psychological condition of farmers after harvest failure, (2) the form of applying stress-coping strategies to melon farmers after harvest failure, and (3) the results of applying stress-coping strategies to melon farmers after harvest failure in Maguwan Village, Sambit District, Ponorogo Regency.</td>
<td>The samples were three melon farmers who experienced crop failure in Maguwan Village, Sambit District, Ponorogo Regency.</td>
<td>This research uses a descriptive qualitative approach. In this study, the authors used the data analysis model of Miles and Huberman.</td>
<td>The results showed that (1) the psychological condition of melon farmers after harvest failure experienced anxiety, trauma, depression, disappointment, and pessimism. (2) The application of stress-coping strategies to overcome the psychological condition of farmers after crop failure has a very positive impact because the coping materials aim to control emotions and manage stress well. (3) The form of coping strategies applied is a problem-focused coping strategy (Problem Focused Coping) and an emotion-focused coping strategy (Emotion Focused Coping).</td>
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| Author : Ningrum, S. M., Dewi, E. I., & Kurniyawan, E. H. | Relationship between Work Stress and Fatigue in Rubber Farmers at PTPN XII Kebun Renteng Agung Jember Regency | The study aimed to analyze the relationship between rubber farmers' job stress and work fatigue. | The samples used were 78 PTPN Kebun Renteng rubber farmers, Ajung District, Jember Regency. | The study design used observational analytic research with cross sectional approach and used the sampling technique using simple random sampling. | The results showed that of 78 respondents, there were 73 respondents (92.6%), meaning farmers experienced high stress. Moreover, as many as 78 respondents (100%) experienced high work fatigue. There is a significant relationship between job stress and work fatigue of rubber farmers in PTPN XII Renteng Plantation, Ajung, Jember Regency (p-value 0.000; r = 0.538) have a positive relationship or the higher job stress, the higher work fatigue. Farmers can do relaxation therapy to prevent work stress so that it does not cause work fatigue. |

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<td>Septiani, A. N., Wuryaningsth, E. W., &amp; Kurniyawan, E. H.</td>
<td>Description of Psychological Distress in Tobacco Farmers in Kalisat District, Jember Regency</td>
<td>This study aimed to analyze psychological distress in tobacco farmers in Kalisat, Jember.</td>
<td>The population of this study was tobacco farmers in Kalisat District, totaling 8,688 respondents. The research sample is 91 respondents.</td>
<td>The design of this study was descriptive analysis with cluster sampling and proportional sampling techniques.</td>
<td>The results showed that tobacco farmers had the highest anxiety (73.6%), stress (26.4%), and depression (11%). Psychological distress in farmers is manifested in the form of worries and fears of work, which is generally due to instability from the work of farmers.</td>
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<td>Patuh, A., Wuryaningsth, E. W., &amp; Afandi, A. T.</td>
<td>Description of Stress and Coping Mechanism Farmer in Kalisat Jember</td>
<td>This study aimed to investigate the representation of Stress and Farmers’ Coping Mechanisms in Kalisat Jember</td>
<td>The respondents were measured by using the farmers’ stress questionnaire and Brief farmers’ coping mechanism questionnaire COPE</td>
<td>The results of stress representation and farmer’s coping mechanism analysis showed that the number of farmer’s stress tends to be a cognitive response. Meanwhile, the result of coping mechanisms showed that most farmer’s coping mechanisms focus more on emotion rather than a problem.</td>
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<td>Putra, M. A. R., Dewi, E. I. D., &amp; Kurniyawan, E. H.</td>
<td>Relation of Resilience with Burnout on Rice Farmers in Ampel Village, Wuluhan District</td>
<td>The purpose of this study was to determine the relationship between resilience and burnout on rice farmers in Ampel village, Wuluhan district. This study has 80 rice farmers as a sample</td>
<td>This study used a cross-sectional design with sampling techniques using cluster random sampling. Data retrieval was done by using the resilience scale-14 questionnaire and MBI-GS questionnaire.</td>
<td>The results of this study indicate that the resistance experienced by farmers is 100% high, while burnout is obtained, which is 55% low and 45% high. The results of the bivariate analysis with the Pearson correlation obtained a p-value = 0.003, which means there is a relationship between resilience and burnout among rice farmers in Ampel Village, Wuluhan district. The research results can be used as an evaluation, especially for health services to care more for rice farmers to improve their health.</td>
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Relationship between Self-Efficacy and Social Support with Coping Stress on Horticultural Farmers in Managing Farming Enterprises in Saribudolok Village, as shown by R = 0.477; R² = 0.227; contribution of 22.7%. This means other factors have a more significant percentage (%) in increasing stress coping in horticultural farmers. Other factors in this study were not considered, including problem-solving skills, social skills, optimism, and self-esteem.

**DISCUSSION**

Psychosocial problems are one of the big problems that many farmers still experience. Psychosocial is a condition that occurs in individuals that describes the relationship between a person's social condition and his emotional and mental health, which includes psychological and social aspects or vice versa (Puspita & Dian, 2019). The risk of psychosocial problems among farmers occurs a lot. It continues to increase for several reasons, such as changes in agriculture, industrial restructuring, climate change, and even family responsibilities (Putra et al., 2022). Work demands as a farmer often trigger psychosocial problems that can occur anytime and anywhere.

This statement is supported by the results of a literature review which shows that several psychosocial problems often arise in farmers, such as stress and depression (Septiani et al., 2020). Stress is a mental disorder faced by a person due to pressure from within or outside due to failure to fulfill their needs or desires (Andriyani, 2019). The results show that psychological pressure on farmers is manifested in the form of worry, anxiety, fear, and even instability at work. Work stress for a long time can also cause depression for farmers. This was also discussed by Putra et al. (2022), who stated that psychosocial problems in farmers would interfere with their work and cause burnout, so that work was not optimal. The data emphasize a significant relationship between work stress levels and psychosocial health that must be maintained.

However, these psychosocial problems can be a reason for farmers to take dangerous actions, for example, suicide. This statement is included in the research Behere et al. (2021), which explains some of the causes of suicides experienced by farmers. Some of these causes include demands as the backbone of the family, bad living habits, illness, mental health problems, economic burdens, and even debt due to crop failure, which causes farmers to go bankrupt. They carry a lot of demands and burdens, so this bad thing happens. Therefore, in the 10th article, it is explained that self-efficacy and social support are needed to overcome psychosocial problems (Saragih et al., 2020). So the surrounding environment must play a role in supporting the psychosocial health of farmers through the sympathy and support they must provide (Behere et al.,...
2021). This is in line with the research of Nuryanti et al. (2021) that the environment has a vital role in supporting a person's psychosocial health.

Psychological conditions have a significant relationship to the workload of farmers. This statement is contained in the 6th article, which states that the prevalence of stress in farmers is relatively high, namely 92.6% of respondents. The respondents also said that stress occurs when experiencing fatigue. Work stress for a long time can also cause anxiety for farmers. The data emphasize a significant relationship between the level of work stress and the resulting workload and vice versa; the higher the stress, the higher the fatigue (Ningrum et al., 2020). This statement also relates to the results of the 1st article, which analyzes the relationship between resilience and psychological distress for farmers (Wuryaningsih et al., 2019). These psychological problems are generally due to the burdens and risks of working farmers who depend on nature with unpredictable weather, so resilience and psychological distress have a parallel relationship.

To overcome this, an appropriate coping mechanism is needed. There are two stress-coping strategies: problem-focused and emotion-focused (Andriyani, 2019). Problem-focused coping is a cognitive strategy for reducing stressors by learning new ways or skills to change situations, circumstances, or subject matter. Aspects of this coping strategy include seeking informational support, namely solving problems by seeking information from other people such as doctors, psychologists, or teachers, then confronting coping, namely solving problems concretely, and finally, planful problem solving, namely analyzing every situation that creates a problem, and try to find solutions directly to the problems encountered. The results of the 3rd article review literature show that the farmer has used this coping strategy to solve his psychosocial problems by seeking information from an expert through extension activities in the local area (Kurniyawan et al., 2022). The results of the 5th article also show that farmers combine this strategy with emotion-focused coping (Fitria & Riyadi, 2022).

Emotion-focused coping is a stress management strategy in which individuals respond to stressful situations emotionally, especially by using defensive judgment. Related aspects include seeking social-emotional support, namely seeking emotional/social support; distancing, namely cognitive efforts to get away from problems; escape avoidance, namely imagining or avoiding unpleasant situations; self-control, namely regulating one's feelings or actions, accepting responsibility, namely accepting in carrying out the problems it faces, and positive reappraisal, namely making a positive sense of the situation in the period of personality development which is sometimes religious. The majority of the results of the literature review above show that farmers use this type of coping mechanism to overcome their problems (Fitria & Riyadi, 2022; Patuh et al., 2021; Putra et al., 2022; Wuryaningsih et al., 2019). They are trying to subside or overcome their emotions first to find a way out of the problems they face. However, this 5th article states that farmers combine the two coping strategies to get more optimal results (Fitria & Riyadi, 2022).

CONCLUSION

Psychosocial problems in farmers are proven to have a close relationship with various factors related to their workload. This can cause farmers to become stressed, depressed, and even commit suicide. Therefore, an appropriate coping mechanism is needed to solve their problems, namely problem-focused and emotion-focused coping.
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REFERENCES


