



Proposal for the Management of Students' Mental Health Care through Agricultural Projects to Promote Sustainable Social Development

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Received: 07/30/2026

Accepted: 09/21/2026

Published: 10/13/2026

Abstract: Mental health care management proposals are relevant because they also include projects aimed at social development. **Objective:** To propose a management model for student mental health care through agricultural projects that promote sustainable social development in educational institutions. **Methodology:** This propositional article adopts a qualitative approach based on a documentary review of literature on student mental health, educational productive projects, and sustainable development, as well as the systematization of institutional management criteria. **Results:** Three interconnected components are proposed: participatory planning of agricultural projects focused on well-being, socioemotional support during productive activities, and engagement with the community and local market. The model includes implementation phases, monitoring and evaluation indicators, ethical safeguards, and institutional stakeholders' responsibilities. **Conclusions/Contributions:** Agricultural projects can integrate mental health care, practical learning, and community development, strengthening shared responsibility among schools, families, and communities. Their effectiveness requires leadership, interinstitutional coordination, referral protocols, and continuous evaluation. The model may be adapted to different educational contexts and should be validated through expert assessment and pilot experiences before implementation. **Keywords:** Management, students, agricultural projects, sustainable social development.

Propuesta de gestión del cuidado de la salud mental en estudiantes mediante proyectos agropecuarios para el desarrollo social

Resumen: Las propuesta de gestión del cuidado de la salud mental son relevantes debido a que además implican proyectos para el desarrollo social. **Objetivo:** Proponer un modelo de gestión del cuidado de la salud mental estudiantil mediante proyectos agropecuarios que promuevan el desarrollo social sostenible en instituciones educativas. **Metodología:** Artículo propositivo de enfoque cualitativo, basado en la revisión documental de literatura sobre salud mental estudiantil, proyectos productivos educativos y desarrollo sostenible, así como en la sistematización de criterios de gestión institucional. **Resultados:** Se proponen tres ejes articulados: planificación participativa de proyectos agropecuarios orientados al bienestar, acompañamiento socioemocional durante las actividades productivas y vinculación con la comunidad y el mercado local. El modelo contempla fases de implementación, indicadores de seguimiento y evaluación, salvaguardas éticas y responsabilidades de los actores institucionales. **Conclusiones/aportes:** Los proyectos agropecuarios pueden integrar el cuidado de la salud mental, el aprendizaje práctico y el desarrollo comunitario, fortaleciendo la corresponsabilidad entre escuela, familia y comunidad. Su efectividad requiere liderazgo directivo, articulación interinstitucional, protocolos de derivación y evaluación continua. Se propone adaptar el modelo a diferentes contextos educativos y validarlo mediante juicio de especialistas y experiencias piloto antes de su implementación. **Palabras clave:** Gestión, estudiantes, proyectos agropecuarios, desarrollo, social, sostenible

Proposta de gestão do cuidado da saúde mental de estudantes por meio de projetos agropecuários para promover o desenvolvimento social sustentável

Resumo: As propostas de gestão do cuidado da saúde mental são relevantes porque também incluem projetos voltados para o desenvolvimento social. **Objetivo:** Propor um modelo de gestão do cuidado da saúde mental dos estudantes por meio de projetos agropecuários que promovam o desenvolvimento social sustentável nas instituições educacionais. **Método:** Artigo propositivo de abordagem qualitativa, baseado na revisão documental da literatura sobre saúde mental estudiantil, projetos produtivos educacionais e desenvolvimento sustentável, bem como na sistematização de critérios de gestão institucional. **Resultados:** São propostos três eixos articulados: planejamento participativo de projetos agropecuários voltados ao bem-estar, acompanhamento socioemocional durante as atividades produtivas e integração com a comunidade e o mercado local. O modelo contempla etapas de implementação, indicadores de monitoramento e avaliação, salvaguardas éticas e responsabilidades dos atores institucionais. **Conclusões/Contribuições:** Os projetos agropecuários podem integrar o cuidado da saúde mental, a aprendizagem prática e o desenvolvimento comunitário, fortalecendo a corresponsabilidade entre escola, família e comunidade. Sua efetividade requer liderança institucional, articulação interinstitucional, protocolos de





encaminhamento e avaliação contínua. Recomenda-se adaptar o modelo a diferentes contextos educacionais e validá-lo por meio da avaliação de especialistas e de experiências-piloto antes de sua implementação.

Palavras-chave: Gestão, estudantes, projetos agropecuários, desenvolvimento social sustentável

1. Introduction

Student mental health has become a matter of institutional management and not only a clinical one. At the university level it is recognized as a challenge for institutions (Regalado Chamorro et al., 2023), which calls for decisions on organization, resources, and responsibilities that go beyond individual care. From the standpoint of health sciences education, recent evidence underscores the advisability of incorporating training in resilience and empathy in a coordinated way into the teaching-learning process (Díaz-Narváez et al., 2025).

In parallel, agricultural productive spaces (gardens, organic school gardens, nurseries, raising of small livestock) have been explored as health-promoting environments. Previous research on planting considers outcomes such as strengthening social ties, practicing healthy lifestyle habits, and addressing psychological difficulties, and puts forward a systemic and multidisciplinary perspective on health (Echeverri et al., 2024). These spaces also connect with the 2030 Agenda, which includes promoting sustainable agriculture (SDG 2), ensuring healthy lives and well-being (SDG 3), and inclusive and equitable quality education (SDG 4), goals that are carried out through policies, plans, and projects implemented by each State according to its resources and sociocultural characteristics (Villasmil Espinoza & Oleksenko, 2024).

This article starts from the need for a management model that brings together, in a single proposal, mental health care, socioemotional support, practical learning, and sustainable social development through agricultural projects in educational institutions. The objective is to propose that model, with its components, phases, indicators, and safeguards. After this introduction, the theoretical framework, the method, the proposal, the discussion, and the conclusions are presented.

1.1. Theoretical framework

In this work, care management is understood as the set of decisions, processes, resources, and responsibilities that an institution organizes to promote well-being, prevent risks, support those who need it, and refer them in a timely manner to specialized services. This definition places the institution as a co-responsible party and allows three levels to be distinguished: universal promotion for all students, detection and support of those showing signs of distress, and referral to professional care. Resilience appears as a relevant formative resource (Díaz-Narváez et al., 2025), and student well-being is conceived as a multidimensional phenomenon that can be supported through mentoring programs, addressed in studies on seven dimensions of well-being (Rincon-Flores et al., 2024).

1.1.1. Agricultural projects as spaces for well-being and learning

An educational agricultural project combines tasks with their own rhythms (preparing the soil, sowing, watering, tending, harvesting), teamwork, contact with the natural environment, and visible results in the short and medium term. These characteristics make it possible to suggest that participation in such projects may foster social support, a sense of achievement, and healthy





routines, in line with the aspects that the literature on planting and health promotion seeks to strengthen: social support, psychological well-being, and quality of life (Echeverri et al., 2024). This is a working hypothesis that requires validation in each context, not a guarantee of results.

1.1.2. Sustainable social development and institutional governance

Sustainable development requires linking the social, the economic, and the environmental through norms and strategies that guide public action. The public administration of sustainable development relies on regulatory frameworks and strategic documents and on the action of government bodies, local authorities, and public associations (Holynska et al., 2023). Transferred to the educational setting, this means that agricultural projects must have the backing of school leadership, partnerships with local government and the community, and explicit sustainability criteria, consistent with SDGs 2, 3, and 4 (Villasmil Espinoza & Oleksenko, 2024).

1.1.3. Synthesis of the base literature

Table 1 summarizes the sources that support the model and the contribution of each. Together, they offer three supports: the institutional justification for mental health care, the plausibility of planting spaces as well-being environments, and the sustainable development and governance framework that allows the proposal to be sustained.

Table 1

Base Sources and Contribution to the Proposed Model

Source	Focus	Contribution to the proposed model
Regalado Chamorro et al. (2023)	Mental health of university students as a challenge for institutions	Justifies managing mental health care from the institution
Díaz-Narváez et al. (2025)	Resilience and empathy in 1,093 health sciences students (El Salvador)	Supports incorporating resilience training into teaching and learning
Echeverri et al. (2024)	Promotion of mental health through garden planting (Cali)	Supports the potential of planting for social support, well-being, and quality of life
Rincon-Flores et al. (2024)	Mentoring program and seven dimensions of student well-being	Provides the idea of support and of multidimensional well-being
Villasmil Espinoza & Oleksenko (2024)	2030 Agenda and Sustainable Development Goals	Provides the framework of SDGs 2, 3, and 4 and each State's responsibility
Holynska et al. (2023)	Public administration of sustainable development	Underscores regulatory backing and institutional actors

Source: Author's own elaboration based on the cited references.

2. Methodology

A propositional article with a qualitative approach and documentary design was developed. The unit of analysis consisted of recent publications (2023–2026) on student mental health, well-being, planting or agricultural projects for health purposes, and sustainable development, found in Ibero-American scientific journals. The procedure included five steps: (1) delimitation of categories (mental health care, formative agricultural projects, and sustainable social development); (2) review and selection of verifiable sources; (3) content analysis by categories; (4) systematization of management criteria; and (5) design of the model, with provision for validation through expert judgment.





The proposal for mental health care management is intended for students in public secondary education with access to the means to develop agricultural projects for development.

Ethical considerations: the proposal does not replace professional care; it provides for informed consent (and assent with family authorization for minors), confidentiality, voluntary participation, and referral protocols. **Limitation:** as a proposal, it does not present original empirical results.

2.1. Projected Results (Management Proposal)

The model is governed by six principles: (a) mental health care is a shared institutional responsibility; (b) participation is voluntary and students are the protagonists; (c) safety and ethics take precedence over productivity; (d) practices are environmentally sustainable; (e) the community and local government are allies; and (f) the proposal complements, and never replaces, the care provided by mental health professionals.

2.2. Components of the model

Component 1: participatory planning. Students take part in the assessment of interests, knowledge, and resources and in the choice of the project (organic garden, nursery, small livestock, or other). A plan is defined with rotating roles and a schedule compatible with the academic workload, so that the productive activity does not become an additional source of stress.

Component 2: socioemotional support. Each session includes a brief closing reflection; individual and group tutoring is organized, and a voluntary well-being screening with validated instruments is offered. Psychology or student welfare staff train tutors in active listening and detection of warning signs, and activate a referral pathway to mental health services when appropriate.

Component 3: community engagement and sustainability. Partnerships are formalized with local government, families, and technical organizations; the social destination of the production is defined (canteens, fairs, classroom use) and agroecological practices for water and soil care are applied. This component connects individual care with sustainable social development. Table 2 summarizes the actions, responsible parties, and indicators of the three components.

Table 2

Management Matrix for Mental Health Care Through Agricultural Projects

Component	Key actions	Responsible parties	Monitoring indicators
1. Participatory planning	Assessment of interests, knowledge, and resources; joint choice of projects (organic garden, nursery, small livestock); work plan with rotating roles and a schedule compatible with academic workload.	School principal or academic coordination; tutor teachers; student representatives	Percentage of students participating in the design; approved projects with a written plan; weekly hours assigned
2. Socioemotional support	Brief closing and reflection sessions; individual and group tutoring; voluntary well-being screening with validated instruments; referral pathway to mental health services.	Psychology or student welfare; trained tutors; local health service	Sustained participation over time; well-being score before and after; cases referred and followed up



Component	Key actions	Responsible parties	Monitoring indicators
3. Community engagement and sustainability	Partnerships with local government, families, and organizations; social destination of production (canteens, fairs, classroom); agroecological practices and care of water and soil.	School principal; local government; families; technical partners	Formalized partnerships; destination of production; sustainable practices applied; continuity of the project

Source: Author's own elaboration (author's proposal).

3. Resultados (Roles and governance)

The A management committee is proposed, made up of the school principal, academic coordination, psychology or student welfare, tutor teachers, and representatives of students and families. The principal ensures institutional backing and resources; psychology or student welfare designs the referral protocol and trains tutors; tutors accompany the sessions; students plan and carry out the work; families provide support and are kept informed of progress; and local government provides technical assistance, spaces, or supplies. This distribution of responsibilities reflects the idea that sustainable development requires coordinated norms, strategies, and actors (Holynska et al., 2023).

3.1. Sample session

A weekly session of two to three hours could be organized as follows: arrival and brief emotional check-in (10 minutes); explanation of tasks and assignment of roles (10 minutes); productive work (60 to 90 minutes); break and informal exchange (10 minutes); and reflective closing with a log entry (15 minutes). The structure is flexible and should be adapted to age, weather, available space, and each institution's safety rules.

3.2. Phases and timeline

Implementation is planned in five phases over 12 months (Table 3), with well-being measured before and after participation and with quarterly review of the indicators.

Table 3
Model Phases and Expected Products

Phase	Period	Main activities	Products
0. Assessment	Months 1–2	Resource mapping (land, water, supplies), well-being baseline, and informed consents	Baseline; stakeholder map
1. Design and partnerships	Months 2–3	Participatory planning workshops; tutor training; signing of agreements; referral protocol	Operational plan; approved protocol
2. Implementation	Months 3–9	Agricultural work with support; reflection sessions; attendance records and log	Logs; quarterly report
3. Evaluation and adjustment	Months 9–11	Post-participation well-being measurement; focus groups; expert judgment on the model	Evaluation report; adjusted model
4. Systematization	Month 12	Documentation of lessons learned and plan for continuity or scaling	Replication guide

Source: Author's own elaboration (author's proposal).

3.3. Safeguards and risk management

The following safeguards are recommended: a written protocol for referral and case follow-up; confidential handling of information; informed consent and assent where applicable; safety in the work (tools, protective equipment, adult supervision, and weather); avoiding hazardous





agrochemicals and prioritizing organic inputs; animal welfare in livestock raising; and preventing production goals from pressuring participants. Table 4 summarizes the main risks and mitigation measures.

Table 4
Risks and Mitigation Measures

Risk	Mitigation measure
Academic overload of participants	Schedule compatible with classes, voluntary participation, and rotating roles
Accidents in agricultural work	Adult supervision, protective equipment, training in tool use, and first-aid kit
Detection of at-risk cases without an adequate response	Written referral protocol, partnership with the health service, and trained tutors
Stigmatization of participants	Activities open to all students, confidentiality, and respectful language
Dependence on a single person and lack of continuity	Management committee, continuity plan, and partnerships with local government
Pressure to produce	Well-being goals first; production is a secondary result with a defined social destination

Source: Author's own elaboration (author's proposal).

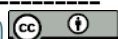
3.4. Evaluation and validation

It is proposed to validate the model through expert judgment from specialists in mental health, education, and agronomy (for example, with an inter-rater agreement coefficient), followed by a pilot experience with pre- and post-evaluation, focus groups, and analysis of the indicators in Table 2. The indicators can be classified into three types: process (attendance, hours, activities carried out), outcome (well-being before and after, cases supported and referred), and social impact (destination of production, partnerships, and project continuity).

4. Discussion

The proposal is consistent with the idea that student mental health is an institutional challenge (Regalado Chamorro et al., 2023) and with the need to integrate resilience training into the teaching-learning process (Díaz-Narváez et al., 2025). It also reflects the interest of recent literature in planting as a health promotion strategy based on social support, psychological well-being, and quality of life (Echeverri et al., 2024), and it complements this with a mentoring and support component consistent with a multidimensional view of well-being (Rincon-Flores et al., 2024).

Its main contribution is managerial: it turns scattered agricultural activities into a model with components, phases, responsible parties, and indicators, aligned with SDGs 2, 3, and 4 (Villasmil Espinoza & Oleksenko, 2024) and with the need for regulatory and institutional backing highlighted by the literature on the public administration of sustainable development (Holynska et al., 2023). Among the tensions to watch are the competition between the production goal and well-being, the risk of instrumentalizing mental health as an argument for activities that already exist, and institutions' resource limitations. In addition, part of the cited evidence is at an early stage, so the expected effects must be tested in each context.





For educational management, the model suggests that mental health care can be integrated into existing formative activities, with a moderate budget and clear responsibilities. For local policy, it opens the possibility of partnerships among educational institutions, local governments, and health services. For research, it suggests lines of work such as case studies, evaluations with pre- and post-measurement, comparisons among types of agricultural projects, and analyses of costs and sustainability.

The proposal for managing students' well-being and mental health through educational agricultural projects is considered highly relevant from a pedagogical perspective, because it gives teachers a tool for developing meaningful learning through practical experiences that reinforce and develop students' cognitive, emotional, and social capacities.

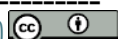
Agricultural projects make it possible to develop productive knowledge and skills, but they also foster social interaction, effective communication, teamwork, solidarity, self-esteem, autonomy, and a sense of belonging, aspects that are fundamental for socioemotional well-being and comprehensive education. However, these activities should not be developed in isolation or left to spontaneity. On the contrary, they should be properly planned and integrated across the curriculum from the planning stage of the project, incorporated through pedagogical strategies in the various academic areas during their execution, and supported by monitoring, follow-up, and evaluation mechanisms that make it possible to identify progress in students' personal and social development.

Furthermore, agricultural projects should extend beyond the school setting and become community integration initiatives, coordinated with local governments and other social actors, in order to contribute to the sustainable development of communities. In this way, the project would have an educational-pedagogical, social, economic, and environmental dimension, that is, a comprehensive dimension. Background works on academic anxiety (Toro Añel et al., 2014), mental health in children and adolescents (Sánchez Boris, 2021), and barriers to access to student psychological care (Quiñones Robles et al., 2026) were also considered.

The proposal takes into account the importance of psychosocial development and social skills in educational processes (Gutiérrez Santana et al., 2024), as well as the prevention of psychosocial risks in educational and work settings (Murguía et al., 2019; Diéguez Reyes & Valdés Santiago, 2024). Agricultural projects can integrate mental health care, practical learning, and community development, strengthening shared responsibility among school, family, and community. Their effectiveness requires leadership from school principals, interinstitutional coordination, referral protocols, and continuous evaluation. Identifying emotional symptoms and barriers to accessing mental health services is a relevant component of institutional management (Cuenca Robles et al., 2025; Quiñones Robles et al., 2026). It is proposed that the model be adapted to different educational contexts and validated through expert judgment and pilot experiences before its implementation.

5. Conclusions and Contributions

A student mental health care management model is proposed that uses agricultural projects as a space for prevention, support, practical learning, and community development. Its conditions for





viability are leadership from school principals, voluntary participation, coordination with local government and the community, clear referral protocols, and continuous evaluation. As a next step, it is recommended to validate the model through expert judgment and to test it in pilot experiences that measure well-being before and after participation.

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Víctor Hugo Rojas Fernández (33.3%): validation, visualization, writing – original draft, review and editing.

Funding: The study was self-funded by the authors. The submission, review, and publication processes and all activities related to the processing and publication of the article are free of charge.

Statement of responsibility for information: The authors declare that the information is truthful and that they are fully responsible for the information shared in this article, and that the processing of information has not influenced the results obtained.

Informed consent statement: The study was conducted in accordance with the Code of Ethics and good research practices.

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