RESEARCH ARTICLE

WILEY

Design and validation of a scale of core components of community interventions in mental health

Felipe Agudelo-Hernández[1] ⓘ | Rodrigo Rojas-Andrade[2] ⓘ

[1]University of Manizales, Manizales, Colombia

[2]Escuela de Psicología, Universidad de Santiago de Chile, Santiago, Chile

Correspondence
Felipe Agudelo-Hernández.
Email: afagudelo81703@umanizales.edu.co

Abstract

Aims: To develop and validate an instrument to identify the core components of community strategies for mental health, especially mutual aid groups: The Mutual Aid Scale .

Methods: 135 community strategies leaders participated in the study. The core components are active agency, coping strategies, recognition, and management of emotions, problem-solving strategies, supportive interaction, trust, self-identity construction, and strengthening of social networks. With these components a scale was designed. Content validity was carried out in addition to an exploratory factor analysis.

Results: Two dimensions resulted, strengthening of agency capacity and Coping strategies, and the internal consistency of both factors was acceptable, with a Cronbach's alpha of 0.722 and 0.727, respectively. The Kaiser-Meyer-Olkin (KMO) statistic was used with a score of 0.831 and the Barlett Sphericity Test, with a significant value of 265.175.

Conclusion: This scale identifies the components of community interventions for mental health and can contribute to a better implementation of these strategies. It also articulates autonomous community processes with strategies developed in health services.

KEYWORDS
community networks, implementation sciences, mental health, psychosocial support systems, self-help group, social interaction, validation study

> **Highlights**
>
> - The community interventions have few implementation instruments.
> - The core components of community interventions in mental health are provided.
> - A scale is proposed to measure these interventions.
> - The process of design and validation of the instrument is shown, which is provided in this manuscript.

1 | INTRODUCTION

In overall terms, mental disorders and problems represent a public health problem. Mental disorders are positioned as the main cause of lost years due to disability. The impact of these on the individual, the family, the communities and the countries are very significant and the economic consequences are evident in relation to the direct costs, the loss of productivity and other indirect costs.[1]

As an aggravating factor of the mentioned above, the resources designated to address mental health is equivalent to less than 2% of the resources designated to health and, of this minimum resource, more than half of it is assigned to psychiatric hospitals.[1] The data show that the approach is still focused on care and that there is a great lack of a community approach, which is essential for a comprehensive approach to mental health and is proposed as an axis of recovery in global public policies.[2]

In order to achieve a healthy social participation and also to achieve the construction of mental health from their own environment, people with mental problems or mental disorders go through an arduous path in which they are forced to fight to live with dignity. During most of the 19th century, it was argued that therapy carried out in institutions was highly beneficial, however, in 1857, the scientific journal The Lancet published the first criticisms of this form of therapy, showing that its effectiveness was not as high as previously thought.[3]

The Lancet Commission, updated in 2018, reassessed the global mental health agenda in the context of the Sustainable Development Goals (SDG), concluding that there is no sustainable development without mental health, and that saving mental health is linked to achieving the proposed agenda for 2030, especially with objective 3.4 in which it is indicated: "By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being" ([2], p. 35), where the indicator is suicide mortality. This commission also points out that there is a significant direct linear relationship between national income and public spending on mental health as a proportion of the total health budget, while spending on psychiatric hospitalisation is higher in countries with fewer mental health resources.[4]

This suggests that with greater investment in community services, greater recovery in one's own environment, and fewer psychiatric hospitalizations, finally there will be a positive impact, not only on the capacity and functioning of individuals and families, but also at the economic and social levels of health systems.[5] The direct and indirect costs of poor mental health worsen economic conditions, creating a vicious cycle of poverty and mental disorders.[6]

1.1 | Implementation science and mental health

According to the Implementation Science Resource Centre of the University of Washington, implementation science answers questions about strategies used to implement Evidence Based Practices (EPB). In addition to taking the effectiveness of the intervention, it takes as research questions the scaling, replicability, programme integration,

equity, real-world effectiveness, taking as results the acceptability, adoptability, suitability, feasibility, fidelity, cost of implementation, penetration and sustainability.[7]

For this, the unit of analysis becomes the health team, an organization and also becomes the people, and the components of the strategies become essential elements to answer these research questions that end up favouring implementation practices. It has been described that the implementation in mental health is more successful when it is provided the necessary infrastructure for implementation, training in the components of the strategies, monitoring and evaluation of results, the community is involved in the selection and evaluation of programs and practices.[8]

The core components are some techniques, contents, skills or principles that are essential for a greater effectiveness of the strategies, in addition to serving as a point of reference to understand, apply and evaluate an intervention.[9-11] Greater knowledge of the common components of community mental health strategies can facilitate future implementation efforts by revealing common ground for building and predicting the accompanying elements that may be most resistant to change.

Detailed descriptions of these elements can also facilitate decisions about the feasibility of implementing an intervention in broader community settings.[12] It has been argued that a core component approach to EPB may be more compatible and useful for routine practice settings and therefore it has the potential to guide clinical decision-making and ultimately improve care.[13]

1.2 | This research

Community psychosocial recovery strategies, specifically mutual aid or peer support groups, have been widely recommended by scientific evidence, which is why they have become part of the global mental health policy, with projections at the level of laws and resolutions in some countries such as Colombia. Despite the above, these strategies show implementation problems,[14] meaning that, despite being recommended, they are not carried out and do not contribute to the psychosocial recovery of people and their environments. These implementation problems are caused by ignorance of the core components of these strategies, which will increase fidelity and facilitate their adaptation and dissemination.

One way to contribute to these implementation variables consists in the determination of core or nuclear components. These components allow to have better strategies in each phase of the process of transferring an EPB, and also it allows the results to improve.[13]

Community strategies, especially those closely related to the health sector, have few elements that favour implementation. Therefore, the professionals responsible for accompanying these processes do not usually rely on techniques that scientific evidence recommends and are usually unaware of their nuclear components,[15,16] which generates a loss of economic resources and increases the recovery gaps of people with mental problems or disorders.

Based on the above elements, which indicate a significant increase in mental problems or disorders, a global mental health policy that increasingly recommends community strategies, and implementation problems in these strategies, it is necessary to have tools to identify implementation variables, especially core components of these strategies. This is how the objective of this research is to develop and validate an instrument to identify the core components of community strategies for mental health, especially mutual aid groups: The Mutual Aid Scale (MAS).

2 | METHOD

2.1 | Participants

The people who participated to validate the instrument were 135 (55.56% were men and the rest of them women), 37.78% led support and mutual aid groups (45% registered as health professionals, the remaining percentage did not

register as professionals). The remaining percentage coordinated, from the administrative point of view, the community processes for mental health, of these, 59.52% were part of district health secretariats and the rest of private organizations. Most specified an average of 28.5 months of experience in their work. All voluntarily agreed to fill out the instrument by signing an informed consent.

2.2 | Instruments

The information was taken with an instrument designed to determine the application of nuclear components in mutual aid groups. This scale was based on the core components of mutual aid groups,[9] which were established as active agency, coping strategies, recognition and management of emotions, problem solving, support interaction, confidence, identity construction and strengthening of social networks.

The previous components formed a scale composed of eight items, which sought to investigate the presence of these components in the functioning of the strategies. These items were proposed by the researchers and adjusted by 15 national mental health referents, which are in charge of mental health processes in each department of Colombia, in addition to three leaders of mutual aid groups, including a psychologist, a general practitioner and a social worker.

To review the validity of the content, the descriptors for the validity index were calculated, which was evaluated by 18 experts (10 men and eight women) in community interventions for mental health, some of them representatives of the Colombian College of Psychologists, of the Colombian Association of Psychiatry in its community node, of the Colombian Association of Rehabilitation, in addition to the professional in charge of the community-based rehabilitation axis for the Ministry of Health and Social Protection of Colombia. For this point, the criteria of Skjong & Wentworht[17] were considered, including experience in making judgements and evidence-based decision-making (degrees, research, publications, position, experience and awards, among others), reputation in the community, willingness and motivation to participate, and fairness and inherent qualities such as self-confidence and adaptability.

These professionals were sent an email with the scale and a form, which used a four-point Likert scale that addressed the representativeness, relevance, adequacy, comprehension, ambiguity, and clarity of the items.[18] Subsequently, interobserver agreement was determined using the Fleiss kappa index (moderate agreement results in the ranges 0.41–0.60, substantial agreement in the ranges 0.61-0.80 and almost perfect agreement 0.81–1.00).

In this sense, the objective of the instrument is to identify the core components of community strategies for mental health. It consists of a scale with eight items, which is answered with a Likert scale with four options that investigate the presence of the component in the implemented strategy (0 = absent, 1 = present rarely, 2 = present sometimes, 3 = present most of the time, 4 = always present) (See Table 1). This instrument can be filled out by group facilitators, they can be health professionals or community leaders.

TABLE 1 Items of the MAS.

	Mean	Deviation typical	Asymmetry	Kurtosis
Coping strategies	3.76	0.431	−1.203	−0.562
Recognition and emotional management	3.82	0.384	−1.705	0.919
Problem solving techniques	3.73	0.448	−1.024	−0.965
Supportive interactions	3.72	0.687	−2.768	7.256
Trust in other members	3.77	0.422	−1.3	−0.314
Support in the construction of identity	3.64	0.527	−1.036	−0.015
Strengthening of social networks	3.72	0.542	−1.802	2.366
Strengthening agency capacity	3.42	0.91	−2.39	6.559

Abbreviation: MAS, Mutual Aid Scale.

Subsequently, correlations were made with the benefits of the community interventions described by Agudelo-Hernández et al.,[9] namely, Improvement in quality of life, Learning in mental health, Improvement in social functioning, Improvement in life skills, Increased Hope. These were determined on a Likert-type scale where 0 = absent and 4 = very present. A higher score indicates a greater presence of these components in group dynamics, which is associated with a greater probability of achieving the benefits described.

2.3 | Process

In the stages of design, validation, reliability analysis and exploratory and confirmatory factor analysis of the instrument, the following steps were carried out. The first one consisted of a Scoping review whose objective was to investigate the literature on these components, to continue with the validation based on the expertise of some professionals in community strategies for mental health. Subsequently, content validity analysis was performed using the Delphi method,[19] with the validity criteria proposed by Escobar-Pérez & Cuervo-Martínez[20]: Clarity, the item is easily understood; Coherence, the item is related to what is intended to be evaluated; Relevance, the item is essential to evaluate what is intended and Sufficiency, the proposed items are sufficient to fully evaluate what is intended. These criteria were assessed with scores between cero and three, with three being the maximum value on the scale.

This implies making an expert judgement, before verifying the reliability. In this step, a qualitative analysis of the opinions of experts was also made[21] before proposing the final items (Appendix 1). Once the instrument was determined, the application of the scale was carried out through an intentional non-probabilistic sampling, to 135 people linked to the implementation of mutual aid groups and other community strategies in Colombia. With these data, the reliability was analysed and then a dimensional analysis of the construct was carried out, carrying out an exploratory factor analysis and a Confirmatory Factor Analysis (CFA).

2.4 | Statistical analysis

The statistical programme SPSS version 26 was used. Internal consistency (already previously described) and reliability were determined with Cronbach's Alpha coefficient, which allowed analysing the global reliability and the individual reliability and variances of each item. Finally, exploratory factor analysis and CFA were performed, these using the data obtained from the KaiserMeyer-Olkin and Bartlett tests, as well as self-values and communalities. Correlations were made to compare the presence of the nuclear components with other implementation measures, in addition to the benefits registered by the community strategies. In addition to the goodness-of-fit test X^2 which compared the covariance matrix with the null model, there were used absolute fit indices (Root Mean Square Error or Approximation, RMSEA; Standardized Root Mean Residual, SRMR), and incremental fit indices (Comparative Fit Index, CFI; Tucker Lewis Index, TLI).

3 | RESULTS

To carry out the feasibility analysis of the factorial analysis to determine the construct validity of the instrument, the Kaiser-Meyer-Olkin (KMO) statistic was used with a score of 0.831, which is considered adequate according to Hair et al.,[22] also it was used the Barlett Sphericity Test, with a significant value of 265.175 (p = <0.001). Subsequently, an exploratory factorial analysis was carried out with extraction of principal and rotated components (Varimax of orthogonal rotation) with half of the sample. At this point, two factors are reflected that explain 65.584% of the variance, with communalities between 0.53 (Strengthening of agency capacity) and 0.83 (Coping strategies).

TABLE 2 Rotation of the MAS factors.

Items	Mental health strategies	Mutual aid	Communalities
Coping strategies	0.896		0.814
Recognition and emotional management	0.757		0.789
Problem solving techniques	0.625		0.648
Strengthening agency capacity	0.625		0.53
Support in the construction of identity	0.72		0.616
Supportive interactions		0.758	0.774
Trust in other members		0.80	0.684
Strengthening of social networks		0.566	0.541
Cronbach's alpha	0.722	0.727	
Number of items	5	3	
Explained variance	41.837%	23.746%	
Total variance explained		65.584%	
Total Cronbach's alpha		0.736	
Kaiser-Meyer-Olkin		0.61	

Note: Communalities, explained variance and Cronbach's Alpha total and of each factor.
Abbreviation: MAS, Mutual Aid Scale.

It is found that all the items show loads greater than 0.4 and that they meet in two dimensions. For the item that is grouped in more than one factor, it is located where it has the highest factor load. Factor one has been called Mental Health Strategies, made up of Coping Strategies, Emotional Recognition and Management, Problem Solving Techniques, Strengthening Agency Capacity and Support in Identity Construction. Factor two, made up of Support Interactions, Trust in other members and Strengthening of social networks, has been called Mutual Help. The internal consistency of both factors was acceptable, with a Cronbach's alpha of 0.722 and 0.727, respectively (see Table 2).

As for the confirmatory factor analysis, it was found that the goodness-of-fit indices of the two-factor model show an adequate fit. However, the CFA was sought for the second sample to ensure this fit (Appendix 1). On the other hand, the reliability of the two factors is shown to be higher than 0.70, higher than the recommended value according to Fornell & Larcker.[23]

The same as the composite reliability and the extracted mean variance, greater than 0.5, which, according to Bagozzi & Yi,[24] indicates an adequate value for reliability. On the other hand, when correlating in the entire sample the MAS with the scale of the benefits of these interventions, described in the literature, significant correlations are found between the component of Strategies for Mental Health and Improvement in Quality of Life, Learning in Mental Health, Building Skills for Life and Increasing Hope.

The Mutual Aid component showed a statistically significant correlation with Improvement in the quality of life, Building Skills for Life and Increasing Hope. The total sum of the MAS showed a correlation with all the benefits found in the literature[9] (See Table 3).

3.1 | Discussion

Although global mental health policy points to the need to implement community-based strategies, such as support groups or mutual aid groups,[5] there are significant implementation problems, especially in low- and middle-income countries.[25] These implementation problems are related to a lack of knowledge of the core components of these strategies.[9,11] For this reason, the present study has been proposed to develop and validate an instrument to identify

TABLE 3 Correlations and coefficients obtained for the confirmatory factor analysis and model fit of the data.

		Mental health strategies	Mutual aid	Improvement in quality of life	Learning in mental health	Improvement in social function	Building skills for life	Increasing hope
Mutual aid	C.	0.4[a]						
	Sig.	<0.001						
Improvement in quality of life	C.	0.18[b]	0.29[a]					
	Sig.	0.03	0.001					
Learning in mental health	C.	0.18[b]	0.09	−0.11				
	Sig.	0.03	0.273	0.171				
Improvement in social function	C.	0.60[a]	−0.04	−0.03	−0.01			
	Sig.	<0.001	0.616	0.656	0.903			
Building skills for life	C.	0.61[a]	0.37[a]	0.24[a]	0.18[b]	0.072		
	Sig.	<0.001	<0.001	0.004	0.022	0.404		
Increasing Hope	C.	0.29[a]	0.65[a]	0.27[a]	0.19*	−0.14	0.37[a]	
	Sig.	0.001	<0.001	0.001	0.024	0.105	<0.001	
Total	C.	0.91[a]	0.73[a]	0.26[a]	0.17[b]	0.42[a]	0.61[a]	0.50[a]
	Sig.	<0.001	<0.001	0.002	0.04	<0.001	<0.001	<0.001

Note: N = 135, C = Pearson correlation, Sig. = Significance.

[a]The correlation is significant at the .01 level (bilateral).

[b]The correlation is significant at the .05 level (bilateral).

the nuclear components of community strategies for mental health, especially group strategies, which focused on the components that could be considered essential or core components for the development of these strategies. This has been called the MAS.

Apart from being a feasible instrument in its application, given the contexts and the variety of professionals who lead these strategies, a scale with an adequate internal consistency, with an adequate reliability and with two factors that gather all the items is presented: Strengthening of agency capacity and Coping strategies. These factors coincide with the objectives described globally for these strategies,[5] in addition to the components associated with greater recovery in scientific evidence.[9]

Similarly, Coping strategies talks about the relationship with the health system, where a greater effectiveness of the groups that are associated with a strengthened and sensitive health system has been described, since this could contribute knowledge in mental health.[26,27] The Strengthening of agency capacity also describes in the groups the autonomy they must have in order to achieve optimal functioning, where the relationship with the health system is given in a dynamic of cooperation and not of absolute dependence on it.[28,29] The determination of these two components coincides in the MAS with what is described at a theoretical level.

According to Díaz-Castro et al.,[30] this could be related to some difficulties that concern governance, such as scarce research resources, functional fragmentation of mental health systems, absence of a national health system, lack of policies that directly affect the organization and the provision of services, or policies that are mismanaged.[31] This is directly associated with the creation and maintenance of community mental health strategies.[32]

Due to the mentioned above, a call has been made to investigate those components that are part of the implementation process of these strategies, including the exploration of the contexts, and also the training, the implementation climate and the sustainability.[33] As a fundamental step, the application of the nuclear or core components of these strategies is considered, which could be established as a dependent variable of the implementation process.[34]

In this sense, the fidelity of the strategies has been addressed, understood as the degree to which an intervention was implemented as prescribed, which is also associated with the desired results of the implementation.[35]

Other studies have determined this implementation variable with instruments such as the Therapist Procedures Checklist-Revised (TPC-R), developed as a checklist of self-report clinical techniques that assesses cognitive, behavioural, familial, and psychodynamic components.[36] Other similar instruments are the Therapy Procedures Observational Coding System—Strategies (TPOCS-S)[36] and the *Enhancing Assessment of Common Therapeutic factors* (*ENACT-18*),[37] both used in community strategies. However, these instruments are aimed at clinical professionals and not at facilitators of community strategies, who do not necessarily have a profession, like the sample of the present research.

Regarding each component, there is the support interaction, which refers to the communication of feelings and the exchange of mutual support and experiential knowledge among the members of the group, which tends to have a positive influence on adherence to treatment of the members.[27] During a 4-year follow-up of a cohort of people with severe mental disorders, participation in community strategies was an independent predictor of improvement in social functioning, for example, voting, attending festivals and working.[38] The mentioned above is in dialogue with the findings of the present study, which shows an association between the Mutual Aid component and Improvement in the quality of life, Building Skills for Like and Increasing Hope.

Other components coincide with some guidelines proposed by Pearce et al.,[39] who mention as core components of support for self-management of non-communicable problems and disorders: understandable language, report on available resources, training in life skills, training in psychological strategies, social support, advice on lifestyles, which is reaffirmed in the correlation between the Strategies for Mental Health, and the benefits of Learning in mental health and Building skills for life (Appendix 1).

Although people from various regions of Colombia were considered, future studies could strengthen the validation process by increasing the population with samples from different regions, including an ethical approach and with groups of different ages. Additionally, this will allow for comparing the effectiveness of different community strategies in the future and the influence of contextual factors on the results. In this sense, another limitation of the study consists in the difficulty of analysing multisectoral action in community actions for mental health, which is essential for these interventions to work.[40]

Although it is recognized as a strength of this study that the core components and benefits indicated by the people in the groups coincide with approaches to global community strategies,[3,5] long-term recoveries can only be achieved if programs address the multiple challenges (e.g., clinical, social and economic) faced by people with mental disorders.[41,42] The proposed models with the MAS also promote the integration of health services with autonomous community strategies. This is because it identifies Mental Health Strategies (Coping Strategies, Recognition and emotional management, Problem-solving techniques, Strengthening agnecy capacity, and Support in the constrction of identy) and Mutual Aid (Supportive interactions, Trust in other membres, and Strengthening of social networks) as two components that bridge health services with individuals needs in the recovery process.

4 | CONCLUSIONS

Specifying, adapting and applying core components, in addition to having clear benefits in community strategies for mental health, could contribute to strategies that have shown effectiveness to be better implemented by global and local political frameworks that propose them in plans, programs and strategies mental health recovery. The present study presented an instrument that can be used for this purpose.

It is directly associated with the creation and maintenance of community mental health strategies, in addition to the connection with the health system that validates health rights and respects autonomy.[43] The application of the factors shown by the MAS, specified as Strengthening of agency capacity and Coping strategies, can better guide the role of the health system in community mental health strategies: strengthen psychological skills and accompany the autonomy of these groups to facilitate their role in the defence of human rights, in the processes of social innovation and the strengthening of social support networks.[9]

In this sense, following a local community-based approach facilitated the coordination and distribution of aid, the mobilisation of volunteers and resources, leading to a sense of being part of and able to contribute to the local community. This study supports previous suggestions about the need to recognise the role of group processes and integration with the health system.[44,45]

Although the present study provides a simple instrument to guide community interventions in mental health towards the expected results, these benefits will also depend on local realities, including a differential approach that considers the intersection of multiple determinants of quality of life and well-being.[31,46]

ACKNOWLEDGEMENTS

CONFLICT OF INTEREST STATEMENT

The authors have no conflicts of interest.

DATA AVAILABILITY STATEMENT

The authors declare that the data presented in this manuscript are available.

ETHICS STATEMENT

This research was approved by the bioethics committee of the University of Manizales, with record 022 of 2022. Informed consent was obtained from the people who participated in the research.

ORCID

Felipe Agudelo-Hernández (iD) https://orcid.org/0000-0002-8356-8878

Rodrigo Rojas-Andrade (iD) https://orcid.org/0000-0002-6459-6902

REFERENCES

1. World Health Organization. World Mental Health Report: Transforming Mental Health for All; 2022. Licence: CC BY-NC-SA 3.0 IGO. https://www.who.int/es/publications/i/item/9789240050860
2. Patel V, Saxena S, Lund C, et al. The Lancet Commission on global mental health and sustainable development. *Lancet (London, Engl)*. 2018;392(10157):1553-1598. https://doi.org/10.1016/S0140-6736(18)31612-X
3. Cohen A, Raja S, Underhill C, et al. Sitting with others: mental health self-help groups in northern Ghana. *Int J Ment Health Syst*. 2012;6(1):1. https://doi.org/10.1186/1752-4458-6-1
4. Organización Panamericana de la Salud. *La carga de los trastornos mentales en la Región de las Américas*. OPS; 2018.
5. Organización Panamericana de la Salud. Servicios de salud mental de apoyo entre pares: promover los enfoques centrados en las personas y basados en los derechos; 2022. https://doi.org/10.37774/9789275325995
6. Jamison DT, Nugent R, Gelband H, et al. *Prioridades para el control de enfermedades: Compendio de la 3 a edición*. Banco Mundial; 2018. https://openknowledge.worldbank.org/handle/10986/29392
7. Damschroder LJ, Reardon CM, Opra Widerquist MA, Lowery J. Conceptualizing outcomes for use with the consolidated framework for implementation research (CFIR): the CFIR outcomes addendum. *Implement Sci*. 2022;17(1):7. https://doi.org/10.1186/s13012-021-01181-5
8. Fixsen DL, Naoom SF, Blase KA, Friedman RM, Wallace F. *Implementation Research: A Synthesis of the Literature*. University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication; 2005. #231).
9. Agudelo-Hernández F, Rojas-Andrade R, Guapacha M, Delgado-Reyes A. Identification of components associated with the operation of Mutual Aid Groups: a scoping review. *Rev Colomb Psicol*. 2023;32(2):95-113. https://doi.org/10.15446/rcp.v32n2
10. Chorpita BF, Daleiden EL, Weisz JR. Identifying and selecting the common elements of evidence based interventions: a distillation and matching model. *Ment Health Serv Res*. 2005;7(1):5-20. https://doi.org/10.1007/s11020-005-1962-6
11. Garland AF, Hawley KM, Brookman-Frazee L, Hurlburt MS. Identifying common elements of evidence-based psychosocial treatments for children's disruptive behavior problems. *J Am Acad Child Adolesc Psychiatry*. 2008;47(5):505-514. https://doi.org/10.1097/CHI.0b013e31816765c2

12. Rychetnik L, Frommer M, Hawe P, Shiell A. Criteria for evaluating evidence on public health interventions. *J Epidemiol Community Health*. 2002;56(2):119-127. https://doi.org/10.1136/jech.56.2.119

13. Chorpita BF, Becker KD, Daleiden EL. Understanding the common elements of evidence-based practice: misconceptions and clinical examples. *J Am Acad Child Adolesc Psychiatry*. 2007;46(5):647-652. https://doi.org/10.1097/chi.0b013e318033ff71

14. Agudelo-Hernández F, Rojas-Andrade R. Ciencia de la implementación y Salud mental: un diálogo Urgente. *Rev Colomb Psiquiatr*. 2021. https://doi.org/10.1016/j.rcp.2021.08.001

15. Nickels SV, Flamenco Arvaiza NA, Rojas Valle MS. A qualitative exploration of a family self-help mental health program in El Salvador. *Int J Ment Health Syst*. 2016;10(1):10-26. https://doi.org/10.1186/s13033-016-0058-6

16. Rettie HC, Hogan LM, Cox WM. Identifying the main components of substance-related addiction recovery groups. *Subst Use Misuse*. 2021;56(6):840-847. https://doi.org/10.1080/10826084.2021.1899228

17. Skjong R, Wentworth B. Expert Judgement and Risk Perception; 2000. http://research.dnv.com/skj/Papers/SkjWen.pdf

18. Abal FJ, Auné SE, Lozzia GS, Attorresi HF. Funcionamiento de la categoría central en ítems de Confianza para la Matemática. *Revista Evaluar*. 2017;17(2):18-31.

19. Gallardo R, Cuadra R, Astigarraga E. The Delphi method and the investigation in health services. *Ciencia y enfermería*. 2008;14:9-15.

20. Escobar-Pérez J, Cuervo-Martínez Á. Validez de contenido y juicio de expertos: una aproximación a su utilización. *Avances en medición*. 2008;6(1):27-36. https://www.humanas.unal.edu.co/lab_psicometria/application/files/9416/0463/3548/Vol_6._Articulo3_Juicio_de_expertos_27-36.pdf

21. Mérida R, Serrano A, Tabernero C. Diseño y validación de un cuestionario para la evaluación de la autoestima en la infancia. *Rev Invest Educ*. 2015;33(1):149-162. https://doi.org/10.6018/rie.33.1.182391

22. Hair JF, Anderson RE, Tatham RL, Black WC. *Análisis Multivariante*. Pearson; 2004.

23. Fornell C, Larcker DF. Evaluating structural equation models with unobservable variables and measurement error. *J Market Res*. 1981;18(1):39-50. https://doi.org/10.2307/3151312

24. Bagozzi R, Yi Y. On the evaluation of structural equation models. *J Acad Market Sci*. 1988;16(1):74-94. https://doi.org/10.1007/BF02723327

25. Agudelo-Hernández F, Rojas-Andrade R. Mental Health Services in Colombia: a national implementation study. *International Journal of Social Determinants of Health and Health Services*. 2023. https://doi.org/10.1016/j.rcp.2021.08.001

26. Agudelo-Hernández F. *De las barreras a los posibles. Las políticas del Acontecimiento en los Grupos de Ayuda Mutua Juveniles para la salud mental*. Editorial Universidad de Manizales; 2023.

27. Ngai SS, Cheung CK, Mo J, et al. Mediating effects of emotional support reception and provision on the relationship between group interaction and psychological well-being: a study of young patients. *Int J Environ Res Publ Health*. 2021;18(22):12110. https://doi.org/10.3390/ijerph182212110

28. Agudelo-Hernández F. *De las barreras a los posibles: Las Políticas del Acontecimiento en los Grupos de Ayuda Mutua Juveniles para la Salud Mental*. 1st ed. Editorial Universidad de Manizales; 2023. https://ridum.umanizales.edu.co/xmlui/handle/20.500.12746/6397

29. De las Cuevas C. Psychiatric patients' perceived health control and reactance: implications for medication adherence. *Patient Prefer Adherence*. 2023;17:1591-2160. https://doi.org/10.2147/PPA.S417608

30. Díaz-Castro L, Arredondo A, Pelcastre-Villafuerte B, Hufty M. Gobernanza y salud mental: aportes para su abordaje en materia de políticas públicas. *Rev Saude Publica*. 2017;51(0). https://doi.org/10.1590/s1518-8787.2017051006991

31. Ghasemi E, Majdzadeh R, Rajabi F, et al. Applying Intersectionality in designing and implementing health interventions: a scoping review. *BMC Publ Health*. 2021;21(1):1407. https://doi.org/10.1186/s12889-021-11449-6

32. Caificil A. *Modelo comunitario de atención en salud mental, intervención sociocomunitaria y rehabilitacion psicosocial: un analisis de su implementación en dos dispositivos salud mental en la provincia de osorno*. Universidad de la Frontera; 2019. http://comunitaria.ufro.cl/wp-content/uploads/2019/08/Tesis_Antonia-Caifil_Enero-2019.pdf

33. Aarons GA, Hurlburt M, Horwitz SM. Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and policy in mental health*. 2011;38(1):4-23. https://doi.org/10.1007/s10488-010-0327-7

34. Beidas RS, Aarons G, Barg F, et al. Policy to implementation: evidence-based practice in community mental health--study protocol. *Implement Sci ISCUS*. 2013;8(1):38. https://doi.org/10.1186/1748-5908-8-38

35. Proctor E, Silmere H, Raghavan R, et al. Outcomes for implementation research: conceptual distinctions, measurement challenges, and research agenda. *Administration and policy in mental health*. 2011;38(2):65-76. https://doi.org/10.1007/s10488-010-0319-7

36. Weersing VR, Weisz JR, Donenberg GR. Development of the Therapy Procedures Checklist: a therapist-report measure of technique use in child and adolescent treatment. *J Clin Child Adolesc Psychol official J Soc Clin Child Adolesc Psychol Am Psychol Assoc Div*. 2002;31(2):168-180. https://doi.org/10.1207/S15374424JCCP3102_03

37. Kohrt BA, Jordans MJ, Rai S, et al. Therapist competence in global mental health: development of the ENhancing Assessment of Common Therapeutic factors (ENACT) rating scale. *Behav Res Ther*. 2015;69:11-21. https://doi.org/10.1016/j.brat.2015.03.009

38. Chatterjee S, Patel V, Chatterjee A, Weiss HA. Evaluation of a community-based rehabilitation model for chronic schizophrenia in rural India. *Br J psychiatry J Ment Sci*. 2003;182(1):57-62. https://doi.org/10.1192/bjp.182.1.57

39. Pearce G, Parke H, Pinnock H, et al. The PRISMS taxonomy of self-management support: derivation of a novel taxonomy and initial testing of its utility. *J Health Serv Res Policy*. 2016;21(2):73-82. https://doi.org/10.1177/1355819615602725

40. Montenegro C. Mental health, by the masses and for the masses. *Lancet (London, Engl*. 2023;401(10388):1562-1563. https://doi.org/10.1016/S0140-6736(23)00906-6

41. Basic Needs Basic Righs. 2022. http://www.basicneeds.org/ghana

42. Sun J, Buys N. Effects of community singing program on mental health outcomes of Australian aboriginal and torres strait islander people: a meditative approach. *Am J Health Promot Aust J Hosp Pharm*. 2016;30(4):259-263. https://doi.org/10.1177/0890117116639573

43. Organización Panamericana de la Salud. *Una nueva agenda para la salud mental en las Américas. Informe de la Comisión de Alto Nivel sobre Salud Mental y COVID-19 de la Organización Panamericana de la Salud*. OPS; 2023. https://doi.org/10.37774/9789275327265

44. Fernandes-Jesus M, Mao G, Ntontis E, et al. More than a COVID-19 response: sustaining mutual aid groups during and beyond the pandemic. *Front Psychol*. 2021;12:716202. https://doi.org/10.3389/fpsyg.2021.716202

45. Mao G, Drury J, Fernandes-Jesus M, Ntontis E. How participation in Covid-19 mutual aid groups affects subjective well-being and how political identity moderates these effects. *Analyses Soc issues public policy ASAP*. 2021;21(1):1082-1112. Advance online publication. https://doi.org/10.1111/asap.12275

46. Powell T, Perron BE. Self-help groups and mental health/substance use agencies: the benefits of organizational exchange. *Subst Use Misuse*. 2010;45(3):315-329. https://doi.org/10.3109/10826080903443594

AUTHOR BIOGRAPHIES

Felipe Agudelo-Hernández: MD, Child and adolescent psychiatrist, PhD in Social Sciences, Childhood and Youth. He is an advisor for the implementation of the mental health public policy in Colombia and the community-based rehabilitation strategy for the capital cities of Iberic-America. Aside from mental health services, his research interest is in mental health mutual aid groups and other community recovery efforts, especially for severe mental disorders and suicidal behaviour. He has led national risk management strategies for adolescents and children at risk of suicide, with an intercultural approach. He is a clinical professor of paediatrics at the University of Manizales and a specialisation in paediatrics at the University of Caldas.

Rodrigo Rojas-Andrade, MEd, Psy.M., Ph.D., is Associate Professor at the School of Psychology, University of Santiago de Chile. Research Director of the Latin American Commission for the Global Implementation Society. His research interests are designing and implementing public community mental health programs in diverse settings.

APPENDIX 1 COEFFICIENTS OBTAINED FOR THE CONFIRMATORY FACTOR ANALYSIS AND MODEL FIT OF THE DATA AND *SCALE FOR THE MUTUAL AID*

COMPONENTES PRINCIPALES DE LOS GRUPOS DE AYUDA MUTUA

El objetivo del instrumento consiste en identificar algunas técnicas, contenidos, habilidades o principios que son esenciales para que tu grupo funcione mejor y tenga mayor impacto en sus participantes. Lee la definición y marca con una X el número que corresponda según cada componente (0 = está ausente, 1 = presente pocas veces, 2 = presente algunas veces, 3 = presente la mayoría de las veces, 4 = siempre está presente).

Componente	0	1	2	3	4
Estrategias de afrontamiento: técnicas aprendidas o potenciadas en el grupo que facilitan el abordaje individual de situaciones personales adversas.					
Reconocimiento y gestión emocional: identificación de aspectos de la dinámica grupal que son importantes para la identificación de las emociones, construcción de ideas y posterior planificación de la conducta.					
Técnicas de resolución de problemas: percepción de algunas habilidades psicológicas, incluidas técnicas específicas o estrategias individuales que no pertenecen a una técnica propia, que permiten afrontar las dificultades cotidianas					
Interacciones de apoyo: exploración activa de acciones grupales para la salud mental por parte de las mismas personas con la intención de relacionarse con otras a quienes se puede ayudar o de quienes se puede recibir ayuda.					
Confianza en los otros miembros: valor del grupo que permite el actuar grupal en el que una persona puede contar libremente lo que le ha pasado sin esperar un juicio de valor que le haga sentir mal.					
Apoyo en la construcción de identidad: identificación y apropiación en el grupo de aspectos individuales que forman parte de la personalidad y que son necesarios considerar en cada proceso de recuperación.					
Fortalecimiento de redes sociales: reconocimiento del grupo como una herramienta que proporciona a la persona una disponibilidad constante para sus dificultades.					
Fortalecimiento capacidad de agencia: el incremento de habilidades o el traslado de estas habilidades a funciones, que se ha obtenido a través de la participación en el grupo.					

Note: The authors.

Coefficients obtained for the confirmatory factor analysis and model fit of the data.

Model	SB-o2/df.	TLI	SRMR	CFI	RMSEA
Single factor	1029.6	0.51	0.139	0.57	0.14
Two orthogonal factors	280.37	0.94	0.09	0.94	0.05
Two oblique factors	278.07	0.93	0.07	0.95	0.5

Abbreviations: CFI, Comparative Fit Index; RMSEA, Root Mean Square Error of Approximation; SRMR, Standardized Root Mean Residual; TLI, Tucker Lewis Index.