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Analysis of Determinants of Soybean (*Glycine max.*) Market Supply in the Case of Assosa Zone of Benishangul Gumuz Regional State, Ethiopia

Alemayehu Keba Beyene

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Abstract: One of the most significant and essential oilseeds for domestic use, commercial markets, industrial input, and cash cropping is soyabean. Thus, the purpose of this study was to examine the variables influencing the supply of soybean farmers to the market. The study was conducted in Homosha and Assosa woreda of Assosa zone in Benishangul Gumuz regio... [Show More](#)



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Assessment of Public Agricultural Research Investment Trends and Policy Perspectives in Ethiopia

Daniel Hailu

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Abstract: The study examines financial investment trends in public agricultural research in Ethiopia. The budget data from Ethiopian institute of agricultural research (EIAR) and seven regional agricultural research institutes (RARI's) which is supplemented by national agricultural GDP and inflation data were used for this study. Data were analyzed using des... [Show More](#)



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Spatial Analysis of Open Defecation Sites and the Utilization of Public Toilets

Isaac Kwabena Ayereka*, Patience Binambiba Jaman, Samson Austin Ayariga

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Abstract: Nearly one billion people worldwide still practice open defecation. In 2020 about 59.3% of households in Ghana had household toilets while 23% used public toilets (PTs) and 15% did not have toilets. Nearly all homes (98% of the 15%) without access to toilet facility defecate outside in bushes, fields, or gutters. About 100,336 residents of Wa town ... [Show More](#)



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Gemechis Mersha Debela*, Engdasew Feleke Lemma

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Abstract: The agricultural sector remains the main source of livelihood for rural communities in Ethiopia, but the challenge of changing climate continues to pose a serious threat to its development. This study investigated factors affecting smallholder farmers' decisions to adopt adaptation options to climate change in West Ethiopia using data collected from... [Show More](#)



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Review Article

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Mechanisms and Benefits of Equine Therapy for Enhancing Mental Health

Karina Shasri Anastasya*, Indra Gazali Syamsuddin, Meutia Atika Faradilla, Zefanya, Andira Larasari, Daniella Satyasari, Yohana, Endrico Xavierees Tungka, Patricia Liman, Yuliana, Ali Fathi Assegaf, Reza Ramadhan Surya, Eris Sapari, Afif Aminurrohman, Ikhlas Arief Imawan

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Abstract: The problem addressed in this research is the increasing recognition of the complexity of mental disorders, and previous studies have indicated the positive potential of Equine Therapy in addressing various mental conditions. Neurobiological and hormonal changes associated with participation in equine therapy, providing a scientific basis for the... [Show More](#)

Review Article

Mechanisms and Benefits of Equine Therapy for Enhancing Mental Health

Karina Shasri Anastasya^{1,*}, Indra Gazali Syamsuddin², Meutia Atika Faradilla³, Zefanya², Andira Larasari⁴, Daniella Satyasari⁵, Yohana³, Endrico Xavierees Tungka³, Patricia Liman¹, Yuliana⁶, Ali Fathi Assegaf⁷, Reza Ramadhan Surya⁷, Eris Sapari⁷, Afif Aminurrohman⁷, Ikhlas Arief Imawan⁷

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The problem addressed in this research is the increasing recognition of the complexity of mental disorders, and previous studies have indicated the positive potential of Equine Therapy in addressing various mental conditions. Neurobiological and hormonal changes associated with participation in equine therapy, providing a scientific basis for the clinically observed positive effects. On the other hand, as awareness of the complexity of mental disorders and the challenges in their treatment increases, attention to therapy involving interactions with animals, especially horses, is growing. The aim of this research is to deepen the understanding of the mechanisms and benefits of Equine Therapy as an innovative and effective therapy in enhancing individual mental well-being, by detailing previous research results to contribute further to our understanding. The research methodology used in this study is a literature review, involving a critical examination and review of knowledge, ideas, or findings in academically-oriented literature. The results of the study on Equine-Assisted Psychotherapy (EAP) have proven effective in addressing depression and anxiety in adolescents, as well as having the potential as a valuable addition to the treatment of PTSD in first responders and substance use disorders. Despite positive results in increasing self-confidence, social interaction, and well-being, limited public understanding poses a challenge to the recognition of this therapy. Further research is needed to strengthen empirical evidence and understand the positive impact of human-horse interaction in the context of animal-assisted therapy.

Keywords

Equene, Psychotherapy, Therapy, Mental Health

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1. Introduction

Equine therapy, or horse therapy, is a therapeutic approach that utilizes horses as a medium to enhance mental health [1]. This therapy has been used for centuries in various cultures around the world and has proven effective in addressing various mental health issues such as anxiety, depression, and autism. Previous research has shown that equine therapy can provide mental health benefits. For example, a study conducted by [2] shown that equine therapy can help reduce anxiety and depression symptoms in children and adolescents. Another study by Cheak-Zamora atate that the University of Missouri found that equine therapy can improve social and communication skills in children with autism.

On the other hand, as awareness of the complexity of mental disorders and the challenges in their treatment increases, attention to therapy involving interactions with animals, especially horses, is growing [3, 4]. Some studies by [5, 6] indicate that being in the presence of and engaging in activities with horses can have positive effects on various mental conditions, including stress, anxiety, depression, and PTSD (Post Traumatic Stress Disorder). These studies highlight specific aspects of the human-horse relationship that can provide psychological benefits, such as increased self-confidence, emotional attachment, and improved interpersonal skills. Furthermore, some studies have also noted neurobiological and hormonal changes associated with participation in equine therapy, providing a scientific basis for the clinically observed positive effects.

Therefore, this research aims to delve deeper into exploring the potential utilization of equine therapy as an innovative and effective form of therapy to enhance individual mental well-being. By detailing the findings of previous research, this study seeks to contribute additional insights to our understanding of the mechanisms and benefits of equine therapy in the context of treating mental disorders.

Equine-Assisted Psychotherapy (EAP)

Equine-Assisted Psychotherapy (EAP) is a form of therapy that involves the interaction between humans and horses as an integral part of the psychological healing process [7, 8]. This approach is based on the understanding that the relationship between humans and animals, particularly horses, can contribute positively to the development of mental and emotional well-being [9]. In the context of EAP, horses are not just tools or therapy objects but are considered therapeutic partners that can facilitate the individual's transformation process [10]. Interacting with horses can help clients overcome various emotional challenges such as anxiety, depression, and trauma. Through the presence of horses as creatures sensitive to nonverbal expression and responsive to emotional changes, clients can establish a deep connection with these animals [11]. Activities such as feeding, grooming, or direct interaction with horses can create a supportive environment for exploring and understanding the feelings and thought patterns underly-

ing psychological issues [12]. Furthermore, physical engagement with horses can also help improve social skills, self-confidence, and stress management abilities. Horses, as non-judgmental beings without bias, create a safe space for clients to speak and explore their experiences without fear of judgment. Thus, Equine-Assisted Psychotherapy is not merely an alternative therapy method but an approach that respects the complexity of the relationship between humans and animals, acknowledging the unique potential of horses in supporting the psychological healing process.

Equine Facilitated Psychiatry and Psychology

Psychotherapy with a Horse-Based Approach, or Equine-Assisted Psychotherapy (EAP), is a therapeutic method that involves the engagement of humans and horses as an essential part of the psychological healing process [13, 14]. This approach refers to the understanding that the interaction between humans and animals, especially horses, can significantly contribute to the development of mental and emotional well-being for individuals. In the context of EAP, the role of the horse is not merely as a tool or therapy object but is seen as a therapeutic partner with the ability to facilitate the individual's transformation process [15]. The interaction between humans and horses has the potential to help clients overcome various emotional challenges, including anxiety, depression, and trauma.

Through the presence of horses as creatures sensitive to nonverbal expressions and responsive to emotional changes, clients can build a deep connection with these animals [3]. Various activities such as feeding, grooming, or direct interaction with the horse can create a supportive environment for exploring and understanding the feelings and thought patterns underlying psychological issues [16]. Furthermore, physical engagement with the horse also has the potential to improve social skills, self-confidence, and stress management abilities. Horses, as beings free from prejudice and non-judgmental, create a safe space for clients to speak and explore their experiences without fear of judgment. Thus, Equine-Assisted Psychotherapy is not just an alternative therapy but an approach that respects the complexity of the relationship between humans and animals, acknowledging the unique potential of horses in supporting the psychological healing process.

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The research methodology adopted in this study is known as literature review, which involves a critical examination and review of knowledge, ideas, or findings in academically-oriented literature. This approach aims to formulate theoretical and methodological contributions to a specific topic, commonly referred to as literature research or literature review. The literature selected for this study is accessible in

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3. Results

Investigate the perspectives of EAP facilitators regarding the biopsychosocial benefits and therapeutic outcomes of EAP for adolescents with depression and/or anxiety. Qualitative study in Australia involving collaboration between licensed therapists and horse professionals. Improvement in confidence, self-esteem, and assertiveness in adolescent clients. Reduction in undesirable behaviors. The therapy's effectiveness is attributed to the experiential nature of involving horses [17]. Evaluate the additional benefits of equine-assisted therapy for first responders experiencing operational-related trauma, Pilot study with 7 first responders in an 8-week, 90-minute equine-assisted therapy program. Pre- and post-intervention administration of primary outcome measures (anxiety, depression, trauma, inflexibility, and avoidance). Initial support for symptom reduction, especially for depressive and trauma-related symptoms. Benefits include increased sense of peace, reduced anxiety, mindfulness, and increased trust in self and others. This is the first study to directly examine clinical outcomes of first responders with PTSD participating in equine-assisted therapy, presenting a promising adjunct to care for first responders moving forward [18].

4. Discussion

Research conducted by [17] in Victoria and New South Wales, Australia, involved eight therapists with backgrounds in psychology and Equine expertise. They administered Equine-Assisted Psychotherapy (EAP) to adolescents diagnosed with depression and/or anxiety. The interview results revealed three main themes: the characteristics of EAP, its clinical implications, and its practices and limitations. The involvement of Equines and the experimental aspects were acknowledged as pivotal factors influencing the therapy's effectiveness. Therapists emphasized the non-judgmental nature of Equines during therapy sessions. Positive outcomes observed in adolescent clients included enhanced

self-confidence, self-esteem, assertiveness, and resilience, along with improvements in emotional regulation, self-control, and a reduction in undesirable behaviors. Nevertheless, a lack of public understanding of EAP was identified as a hindrance to the recognition and acceptance of this therapy. With more empirical evidence, EAP could be recognized as a suitable therapeutic intervention for preventing and addressing emotional disorders in adolescents. Conversely, [18] offered initial support for symptom reduction, particularly in depression and trauma symptoms. Qualitative responses from participants indicated significant benefits, such as increased feelings of peace, reduced anxiety, self-awareness, and improved self-confidence in oneself and others. This study was the first to directly examine clinical outcomes of Equine-assisted therapy in first responders with PTSD, showing promise as a valuable addition to future treatments. Pilot project results demonstrated a significant decrease in depression and trauma levels in participants after completing the program. Qualitative findings also indicated positive experiences, with participants reporting reduced anxiety and an increased ability to be present in the moment. Self-engagement and connection with others who had similar experiences appeared highly beneficial for first responders.

5. Conclusions

In summary, research on equine therapy for mental health, encompassing Equine-Assisted Psychotherapy (EAP) and Equine-Facilitated Psychosocial Programs (EFPP), indicates promising outcomes across diverse populations. Studies demonstrate the effectiveness of EAP in addressing depression and anxiety in adolescents, highlighting the non-judgmental aspect of equine interactions and improvements in self-confidence, self-esteem, emotional regulation, and undesired behaviors. Similarly, equine therapy shows potential as an adjunctive treatment for PTSD in first responders, with notable reductions in depression and trauma symptoms post-program. Additionally, EFPP positively impacts mood, social interaction, and substance abuse issues among patients, suggesting enhancements in behavior, mood, and overall well-being. These findings underscore the meaningful and therapeutic benefits of human-equine interactions.

The implications of these studies suggest that equine therapy holds promise as a valuable intervention for mental health challenges in various populations. The observed enhancements in mood, social engagement, and self-confidence signify the potential of equine therapy to complement traditional therapeutic approaches. Furthermore, the positive experiences shared by participants emphasize the significance of integrating human-animal interactions into mental health interventions. However, to fully comprehend and utilize the therapeutic potential of equine therapy, future research should prioritize robust study designs and larger sample sizes to strengthen empirical evidence. Additionally, efforts to raise public awareness and understanding of equine therapy are

crucial to bolster its recognition and acceptance within clinical settings. Through advancing research and fostering greater integration of equine therapy into mental health practices, clinicians and therapists can effectively leverage its benefits to promote overall well-being and recovery in individuals facing mental health challenges.

Abbreviations

EAP: Equine-Assisted Psychotherapy

PTSD: Post Traumatic Stress Disorder

EFPP: Equine-Facilitated Psychosocial Programs

Conflicts of Interest

The authors declare no conflicts of interest.

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Mechanism and Benefit of equine therapy

by Meutia Atika Faradilla

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Review Article

Mechanisms and Benefits of Equine Therapy for Enhancing Mental Health

Karina Shasri Anastasya^{1,*}, Indra Gazali Syamsuddin², Meutia Atika Faradilla³, Zefanya², Andira Larasari⁴, Daniella Satyasari⁵, Yohana³, Endrico Xavierees Tungka³, Patricia Liman¹, Yuliana⁶, Ali Fathi Assegaf⁷, Reza Ramadhan Surya⁷, Eris Sapari⁷, Afif Aminurrohman⁷, Ikhlas Arief Imawan⁷

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Investigate the perspectives of EAP facilitators regarding the biosychosocial benefits and therapeutic outcomes of EAP for adolescents with depression and/or anxiety. Qualitative study in Australia involving collaboration between licensed therapists and horse professionals. Improvement in confidence, self-esteem, and assertiveness in adolescent clients. Reduction in undesirable behaviors. The therapy's effectiveness is attributed to the experiential nature of involving horses [17]. Evaluate the additional benefits of equine-assisted therapy for first responders experiencing operational-related trauma. Pilot study with 7 first responders in an 8-week, 90-minute equine-assisted therapy program. Pre- and post-intervention administration of primary outcome measures (anxiety, depression, trauma, inflexibility, and avoidance). Initial support for symptom reduction, especially for depressive and trauma-related symptoms. Benefits include increased sense of peace, reduced anxiety, mindfulness, and increased trust in self and others. This is the first study to directly examine clinical outcomes of first responders with PTSD participating in equine-assisted therapy, presenting a promising adjunct to care for first responders moving forward [18].

4. Discussion

Research conducted by [17] in Victoria and New South Wales, Australia, involved eight therapists with backgrounds in psychology and Equine expertise. They administered Equine-Assisted Psychotherapy (EAP) to adolescents diagnosed with depression and/or anxiety. The interview results revealed three main themes: the characteristics of EAP, its clinical implications, and its practices and limitations. The involvement of Equines and the experimental aspects were acknowledged as pivotal factors influencing the therapy's effectiveness. Therapists emphasized the non-judgmental nature of Equines during therapy sessions. Positive outcomes observed in adolescent clients included enhanced

self-confidence, self-esteem, assertiveness, and resilience, along with improvements in emotional regulation, self-control, and a reduction in undesirable behaviors. Nevertheless, a lack of public understanding of EAP was identified as a hindrance to the recognition and acceptance of this therapy. With more empirical evidence, EAP could be recognized as a suitable therapeutic intervention for preventing and addressing emotional disorders in adolescents. Conversely, [18] offered initial support for symptom reduction, particularly in depression and trauma symptoms. Qualitative responses from participants indicated significant benefits, such as increased feelings of peace, reduced anxiety, self-awareness, and improved self-confidence in oneself and others. This study was the first to directly examine clinical outcomes of Equine-assisted therapy in first responders with PTSD, showing promise as a valuable addition to future treatments. Pilot project results demonstrated a significant decrease in depression and trauma levels in participants after completing the program. Qualitative findings also indicated positive experiences, with participants reporting reduced anxiety and an increased ability to be present in the moment. Self-engagement and connection with others who had similar experiences appeared highly beneficial for first responders.

5. Conclusions

In summary, research on equine therapy for mental health, encompassing Equine-Assisted Psychotherapy (EAP) and Equine-Facilitated Psychosocial Programs (EFPP), indicates promising outcomes across diverse populations. Studies demonstrate the effectiveness of EAP in addressing depression and anxiety in adolescents, highlighting the non-judgmental aspect of equine interactions and improvements in self-confidence, self-esteem, emotional regulation, and undesired behaviors. Similarly, equine therapy shows potential as an adjunctive treatment for PTSD in first responders, with notable reductions in depression and trauma symptoms post-program. Additionally, EFPP positively impacts mood, social interaction, and substance abuse issues among patients, suggesting enhancements in behavior, mood, and overall well-being. These findings underscore the meaningful and therapeutic benefits of human-equine interactions.

The implications of these studies suggest that equine therapy holds promise as a valuable intervention for mental health challenges in various populations. The observed enhancements in mood, social engagement, and self-confidence signify the potential of equine therapy to complement traditional therapeutic approaches. Furthermore, the positive experiences shared by participants emphasize the significance of integrating human-animal interactions into mental health interventions. However, to fully comprehend and utilize the therapeutic potential of equine therapy, future research should prioritize robust study designs and larger sample sizes to strengthen empirical evidence. Additionally, efforts to raise public awareness and understanding of equine therapy are

crucial to bolster its recognition and acceptance within clinical settings. Through advancing research and fostering greater integration of equine therapy into mental health practices, clinicians and therapists can effectively leverage its benefits to promote overall well-being and recovery in individuals facing mental health challenges.

Abbreviations

EAP: Equine-Assisted Psychotherapy
PTSD: Post Traumatic Stress Disorder
EFPP: Equine-Facilitated Psychosocial Programs

Conflicts of Interest

The authors declare no conflicts of interest.

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