

RESEARCH

Open Access



# Integrating mental health and psychosocial support into economic inclusion programming for displaced families in Ecuador

Arianna Moyano<sup>1†</sup>, Daniela Vergara<sup>1†</sup>, Amaleah Mirti<sup>2</sup>, Annie G. Bonz<sup>3</sup>, Adriana Monar<sup>3</sup>, Efrén Astudillo<sup>1</sup>, Sara Vaca<sup>1</sup>, Karen Cordova<sup>1</sup>, Andrea Armijos<sup>3</sup>, Adrian Barroso<sup>1</sup>, Cesar Cherrez<sup>4</sup>, Jennie Cottle<sup>3</sup>, Aimée DuBois<sup>5</sup>, Isabella Fernandez Capriles<sup>6</sup>, Jean Pierre Grandes<sup>1</sup>, Matias Irrarrazaval<sup>7</sup>, Belen Jaramillo<sup>1</sup>, Jeremy C. Kane<sup>2</sup>, Carmen Martinez-Viciano<sup>7</sup>, Franco Mascayano<sup>6</sup>, Yescárleth Rodríguez<sup>3</sup>, Matthew Schojan<sup>3</sup>, Kathleen Sikkema<sup>2</sup>, Ezra Susser<sup>2,6</sup>, Peter Ventevogel<sup>8</sup>, Mike Wessells<sup>2</sup>, Aaron Zambrano López<sup>1</sup>, Kathryn L. Lovero<sup>2†</sup> and M. Claire Greene<sup>2\*†</sup>

## Abstract

**Background** Poverty is a key social determinant of mental health among forcibly displaced persons. This study aimed to design and pilot test a strategy to integrate existing mental health and economic inclusion interventions for displaced families in Ecuador.

**Methods** We conducted a series of qualitative interviews ( $n = 30$ ), focus groups ( $n = 6$ ), and workshops ( $n = 3$ ) to develop a set of strategies for integrating cross-cutting and focused mental health and psychosocial support (MHPSS) strategies into an existing economic inclusion program for displaced families in Quito. We non-randomly assigned two field offices in Quito to (1) integrate cross-cutting strategies focused on improving economic outcomes or (2) integrate both those cross-cutting strategies plus focused MHPSS strategies into an economic inclusion program. We measured site-level implementation outcomes (adoption, appropriateness, acceptability, feasibility, fidelity, reach, retention, usability) and participant-level psychosocial (wellbeing, depressive symptoms, anxiety symptoms, functioning) and economic inclusion outcomes (financial resources, diet diversity, social capital/networks, self-reliance) over six months. We conducted a mixed-methods analysis to explore the acceptability and feasibility of the integration strategies and the ability to evaluate their effects in a future cluster randomized trial.

**Results** We developed a toolkit that included 10 strategies for integrating MHPSS into economic inclusion interventions. Fifty displaced persons participating in an existing economic inclusion program (25 per study condition) were enrolled and 88% remained in the study through the six-month follow-up. Participants and

<sup>†</sup>Arianna Moyano and Daniela Vergara Co-first author.

<sup>†</sup>Kathryn L. Lovero and M. Claire Greene Co-senior author.

\*Correspondence:  
M. Claire Greene  
[mg4069@cumc.columbia.edu](mailto:mg4069@cumc.columbia.edu)

Full list of author information is available at the end of the article



© The Author(s) 2024. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

implementers reported that the integration strategy was appropriate, acceptable, feasible, and usable. Implementers, including people without prior experience in delivering mental health services, were able to deliver the intervention with high fidelity. Integration of focused MHPSS intervention components into an economic inclusion program appeared to improve MHPSS outcomes, the strength of social capital and networks, and engagement in economic and other programs.

**Conclusions** This study provides preliminary evidence of the acceptability and feasibility of integrating MHPSS into economic inclusion programs for displaced people. We found evidence supporting evaluation methods that can be employed in a future study to definitively test the added value of integrated approaches to mental health and economic wellbeing for displaced persons.

**Keywords** Mental health and psychosocial support, Poverty alleviation, Economic inclusion, Forcibly displaced persons

## Background

As of 2023, over 117.3 million people have been forcibly displaced from their homes due to persecution, violence, and other emergencies [1]. Protracted displacement has become increasingly common, and many displaced persons live in uncertain and precarious situations that present barriers to health services, work opportunities, and basic needs. Latin America has experienced high levels of intraregional migration for decades [2].

For the past twenty years, Ecuador has been host to one of the largest refugee populations in Latin America, many of whom are from Colombia [3]. More recently, the economic and political crisis in Venezuela has produced one of the largest populations globally, which includes asylum seekers, refugees, and other migrants in need of international protection, hereafter referred to as displaced persons. In 2024, an estimated 474,945 Venezuelan displaced persons were residing in Ecuador [4], most of whom have an irregular migration status (73%), which presents challenges for socioeconomic integration [5]. In 2017, the National Assembly in Ecuador adopted the Law of Human Mobility, which states that “persons who are residing in Ecuador are entitled to work and to access social security” and are also assured the right to health [6]. In recent years, the government has made efforts to facilitate the regularization process for displaced persons in Ecuador, primarily Venezuelans and their families who lack legal status. These efforts align with protection and integration strategies recommended in the Global Compact on Refugees [7]. Ecuador therefore serves as an important setting to examine how policies and programs can facilitate the integration and wellbeing of displaced communities within economic, health, and social context.

Populations displaced by humanitarian emergencies face an elevated risk of mental health and psychosocial problems [8–10]. Studies of mental health among displaced persons in Latin America reveal that mental health problems, such as depression and anxiety, are common [11, 12] and that social and structural factors

are key determinants of mental health [13–15]. Economic insecurity and lack of livelihood opportunities are among these social determinants of mental health [16, 17]. The numerous barriers to accessing mental health and psychosocial support (MHPSS) that displaced persons face are compounded by socioeconomic inequalities [18, 19], leading to vicious cycles that exacerbate mental health problems as well as socioeconomic disadvantage.

Providing economic support may help to alleviate stress and improve the lives of displaced persons [20]. Thus, humanitarian health and protection organizations have recommended economic inclusion (EI) as a priority component of multisectoral programming [21, 22]. However, based on existing evidence from humanitarian settings, it is unlikely that EI interventions delivered in the absence of MHPSS are sufficient to address the mental health and related needs of displaced persons and their families [23, 24]. Combining EI interventions with MHPSS addresses key structural and social determinants such as living conditions, social networks, and individual resilience simultaneously [25, 26]. This multisectoral approach may create an enabling environment for improved mental health and psychosocial wellbeing [27].

The objective of this study was to design and pilot test a multisectoral strategy for integrating MHPSS into EI programming for displaced persons in Ecuador.

## Methods

### Setting

This study builds on a multi-year partnership between an implementing organization (HIAS), academic organization (Columbia University), and advisors from multilateral organizations. HIAS is a non-governmental organization that provides protection services, including EI and community-based MHPSS to displaced persons and host communities. HIAS’ EI programs promotes opportunities to earn a sustainable income, build self-reliance, and increase resilience [28]. The Socioeconomic Support Program (SESP) is a HIAS poverty alleviation program derived from the Graduation Model Approach

and contextualized for emergencies [29, 30]. HIAS first implemented SESP to respond to the needs of displaced persons in Ecuador. SESP supports families in graduating out of poverty over 12–15 months through four phases. First, families' protection needs are evaluated using the Self-reliance index (SRI) to determine whether they are likely to benefit from SESP [31]. Second, HIAS staff and participants sign an agreement covering their responsibilities throughout the program. Third, families participate in monthly social and economic accompaniment and follow-up from staff, which includes referral to services and case management of protection needs. Participants are provided cash-based interventions in the first 3–6 months of the program to protect their basic needs while they start generating sustainable livelihoods. During this phase, the social promoter provides ongoing accompaniment to connect families with services, verify commitments, collaboratively envision strategies to achieve SESP objectives, and strengthen their community integration. The EI advisor supports families in achieving labor, financial, and savings stability through activities such as entrepreneurship and employment workshops, financial education, and technical/vocational training. Fourth, family's accomplishments towards achieving self-reliance across four criteria (sustainable livelihoods, savings, food security, community integration) are recognized by a graduation certificate [29, 32].

HIAS' MHPSS programs seek to improve mental health and psychosocial wellbeing through multilevel interventions according to the Inter-Agency Standing Committee Guidelines [33]. HIAS provides a range of MHPSS services, including individual support through specialized psychosocial and crisis interventions mainly for violence and torture survivors; group psychosocial support to strengthen coping/social skills and to promote generation of support networks; community programming to connect people to community and family supports through training promoters and local integration activities; and strengthening the capacities of public officials and humanitarian actors to ensure continuity of care and access to services using rights-based and participatory approaches [34].

## Procedures

### Study design

We employed a mixed-methods approach to participatively develop the MHPSS and SESP integration strategy and then evaluate the strategy in a pilot implementation trial. All procedures and data collection were conducted by two research assistants with training in psychology and experience working in participatory and community-based research with displaced populations. Study data in all phases were collected and analyzed in Spanish. All participants provided informed consent, and study

procedures were approved by the Institutional Review Boards at Columbia University (AAAU8002) and Universidad San Francisco de Quito (2023-011E).

### Participatory design phase

We used a participatory, iterative process that included displaced persons (asylum seekers, migrants, and refugees), HIAS MHPSS and EI program staff, and other stakeholder groups. Throughout this process, these groups participated in interviews, focus groups, and workshops to conceptualize the strategy to integrate MHPSS and EI programs, design and operationalize the strategy and its components, and refine the strategy to fit the context. In the first phase (January–April 2023), we used process mapping to visually characterize the flow of HIAS clients entering, exiting, and being referred between SESP and MHPSS services [35]. We consulted with MHPSS and EI staff to refine a flow diagram and used routine monitoring data collected by HIAS from SESP 2022–2023 participants on their engagement in MHPSS services to validate the process diagram.

Next, we conducted 30 in-depth interviews (May–June 2023) to explore the relationship between mental health and socioeconomic status among displaced persons in Ecuador, as well as perceptions on integrating MHPSS and economic programs. Participants were Spanish-speaking adults (18+ years of age) who were familiar with mental health and/or socioeconomic conditions among displaced persons in Ecuador, including SESP participants and MHPSS clients, HIAS staff, and external stakeholders (e.g., representatives of government agencies, non-governmental organizations, and foundations that provide mental health, economic, and protection services to displaced communities). We conducted six focus group discussions (FGDs, June–July 2023) with civil society and governmental organization representatives involved in economic, health and protection services; HIAS coordinators/managers; HIAS MHPSS or EI staff; and displaced persons participating in HIAS' MHPSS and/or EI programs. FGD participants identified and prioritized actions to promote the integration of MHPSS and SESP. We facilitated three participatory integration strategy design workshops (August–September 2023) with HIAS MHPSS and SESP staff. The workshops began by selecting actions prioritized during the FGDs and identifying which parts of SESP or other HIAS programs complement each action, specifying a strategy according to its components/actions (i.e., who is involved in implementation; what activities comprise the strategy; where, when and how it would be implemented), and refining the strategy to fit existing resources. Strategies were organized into a manual called *Building the Future Toolkit* (*Caja de Herramientas para Construir Futuro*; Table 1). All facilitation guides for in-depth interviews, focus

**Table 1** Description of building the future toolkit and components**Cross-cutting strategies targeting economic outcomes****Strategy 1. Trabajando en mi futuro (Working towards the future)**

• **Objective:** Facilitate the exploration of needs, available resources, and the continual strengthening of technical skills to generate secure and sustainable livelihoods

• **Target outcomes:** Secure and sustainable livelihoods, Self-reliance

• **Target population:** Adults participating in entrepreneurship and employment programs

• **Activities:** Recognizing opportunities, Economic project tree, Setting responsibilities, Fulfilling my dreams

**Strategy 2. Conectarnos (Connecting among us)**

• **Objective:** Promote spaces for children, adolescents, and adults to participate in the creation of instrumental and emotional support networks and the exchange of experiences, ideas, and knowledge that aims to help with their integration into communities in Ecuador.

• **Target outcomes:** Support networks

• **Target population:** Families or individuals participating in economic inclusion programs

• **Activities:** I know my community, Alumni network

**Strategy 3. Asegurando mis ahorros (Securing my savings)**

• **Objective:** Promote and strengthen financial education and savings culture for adults, adolescents, and children to reduce the risk of experiencing transgenerational poverty

• **Target outcomes:** Savings

• **Target population:** Families participating in economic inclusion programs

• **Activities:** *Three magic jars, Planning my savings, Creating my savings plan*

**Strategy 4. Sabores que unen (Flavors that unite)**

• **Objective:** Promote healthy eating through participatory and intercultural activities

• **Target outcomes:** Health eating, Support networks

• **Target population:** Families participating in economic inclusion programs

• **Activities:** *My food basket, Healthy pampamesa, What is the name of this food?*

**Non-specialised, focused mhps strategies targeting mhps outcomes****Strategy 5. Tejiendo redes (Weaving networks)**

• **Objective:** Foster the formation of instrumental and emotional support networks among participants and their families to promote social connection among participants and their families while also strengthening coping skills.

• **Target outcomes:** Support networks, Mental health and psychosocial wellbeing

• **Target population:** Families participating in economic inclusion programs

• **Activities:** *Family calendar, Sharing my talent, Building alternatives*

**Strategy 6. Reconocernos (Recognizing ourselves)**

• **Objective:** Promote co-responsibility, autonomy, and resilience among persons through recognizing their own resources, planning their life project, and establishing mechanisms of self-monitoring and tracking their progress and achievements

• **Target outcomes:** Self-reliance, Mental health and psychosocial wellbeing

• **Target population:** Adults participating in economic inclusion programs

• **Activities:** *Path of self-exploration, My vision, Wheel of life, My commitment*

**Strategy 7. Tiempo para tí (Time for yourself)**

• **Objective:** Promote self-care strategies

• **Target outcomes:** Mental health and psychosocial wellbeing

• **Target population:** Adults, adolescents, and/or children participating in economic inclusion programs

• **Activities:** *Self-care calendar, How I feel today, Breathe and release*

**Strategy 8. Afrontando avanza (Facing forward)**

• **Objective:** Strengthen skills for coping with adversity and stress that can emerge during the process of developing secure and sustainable livelihoods

• **Target outcomes:** Mental health and psychosocial wellbeing, Secure and sustainable livelihoods

• **Target population:** Adults participating in economic inclusion programs

• **Activities:** *Connecting with the present, Pursuing my goals, Connecting my strengths with my actions, My value and being kind*

**Strategy 9. Encuentro de sabores (Encountering flavors)**

• **Objective:** Promote healthy eating and nutrition through identifying the connection between eating behaviors and emotions

• **Target outcomes:** Healthy eating, Mental health and psychosocial wellbeing

• **Target population:** Adults participating in economic inclusion programs

• **Activities:** *Exploring food with my senses, Healthy alternatives*

**Strategy 10. Camino hacia mi ahorro (Road to my savings)**

• **Objective:** Strengthen psychosocial skills related to achieving saving goals

• **Target outcomes:** Savings, Mental health and psychosocial wellbeing

• **Target population:** Adults participating in economic inclusion programs

• **Activities:** *Getting stronger and saving, My savings make my ideals possible, Role-play to encourage savings*

groups, and workshops are provided as [Supplementary Material](#).

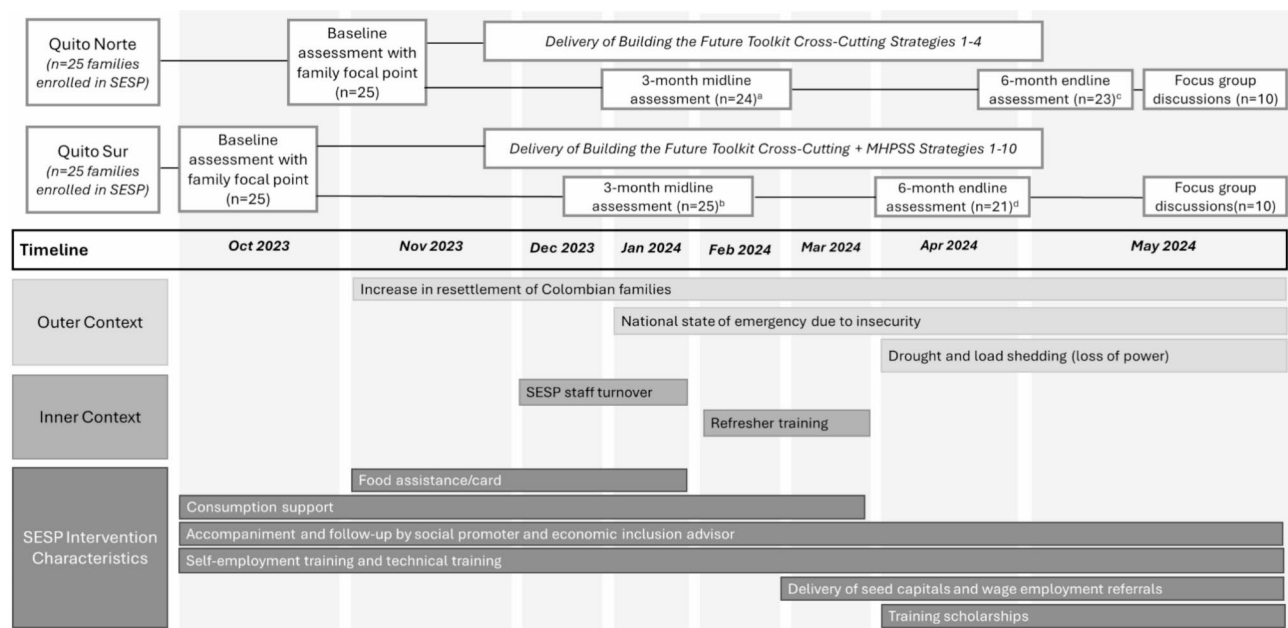
### Pilot implementation and evaluation phase

Twelve EI and MHPSS staff, including social promoters, EI advisors, and psychologists, were trained by the research assistants in the study field offices, from September–October 2023, over two, 5-hour sessions. The training covered basic psychosocial and group facilitation skills, information about integration strategies, and how to implement the integration strategies within SESP.

We piloted the *Building the Future Toolkit* in two HIAS field offices in Quito (Quito Norte, Quito Sur) between October 2023 and May 2024. We enrolled one participant as a household focal point from each of the 50 SESP-participating families ( $n=25$  per site). The 50 families were selected by HIAS to participate in SESP based on the following criteria: (1) Venezuelan or Colombian nationality with regular or irregular migration status; and (2) a score of 2–2.7 on the Self-Reliance Index, a measure of self-sufficiency that ranges from zero to five [31]. The program sought to include families headed by young men/women (17–29 years), large families with three or more children, and families that included someone with social protection needs that included risk/history of gender-based violence, minoritized sexual or gender identity, disability, chronic illness, or someone who is pregnant or breastfeeding. Often, SESP families were single adult households. In these cases, the household focal point for the SESP program was the same individual as was enrolled

in the study. For families that included two eligible adults, they nominated one eligible adult to complete study assessments and serve as the focal point for the research study. We piloted two versions of the *Building the Future Toolkit*. In one site, Quito Norte, we implemented the four integration strategies that aimed to improve EI outcomes through a multisectoral, cross-cutting approach. In the second site, Quito Sur, we implemented both the four cross-cutting strategies to improve EI outcomes and the six focused MHPSS actions to improve mental health and psychosocial wellbeing. SESP implementers incorporated these strategies into different SESP activities (e.g., home visits, entrepreneurship schools, cash-based interventions). Allocation of sites to study condition was non-random. Quito Sur was selected to implement the cross-cutting and focused MHPSS strategies because the study team perceived that readiness to adopt new strategies was higher and the SESP workplan was less developed at the start of the study, which enabled us to evaluate feasibility as part of this pilot study within a more flexible setting.

We collected data on site, implementer, and participant outcomes throughout implementation (Fig. 1). Research assistants collected routine monitoring information on attendance, fidelity, and feedback each time that an integration strategy was implemented. Study participants completed assessments of client outcomes at 0 (baseline), 3 (midline) and 6 months (endline) post-enrollment in SESP. At the 3-month research follow-up, participants were receiving cash and voucher assistance (CVA) and



**Fig. 1** Study flow diagram and timeline. Notes:<sup>a</sup>Reasons for loss to follow-up at 3 months in Quito Norte: Protection risk. <sup>b</sup>Reasons for loss to follow-up at 3 months in Quito Sur: No loss to follow-up. <sup>c</sup>Reasons for loss to follow-up at 6 months in Quito Norte: Loss of contact, left Ecuador to migrate to other country, left Ecuador to return to Venezuela, didn't have time to participate. <sup>d</sup>Reasons for loss to follow-up at 6 months in Quito Sur: Resettlement



had received some of the implementation strategies. At the 6 month assessment, participants were no longer receiving CVA and all the strategies of the toolkit had been applied; however, routine SESP activities continued after the 6-month study endpoint. At 6 months we conducted focus group discussions with EI and MHPSS program staff ( $k=2$ ;  $n=9$ ) and study participants ( $k=4$ ;  $n=20$ ).

## Measures

### Implementation (site-level) outcomes

We accessed routine program monitoring data to measure program adoption (% of strategies implemented), reach (# of families who participated in integration activities, % of families that utilized MHPSS or other HIAS services), and retention (% families who entered SESP and remained at 3- and 6-months after baseline) stratified by site. These indicators were ascertained from SESP program documentation collected through program monitoring forms by SESP (EI) staff as well as by the research assistants through structured attendance sheets and activity checklists, completed by research assistants. We measured acceptability, appropriateness, and feasibility of the integration toolkit using the Acceptability, Appropriateness, and Feasibility of Intervention Measures. These four-item questionnaires include response options on a 5-point Likert scale (range=4–20, higher scores=higher acceptability/appropriateness/feasibility) [36]. We measured usability with the Intervention Usability Scale, a 10-item questionnaire with response options on a 5-point Likert scale (range=0–100, higher scores=higher usability) [37]. Fidelity was measured using a structured checklist that assesses the extent to which a strategy was implemented as intended from zero (not implemented), one (partially implemented), to two (fully implemented as designed), ascertained through implementer interviews after each session. FGDs with MHPSS staff, EI staff, and SESP participants explored barriers and facilitators to adoption, reach, and retention, and the acceptability, appropriateness, feasibility, and usability of *the Building the Future Toolkit* and its components.

### Participant-level outcomes

We examined the psychometric performance of potential client-level study outcome measures. Outcome measures included: (1) psychosocial wellbeing, measured using the Warwick Mental Wellbeing Scale [38]; (2) symptoms of common mental disorder measured using the Patient Health Questionnaire-9 (PHQ-9) to assess depressive symptoms and the 7-item Generalized Anxiety Disorder (GAD-7) to assess anxiety symptoms [39, 40]; (3) the 36-item World Health Organization Disability Assessment Schedule 2.0 (WHODAS) assessment of functioning [41, 42]; (4) financial resources from the World

Health Organization Quality of Life (WHOQOL) [43]; (5) diet diversity using the Diet Quality Questionnaire (DQQ) [44]; (6) social capital and networks using the Short Social Capital Assessment Tool (SASCAT) [45]; (7) the Self Reliance index (SRI) [31]; and (8) self-reported engagement in HIAS programs. Perceptions of the implementation and effectiveness of the integration strategies were captured during FGDs at the six-month follow-up.

## Analysis

### Qualitative data analysis

We employed rapid qualitative analysis [46], a pragmatic approach to identify action-oriented results [47–49]. Two members of the research team listened to recordings and reviewed field notes from the in-depth interviews and FGDs. They independently coded information into a matrix that the research team designed for each phase of the study. In the design phase, the matrix included codes that corresponded to the target MHPSS and EI outcomes, potential actions and strategies for integration, and emergent themes from in-depth interviews, FGDs, and workshops. In the pilot testing phase, the matrix included themes identified for each implementation outcome (acceptability, adoption, appropriateness, effectiveness, feasibility, sustainability) organized by participant type. The research team met to review the matrix and refine coding. Discrepancies were resolved via consensus.

### Quantitative data analysis

We calculated estimates of reach, retention, adoption, and engagement in other HIAS programs by site to descriptively compare outcomes across study conditions (i.e., cross-cutting strategies vs. cross-cutting and focused MHPSS strategies). We described the distribution of implementer-reports of acceptability, appropriateness, feasibility, and usability of each strategy across study conditions. We examined the psychometric performance of latent MHPSS outcome measures by calculating the internal consistency of each scale and estimating its construct validity using a confirmatory factor analysis. We explored sensitivity to change of all outcome measures using mixed-effects models. We estimated the within- and between-group change from baseline to three- and six-month follow-ups.

## Results

### Design phase

#### Relevance and feasibility of integrated MHPSS and EI services

Key informants included 10 SESP participants and MHPSS clients, 13 HIAS staff, and 7 external stakeholders. They described a bidirectional relationship between mental health and economic stability among displaced persons. Gender and gender-based violence, marginalized identities, migration, and stigma were identified as

factors that influence both outcomes, MHPSS and economic stability. Key informants endorsed the integration of MHPSS and EI interventions, citing the importance of promoting mental health before or concurrently with EI programs to strengthen psychosocial skills such as self-determination, confidence, self-esteem, resilience, and coping that could enhance the benefit of EI programs. A summary of themes, including barriers and facilitators to integration, is provided in Supplemental Fig. 1.

### **Relevance and feasibility of integrating MHPSS into SESP**

Process mapping was used to supplement findings from key informant interviews and visualize the different processes whereby displaced persons engage and progress through HIAS' MHPSS and SESP, including points of referral between these services and to others to address protection needs. The process map highlighted 16 decisions or actions nested within three broader processes that could promote or hinder integration of HIAS MHPSS and SESP programs. First, SESP clients identified as having mental health needs were referred to MHPSS by SESP implementers. In a review of historical SESP data from the 2022 cohort, we estimated that 42.4% of SESP participants were referred to MHPSS services by SESP implementers. Second, a HIAS psychologist reached out to the client to assess their MHPSS needs and determine the appropriate level of intervention. Third, SESP clients were linked to an MHPSS provider or group and initiated and continued the MHPSS intervention. Among the 2022 SESP clients who were referred to MHPSS, 28.6% received individual assessment and individual MHPSS intervention, 50.0% received individual assessment and group MHPSS interventions, and 21.4% did not receive any MHPSS assessment or intervention. Of those who initiated individual MHPSS interventions, 42.9% only participated in a single session. Few SESP clients engaged in community-based MHPSS processes such as intercultural fairs and activities that aimed to promote connection with the host community (12.1%) and workshops provided to the community and individuals receiving services from HIAS focused on various topics such as parenting, self-care, and how to access services (3.0%).

Together, results from the key informant interviews, secondary analyses, and process mapping indicated that a multisectoral and multilevel approach that integrated MHPSS into multiple parts of SESP was necessary to overcome barriers to integration for the following reasons: (1) integration across SESP was expected to be more effective than modifying a single barrier, process, or decision point; (2) relying on referrals to MHPSS providers may overwhelm the capacity of the system due to the high prevalence of MHPSS needs and, instead, providing basic MHPSS within SESP may meet the needs of individuals with less severe mental health needs and promote

efficiency within the referral system; and (3) situating MHPSS within other services that address the social determinants of mental health in a cross-cutting, multi-sectoral approach may improve its accessibility, acceptability, and appropriateness.

### **Development of the building the future toolkit to integrate MHPSS and EI interventions**

Through FGDs with 6 civil society and governmental organization representatives, 4 HIAS coordinators/managers, 11 HIAS MHPSS or EI staff, and 19 displaced persons, we identified eight priority opportunities that participants believed would have an impact on MHPSS and EI outcomes and could facilitate MHPSS and SESP integration: (1) Financial education and literacy workshops; (2) Livelihood workshops tailored to client preferences; (3) Nutritional assessments; (4) Food security and nutrition activities; (5) Education about the relationship between MHPSS and EI; (6) Community-based including psychoeducation, awareness-raising, and stigma reduction; (7) Group activities for SESP families to mobilize social support, connectedness, and strengthen psychosocial skills; and (8) Promoting autonomy and co-responsibility.

We conducted participatory workshops with 11 SESP and MHPSS implementers. During the workshops, the eight actions prioritized during the previous FGDs were operationalized into ten integration strategies aimed at improving mental health and psychosocial wellbeing, livelihoods, savings, support networks, and nutrition. The strategies were designed to expand or complement existing SESP and MHPSS programs (Table 1). Together these strategies formed the Building the Future Toolkit (*Caja de Herramientas para Construir Futuro*). Six focused strategies are intended to improve MHPSS outcomes among SESP families and four cross-cutting strategies are intended to enhance EI outcomes among SESP families. The final toolkit is a structured manual covering the objectives of each strategy, step-by-step instructions for activities that can be used and tailored to achieve those objectives, and implementation recommendations.

### **Implementation and evaluation phase**

#### **Baseline characteristics**

The 50 SESP household focal points were 36.3 years of age, on average (SD=8.2; Range: 18–60), and most were female (90.0%) and had a secondary school education (54.0%) or university degree (40.0%; Table 2). Most participants were currently married (24.0%) or living with their partner (30.0%). 40% of participants had full-time (28.0%) or part-time work (12.0%). All were Venezuelan (76.0%) or Colombian (24.0%). Most identified as migrants (66.0%) followed by refugees (22.0%) or asylum seekers (12.0%). Almost one-third reported having

**Table 2** Baseline characteristics of study sample

	Full SESP Cohort, 2023–2024 (n = 50)	SESP Cohort by Field Office		t/X <sup>2</sup> (p)
		Quito Norte, cross-cutting strategies (n = 25)	Quito Sur, cross-cutting and focused MHPSS strategies (n = 25)	
Age, M (SD)	36.3 (8.2)	38.1 (9.0)	34.5 (7.2)	t = 1.6 (0.124)
Female gender, n (%)	45 (90.0)	23 (92.0)	22 (88.0)	Fisher's = 1.000
Marital status, n (%)				Fisher's = 0.453
Never married	13 (26.0)	4 (16.0)	9 (36.0)	
Currently married	12 (24.0)	6 (24.0)	6 (24.0)	
Cohabiting	15 (30.0)	10 (40.0)	5 (20.0)	
Divorced	4 (8.0)	2 (8.0)	2 (8.0)	
Separated	6 (12.0)	3 (12.0)	3 (12.0)	
Employment, n (%)				Fisher's = 0.332
Unemployed	6 (12.0)	1 (4.0)	5 (20.0)	
Housewife	8 (16.0)	4 (16.0)	4 (16.0)	
Informal work	7 (14.0)	4 (16.0)	3 (12.0)	
Self-employed	9 (18.0)	7 (28.0)	2 (8.0)	
Part-time work	6 (12.0)	3 (12.0)	3 (12.0)	
Full-time work	14 (28.0)	6 (24.0)	8 (32.0)	
Education level, n (%)				Fisher's = 0.684
Less than primary school	1 (2.0)	1 (4.0)	0 (0.0)	
Primary school	2 (4.0)	1 (4.0)	1 (4.0)	
Secondary school	27 (54.0)	15 (60.0)	12 (48.0)	
University degree	20 (40.0)	8 (32.0)	12 (48.0)	
Country of birth, n (%)				Fisher's = 0.321
Colombia	12 (24.0)	4 (16.0)	8 (32.0)	
Venezuela	38 (76.0)	21 (84.0)	17 (68.0)	
Time living in Quito (in years), M (SD)	3.4 (2.2)	3.6 (2.4)	3.2 (2.0)	t = 0.6 (0.583)
Self-reported migration status, n (%)				Fisher's = 0.388
Migrant	33 (66.0)	19 (76.0)	14 (56.0)	
Refugee	11 (22.0)	4 (16.0)	7 (28.0)	
Asylum seeker	6 (12.0)	2 (8.0)	4 (16.0)	
Irregular migration status, n (%)	15 (30.0)	7 (28.0)	8 (32.0)	X <sup>2</sup> = 1.0 (0.758)
<b>Baseline outcomes</b>				
Anxiety symptoms, (GAD-7), M (SD)	7.2 (4.2)	5.9 (3.6)	8.6 (4.3)	t = -2.3 (0.024)
Depressive symptoms (PHQ-9), M (SD)	7.7 (4.1)	6.7 (4.1)	8.6 (4.0)	t = -1.6 (0.107)
Diet Diversity (DQQ), M (SD)	3.9 (1.4)	4.3 (1.4)	3.6 (1.4)	t = 1.9 (0.063)
Financial Resources (WHOQOL), M (SD)	13.6 (1.6)	13.4 (1.4)	13.9 (1.8)	t = -1.1 (0.263)
Functional impairment (WHODAS), M (SD)	62.8 (16.0)	60.8 (17.0)	64.8 (15.0)	t = -0.9 (0.377)
Psychosocial wellbeing (Warwick), M (SD)	52.5 (9.3)	54.8 (7.9)	50.2 (10.2)	t = 1.8 (0.084)
Self-reliance (SRI), M (SD)	2.7 (0.1)	2.7 (0.1)	2.6 (0.2)	t = 0.5 (0.608)
Social capital and networks, M (SD)	6.3 (3.0)	6.1 (3.0)	6.4 (3.0)	t = -0.3 (0.745)

irregular migratory status (30.0%). Participants had been living in Quito for 3.4 years, on average (SD=2.2). Most had previously participated in HIAS' EI programs (60.0%). Few participants reported having participated in HIAS' MHPSS (22.0%) or other programming (30.0%).

#### **Implementation of the building the future toolkit**

Participants were enrolled into SESP and the research study between October–November 2023 (*n*=25 in Quito Norte, *n*=25 in Quito Sur). SESP implementation teams

included economic advisors and social promoters (see Supplemental Table 1 for descriptions of roles). Staff in Quito Norte implemented the four cross-cutting strategies from the *Building the Future Toolkit* that aim to improve EI outcomes by mainstreaming MHPSS principles. Staff in Quito Sur implemented all ten strategies that included those implemented in Quito Norte as well as the six focused MHPSS strategies that aimed to improve MHPSS outcomes.



Forty activities covering all 10 strategies from the *Building the Future Toolkit* were implemented during the implementation phase (November 2023 – May 2024; 10 activities in Quito Norte, 30 activities in Quito Sur). SESP implementers (EI advisors, social promoters) were involved in implementing all 10 strategies. Psychologists were involved in implementing five of the 10 strategies. Staff from other programs (e.g., food security and nutrition) were involved in implementing two of the 10 strategies. Strategies were most integrated into SESP's accompaniment activities. Each strategy was delivered a median of 2 times per site (range 1–7) with a median of 23 participants per strategy in each site (range 1–45; Table 3).

#### **Participant service use**

Participants' utilization of HIAS' EI, MHPSS, or other services did not differ by condition at three months (Table 4). At six months, participants in Quito Sur were more likely to report participating in other sustainable income generation activities (e.g., employability and entrepreneurship schools, agrobusiness; 78.3%) in the past three months as compared to participants in Quito Norte (33.3%;  $p=0.005$ ). Similarly, participants in Quito Sur (47.8%) were more likely to report participating in other HIAS programs outside of EI and MHPSS than participants in Quito Norte (14.3%;  $p=0.024$ ). There was no difference in utilization of MHPSS services offered outside of the strategies integrated into SESP between sites.

#### **Participant MHPSS and EI outcomes**

All psychosocial measures displayed good internal consistency and moderate to adequate internal construct validity (Supplemental Table 2). Two items on the PHQ-9 (appetite, moving slowly or restless) had low item-rest correlations. We observed significant changes in MHPSS outcomes in Quito Sur only, which implemented all ten integration strategies including the focused MHPSS strategies (Table 5). These changes included a significant increase in psychosocial wellbeing from baseline to six months (Mean change=8.38, 95% CI: 4.67, 12.08), significant reductions in depressive symptoms from baseline to three months (Mean change=-2.53, 95% CI: -4.17, -0.89) and six months (Mean change=-3.49, 95% CI: -5.15, -1.83), significant reductions in anxiety symptoms from baseline to three months (Mean change=-0.273, 95% CI: -4.12, -1.33) and six months (Mean change=-3.53, 95% CI: -4.95, -2.11), and significant reductions in functional impairment from baseline to three months (Mean change=-7.64, 95% CI: -12.82, -2.46) and six months (Mean change=-9.95, 95% CI: -15.28, -4.63). Three-month improvements in anxiety symptoms and functioning as well as six-month improvements in psychosocial

wellbeing, depressive symptoms, and anxiety symptoms were significantly greater in Quito Sur relative to the non-significant changes observed in Quito Norte.

We observed significant changes in self-reliance, diet diversity, and social capital both in Quito Norte and Quito Sur. These changes included significant increases in self-reliance from baseline to six months (Quito Norte Mean change=0.98, 95% CI: 0.78, 1.19; Quito Sur Mean change=0.86, 95% CI: 0.65, 1.06), increases in diet diversity from baseline to three months (Quito Norte Mean change=1.09, 95% CI: 0.41, 1.77; Quito Sur Mean change=1.56, 95% CI: 0.87, 2.23) and six months (Quito Norte Mean change=1.25, 95% CI: 0.54, 1.96; Quito Sur Mean change=1.11, 95% CI: 0.42, 1.80), and increases in social capital and networks from baseline to three months in both sites (Quito Norte Mean change=2.32, 95% CI: 1.02, 3.62; Quito Sur Mean change=2.32, 95% CI: 1.04, 3.60) and from baseline to six months in Quito Sur only (Mean change=4.18, 95% CI: 2.87, 5.50). These changes did not differ significantly between groups except for the increase in social capital and networks, which was significantly greater in Quito Sur relative to Quito Norte at six months. Satisfaction with financial resources did not significantly change over time.

#### **Implementation outcomes**

Quantitative surveys (Table 3) indicated the toolkit and its cross-cutting and focused MHPSS strategies to be highly acceptable, appropriate, and feasible to implement (scores >19 out of 20 possible points on all measures) and considered to have good usability (>85 out of 100 possible points). Fidelity to strategies was  $\geq 80\%$  in both sites. In FGDs, implementers and participants noted that the toolkit's flexibility made it acceptable and appropriate for diverse situations. The toolkit provided a holistic approach that fit institutional values by complementing existing HIAS activities and included standardized methodology for easy execution of activities. They also noted that strategies did not require many additional resources and were integrated into existing implementer activities. Factors that facilitated implementation included training that progressively developed foundational then technical skills over time, strong technical support, and team communication and coordination. Implementers and participants felt that conducting activities in communities rather than HIAS offices promoted engagement. Participants indicated some challenges participating in the strategies, owing to responsibilities such as work or childcare. However, most prioritized participation because it provided a safe space that helped them build a social network and support for sharing knowledge, learning new skills, and developing self-efficacy and independence. Women were directly reached more than men and children, as they often serve as family focal points, but

Table 3 Implementation of integration strategy

Strategy	Site	Program integration ACC = Accompaniment, CAP = Cash and voucher assistance, EMP = Wage em- ployment program, ENT = Entrepreneurship school, FSN = Food security and nutrition, HV = Home visits, LIV = Livelihoods	Implementer EI = Economic inclusion advisor, FS = Food Security Advisor, PSY = Psychologist, SP = Social promoter	# times delivered	# reached	Implementation outcomes				
						AIM	IAM	FIM	USB	FID
Trabajando en mi futuro	N	CVA, ENT, ACC, MHPSS	PSY, EI	4	28	19.8 (0.5)	19.3 (1.5)	18.8 (1.9)	83.8 (14.8)	1.5 (0.6)
	S	ENT, ACC, CAP	EI, SP	4	16	20.0 (0.0)	20.0 (0.0)	20.0 (5.0)	97.5 (0.0)	2.0 (0.0)
Conectarnos	N	CVA, ACC	EI, SP	2	45	19.5 (0.7)	20.0 (0.0)	19.0 (1.4)	97.5 (3.5)	2.0 (0.0)
	S	HV	SP	1	1	20.0 (0.0)	19.5 (0.7)	19.5 (7.1)	95.0 (7.1)	2.0 (0.0)
Asegurando mis ahorros	N	ACC	EI, SP	2	38	19.0 (1.4)	19.5 (0.7)	20.0 (0.0)	93.8 (1.8)	1.5 (0.7)
	S	ACC, CVA, HV	SP	2	2	19.0 (0.0)	20.0 (0.0)	20.0 (0.0)	95.0 (0.0)	2.0 (0.0)
Sabores que unen	N	CVA, ACC, MHPSS	PSY, EI, SP	2	23	20.0 (0.0)	20.0 (0.0)	20.0 (0.0)	98.8 (1.8)	1.5 (0.7)
	S	CVA, ACC, FSN	SP, FS	2	25	18.0 (4.0)	19.0 (2.0)	20.0 (0.0)	94.4 (6.6)	2.0 (0.0)
Tejiendo redes	S	ENT, ACC	EI, PSY, PS	2	7	18.3 (2.9)	19.7 (0.6)	20.0 (0.0)	82.5 (30.3)	2.0 (0.0)
Reconocernos	S	CVA, HV, ENT, CAP	SP, EI, PSY	7	43	18.5 (2.3)	18.8 (1.7)	19.0 (1.6)	90.9 (9.2)	1.6 (0.5)
Tiempo para tí	S	CVA, ACC	EI, SP	2	23	18.8 (2.2)	17.2 (3.7)	16.8 (4.5)	80.0 (18.8)	1.5 (0.7)
Afrontando avance	S	ENT, LIV, EMP	EI, PSY	4	17	20.0 (0.0)	20.0 (0.0)	20.0 (0.0)	95.6 (4.3)	1.8 (0.5)
Encuentro de sabores	S	CVA, ACC, FSN	SP, FS	2	26	17.5 (3.5)	16.5 (2.1)	17.5 (2.1)	90.0 (10.6)	1.0 (0.0)
Camino hacia mi ahorro	S	ENT, ACC	EI, SP	4	21	20.0 (0.0)	20.0 (0.0)	19.8 (0.5)	92.5 (8.9)	1.3 (0.5)
Overall Toolkit <sup>a</sup>	N	--	--	--	--	19.5 (0.8)	19.8 (0.4)	20.0 (0.0)	87.1 (8.7)	1.6 (0.5)
	S	--	--	--	--	19.4 (1.2)	19.3 (0.9)	19.1 (1.1)	89.1 (9.3)	1.7 (0.5)

Abbreviations: AIM = acceptability; EI = economic inclusion; FID = fidelity; FIM = feasibility; IAM = appropriateness; MHPSS = mental health and psychosocial support; N = Quito Norte; S = Quito Sur; SP = social promoters; USB = usability

<sup>a</sup>Implementation outcomes (AIM, IAM, IAM, USB) measured during training for overall toolkit, with the exception of fidelity which is an average across all strategies as measured during implementation. Strategy-specific implementation outcomes measured during the implementation phase

**Table 4** Self-reported service utilization

		Quito Norte, <i>N</i> (%)	Quito Sur, <i>N</i> (%)	Fisher's Exact Test <i>p</i> -value
Sustainable income generating activities	Baseline (Month 0; Any lifetime use)	12 (48.0)	18 (72.0)	0.148
	3-month follow-up (past 3-month use)	7 (29.2)	9 (36.0)	0.762
	6-month follow-up (past 3-month use)	7 (33.3)	18 (78.3)	0.005
MHPSS services	Baseline (Month 0; Any lifetime use)	6 (24.0)	5 (20.0)	1.000
	3-month follow-up (past 3-month use)	5 (20.8)	2 (8.0)	0.247
	6-month follow-up (past 3-month use)	3 (14.3)	1 (4.4)	0.335
Other HIAS services	Baseline (Month 0; Any lifetime use)	8 (32.0)	7 (28.0)	1.000
	3-month follow-up (past 3-month use)	3 (12.5)	8 (32.0)	0.171
	6-month follow-up (past 3-month use)	3 (14.3)	11 (47.8)	0.024

**Table 5** Sensitivity to change for study outcome measures

	Quito Norte		Quito Sur		Between-group
	Mean (SD)	Mean change from baseline (95% CI)	Mean (SD)	Mean change from baseline (95% CI)	Difference in mean change (95% CI)
Self-Reliance Index (SRI)					
Baseline (Month 0)	2.7 (0.1)	--	2.6 (0.2)	--	--
6-month follow-up	3.7 (0.4)	0.98 (0.78, 1.19)	3.5 (0.6)	0.86 (0.65, 1.06)	-0.13 (-0.42, 0.16)
Financial Resources (WHOQOL)					
Baseline (Month 0)	13.4 (1.4)	--	13.9 (1.8)	--	--
3-month follow-up	14.0 (1.4)	0.57 (-0.10, 1.24)	14.0 (1.3)	0.12 (-0.54, 0.78)	-0.45 (-1.40, 0.49)
6-month follow-up	13.8 (1.1)	0.44 (-0.26, 1.15)	13.5 (1.4)	-0.36 (-1.04, 0.33)	-0.80 (-1.78, 0.18)
Diet Diversity (DQQ)					
Baseline (Month 0)	4.3 (1.4)	--	3.6 (1.4)	--	--
3-month follow-up	5.4 (1.2)	1.09 (0.41, 1.77)	5.1 (1.4)	1.56 (0.87, 2.23)	0.47 (-0.49, 1.43)
6-month follow-up	5.6 (1.5)	1.25 (0.54, 1.96)	4.7 (1.3)	1.11 (0.42, 1.80)	-0.13 (-1.12, 0.86)
Social Capital and Networks (SASCAT)					
Baseline (Month 0)	6.1 (3.0)	--	6.4 (3.0)	--	--
3-month follow-up	8.5 (3.9)	2.32 (1.02, 3.62)	8.7 (4.4)	2.32 (1.04, 3.60)	0.00 (-1.83, 1.82)
6-month follow-up	7.2 (4.6)	1.10 (-0.28, 2.49)	10.7 (4.3)	4.18 (2.87, 5.50)	3.08 (1.17, 4.99)
Psychosocial Wellbeing (Warwick)					
Baseline (Month 0)	54.8 (7.9)	--	50.2 (10.2)	--	--
3-month follow-up	55.4 (7.8)	0.36 (-3.30, 4.02)	53.5 (12.3)	3.36 (-0.29, 7.01)	3.00 (-2.17, 8.17)
6-month follow-up	54.0 (8.7)	-1.27 (-5.10, 2.56)	58.4 (9.5)	8.38 (4.67, 12.08)	9.65 (4.32, 14.98)
Depressive symptoms (PHQ-9)					
Baseline (Month 0)	6.7 (4.1)	--	8.6 (4.0)	--	--
3-month follow-up	6.3 (3.8)	-0.33 (-1.97, 1.31)	6.0 (4.9)	-2.53 (-4.17, -0.89)	-2.20 (-4.52, 0.11)
6-month follow-up	5.6 (3.4)	-0.86 (-2.57, 0.86)	5.1 (3.7)	-3.49 (-5.15, -1.83)	-2.63 (-5.02, -0.25)
Anxiety symptoms (GAD-7)					
Baseline (Month 0)	5.9 (3.6)	--	8.6 (4.3)	--	--
3-month follow-up	7.0 (3.4)	1.18 (-0.22, 2.58)	5.6 (4.4)	-2.73 (-4.12, -1.33)	-3.91 (-5.88, -1.93)
6-month follow-up	4.8 (3.1)	-0.82 (-2.29, 0.64)	4.9 (4.2)	-3.53 (-4.95, -2.11)	-2.71 (-4.75, -0.67)
Functional impairment					
Baseline (Month 0)	60.8 (17.0)	--	64.8 (15.0)	--	--
3-month follow-up	60.8 (15.5)	0.58 (-4.68, 5.84)	57.2 (14.1)	-7.64 (-12.82, -2.46)	-8.22 (-15.60, -0.84)
6-month follow-up	54.0 (9.7)	-5.45 (-10.96, 0.07)	54.4 (13.9)	-9.95 (-15.28, -4.63)	-4.51 (-12.17, 3.16)

participants felt the strategies also benefited family members, since learnings were disseminated and applied in the household.

## Discussion

This research aimed to design and pilot test a strategy to integrate MHPSS and EI interventions for displaced persons. Our formative research reinforced the close interconnections between mental health and economic stability [50]. Economic resources, livelihood opportunities, and responding to specific protection concerns are essential components to mental health within displaced communities [20, 51–53]. While this implies that EI interventions may have direct or indirect benefits on mental health, the research on the effect of EI interventions on MHPSS outcomes is mixed [23, 24, 54]. Instead of examining the effect of EI interventions on mental health or vice versa, this study aimed to examine how these types of interventions may be integrated to enhance their respective benefits given the close interconnections among their target outcomes.

We found that it was highly feasible, appropriate, and acceptable to integrate MHPSS intervention components into a complex EI intervention for displaced families. Implementers, including those without prior experience in MHPSS, reported that the strategies were usable and they were able to implement them with high fidelity. By integrating EI and MHPSS, leveraging local resources, and working across sectors, this integrated package addresses the multi-dimensional needs of displaced families. This approach aligns with the multistakeholder and multisectoral cooperative framework outlined in the Global Compact on Refugees [55]. Extending this multi-sectoral coordination to engaging with other stakeholders, including development and government actors, is essential for expanding and maintaining this type of integrated approach.

We found promising preliminary indicators of the benefits of incorporating focused MHPSS components delivered primarily by non-specialists on MHPSS outcomes of participants. Several strategies were drawn from existing evidence-based, scalable psychological interventions contextualized to the setting and program [56], while others were developed specifically for the integration toolkit. Results suggest that these additional MHPSS interventions may also strengthen social capital and networks, though we did not observe an effect on other EI indicators, such as self-reliance and satisfaction with personal financial resources. However, this pilot study was not powered to detect intervention effects and fully-powered evaluation studies are warranted along with research examining potential mechanisms through which integration impacts these MHPSS and EI outcomes.

This study provides evidence that conducting a fully-powered cluster trial is feasible. We identified MHPSS and EI outcome measures that detect changes over a six-month study period. Furthermore, MHPSS outcome measures demonstrated good reliability and validity. The study demonstrated high retention (88%), particularly compared to studies with similar populations [57, 58]. Previous studies conducted in partnership with HIAS Ecuador have found that one of the primary reasons that people were not able to participate in MHPSS interventions was due to the need to dedicate their time to working, finding livelihood opportunities, and meeting their basic needs [57]. It is possible that the higher retention observed in this study may also be due to integrating MHPSS within EI programming so that these activities were no longer competing interests.

While few studies have formally implemented and evaluated integrated MHPSS and EI interventions within displaced populations, existing guidelines are available that promote this practice. The International Organization on Migration (IOM) developed a manual that provides guidance on the integration of these sectors [59]. Their manual includes modules that align closely with the MHPSS focused and cross-cutting strategies that were developed in this study. Both the IOM manual and the *Building the Future Toolkit* include elements dedicated to building skills that promote coping and resilience, self-confidence and self-esteem, motivation, communication, problem-solving, and relationships. The structure of the IOM manual and the *Building the Future Toolkit* are similar with each strategy consisting of several activities that can be tailored to certain populations or situations. A key difference between these resources is that the *Building the Future Toolkit* was designed to integrate MHPSS into a specific EI program, SESP, whereas the IOM manual was designed to be applied to livelihood interventions more broadly. However, implementers and participants noted the utility of *Building the Future Toolkit* outside of SESP and since the beginning of its implementation, several staff members have applied activities in other EI or MHPSS programs. This integrated model aligns with key guidance from the health sector, including the WHO mhGAP Humanitarian Intervention Guide on integrating MHPSS into general health and other programs in humanitarian emergencies [60]. Embedding MHPSS components into an existing EI intervention provides a path for making MHPSS accessible while also addressing social determinants of mental health and incorporating prevention and promotion elements into MHPSS treatment services, an approach the mhGAP and the World Health Organization encourage for closing treatment gaps. Despite these promising findings, integration strategies such as the one described in this study should be implemented alongside advocacy efforts to promote

inclusive policies and social systems that are needed to support the psychosocial wellbeing of displaced persons within host communities at the structural level beyond specific programming [61–65].

### Strengths and limitations

This study employed an extensive participatory formative research process to develop the *Building the Future Toolkit* to ensure that it aligned with priority needs and preferences of the displaced community, resources available within SESP, and HIAS' organizational priorities. This is a strength given that it incorporates multiple perspectives and may serve as a model for designing multisectoral interventions. However, it also requires significant time and dedicated resources, which may not always be available. This process resulted in strategies that were optimized to fit the context within Ecuador and the HIAS SESP. Therefore, the high usability, acceptability, feasibility, and appropriateness may not apply outside of this context or to other populations. Notably, most of our sample identified as female. Several of the strategies within the toolkit address family dynamics, which may function differently in groups with different gender compositions or relational dynamics.

The primary objectives of this study were to evaluate the acceptability and feasibility as well as methods for evaluating the EI and MHPSS integration strategy through a randomized trial with an active and enhanced comparison condition. This study was underpowered to evaluate the effects of the integrated approach and was not designed to permit subgroup analyses. A future fully-powered evaluation of this integration strategy should also consider examining whether there are differences in its effects by key population and contextual factors (e.g., by legal/migration status). Furthermore, there are several risks of bias that must be considered. The implementers, outcome assessors, and researchers were not blind to study condition and thus there may have been some bias introduced in the implementation, outcome assessment, and interpretation of the quantitative and qualitative findings. Additionally, this study only included two sites that were allocated to study condition non-randomly, making it difficult to determine how site-specific characteristics may have impacted the observed outcomes. Another important consideration is that during the study period, several external factors – political instability and a state of emergency in Ecuador that led to shutting down SESP activities – may have impacted MHPSS and EI outcomes.

### Conclusions

This study is among the first to develop and pilot test the integration of MHPSS and EI interventions for displaced families. Through this process, we found that it

was feasible to co-develop and implement a multisectoral approach to MHPSS and EI alongside community members, EI and MHPSS program implementers, and other stakeholders. Additionally, we found preliminary evidence that an integrated approach may enhance some target outcomes for both sectors. Further research is needed to advance the evidence on complex multisectoral and integrated interventions (e.g., the *Building the Future Toolkit* combined with SESP and/or MHPSS services), the impact of integrated approaches, and the generalizability of integration strategies across types of interventions, populations, and contexts.

### Abbreviations

AIM	Acceptability of Intervention Measure
CVA	Cash and Voucher Assistance
DQQ	Diet Quality Questionnaire
EI	Economic Inclusion
FIM	Feasibility of Intervention Measure
GAD-7	Generalized Anxiety Disorder 7-item scale
IAM	Intervention Appropriateness Measure
MHPSS	Mental health and psychosocial support
PHQ-9	Patient Health Questionnaire-9
SASCAT	Short Social Capital Assessment Tool
SESP	Socioeconomic support program
SRI	Self Reliance Index
WHODAS	World Health Organization Disability Assessment Schedule
WHOQOL	World Health Organization Quality of Life

### Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s13031-024-00629-x>.

Supplementary Material 1

Supplementary Material 2

### Acknowledgements

We would like to thank the MHPSS and SESP implementers whose insight and contributions to the development and implementation of this project were essential. We are also grateful to the study participants for sharing their experiences with us. Without them, this project would not have been possible.

### Author contributions

AM and DV are co-first authors on the manuscript. KL and MCG are co-senior authors on the manuscript. AA, AGB, AM, KC, AA, JCK, FM, KS, ES, PV, MW, KLL & MCG were involved in the conception and design of the project. AM, DV, EA, KC, AA, BJ, YR, MS, SV, AZ, KLL & MCG were involved in data collection and study implementation. AM, DV, AM, IFC, KLL & MCG were involved in data analysis. All authors were involved in interpretation of the data and substantive review and revision of the manuscript. All authors have reviewed the manuscript.

### Funding

This study was funded by the Columbia University Mailman School of Public Health Centennial Grand Challenges initiative. MCG was supported by a career development award from the National Institute of Mental Health (K01MH129572).

The implementation of this SESP was co-funded by Bureau of Population, Refugees, and Migration – United States of America and Whole Planet Foundation.

### Data availability

The toolkit as well as the data collected as part of this study will be made available upon reasonable request to the corresponding author.



## Declarations

### Ethics approval and consent to participate

All participants provided informed consent to participate, and study procedures were approved by the Institutional Review Boards at Columbia University (AAU8002) and Universidad San Francisco de Quito (2023-011E).

### Consent for publication

Not applicable.

### Competing interests

The authors declare no competing interests.

### Author details

<sup>1</sup>HIAS Ecuador, Quito, Ecuador

<sup>2</sup>Columbia University Mailman School of Public Health, New York, USA

<sup>3</sup>HIAS, Silver Spring, USA

<sup>4</sup>United Nations High Commissioner for Refugees, Quito, Ecuador

<sup>5</sup>Pan American Health Organization, Quito, Ecuador

<sup>6</sup>New York State Psychiatric Institute, New York, USA

<sup>7</sup>Pan American Health Organization, Washington, DC, USA

<sup>8</sup>United Nations High Commissioner for Refugees, Geneva, Switzerland

Received: 13 July 2024 / Accepted: 28 October 2024

Published online: 06 November 2024

## References

1. UNHCR, Global Trends. Forced Displacement in 2023 Geneva: United Nations High Commissioner for Refugees; 2024 [ <https://www.unhcr.org/global-trends> ]
2. International Organization for Migration. World Migration Report 2024. IOM; 2024. p. 384.
3. UNHCR. Ecuador Data Portal Geneva: UNHCR. 2024 [ <https://data.unhcr.org/en/country/ecu> ]
4. R4V. RMRP 2023–2024 Ecuador 2-Pager. R4V; 2022.
5. GTRM RV, Ecuador. Situation Report - April 2024: R4V; 2024 [ <https://reliefweb.int/report/ecuador/ecuador-situation-report-april-2024> ]
6. IOM. Migration Governance Snapshot: Republic of Ecuador. 2018.
7. IOM UNHCR, IOM, UNHCR Commend Ecuador's Efforts to Regularize Venezuelan Refugees and Migrants: IOM.; 2024 [ <https://www.iom.int/news/iom-unhcr-commend-ecuadors-efforts-regularize-venezuelan-refugees-and-migrants> ]
8. Blackmore R, Boyle JA, Fazel M, Ranasinha S, Gray KM, Fitzgerald G, et al. The prevalence of mental illness in refugees and asylum seekers: a systematic review and meta-analysis. *PLoS Med*. 2020;17(9):e1003337.
9. Morina N, Akhtar A, Barth J, Schnyder U. Psychiatric disorders in refugees and internally displaced persons after forced displacement: a systematic review. *Front Psychiatry*. 2018;9:433.
10. Turrini G, Purgato M, Ballette F, Nose M, Ostuzzi G, Barbui C. Common mental disorders in asylum seekers and refugees: umbrella review of prevalence and intervention studies. *Int J Ment Health Syst*. 2017;11:51.
11. Carroll H, Luzes M, Freier LF, Bird MD. The migration journey and mental health: evidence from Venezuelan forced migration. *SSM Popul Health*. 2020;10:100551.
12. Leon-Giraldo S, Casas G, Cuervo-Sanchez JS, García T, Gonzalez-Urbe C, Moreno-Serra R, et al. Mental health disorders in population displaced by conflict in Colombia: comparative analysis against the National Mental Health Survey 2015. *Rev Colomb Psiquiatr (Engl Ed)*. 2023;52(2):121–9.
13. Miller KE, Rasmussen A. The mental health of civilians displaced by armed conflict: an ecological model of refugee distress. *Epidemiol Psychiatr Sci*. 2017;26(2):129–38.
14. Hynie M. The Social Determinants of Refugee Mental Health in the Post-migration Context: a critical review. *Can J Psychiatry*. 2018;63(5):297–303.
15. Mougenot B, Amaya E, Mezones-Holguin E, Rodríguez-Morales AJ, Cabieses B. Immigration, perceived discrimination and mental health: evidence from Venezuelan population living in Peru. *Global Health*. 2021;17(1):8.
16. Alarcon RD, Ordoñez-Mancheno J, Velásquez E, Uribe A, Lozano-Vargas A, Gaviria SL, et al. A scoping review of the Venezuelan migration in three south American countries: Sociocultural and mental health perspectives. *World Social Psychiatry*. 2022;4(1):13–23.
17. Leon-Giraldo S, Casas G, Cuervo-Sanchez JS, Gonzalez-Urbe C, Bernal O, Moreno-Serra R, et al. Health in conflict zones: analyzing inequalities in Mental Health in Colombian conflict-affected territories. *Int J Public Health*. 2021;66:595311.
18. Dickson K, Bangpan M. What are the barriers to, and facilitators of, implementing and receiving MHPSS programmes delivered to populations affected by humanitarian emergencies? A qualitative evidence synthesis. *Glob Ment Health (Camb)*. 2018;5:e21.
19. Pan American Health Organization. Policy on ethnicity and health. Washington, DC: PAHO WHO; 2017.
20. Schinina G, Babcock E, Nadelman R, Walsh JS, Willhoite A, Willman A. The integration of livelihood support and mental health and psychosocial wellbeing for populations who have been subject to severe stressors. *Intervention*. 2016;14(3):211–22.
21. Dohuk K, Ninewa, Al-Din S. Needs Assessment: Integration MHPSS and Livelihood Support in Iraq. IOM; 2020.
22. Inter-Agency Standing Committee. MHPSS Minimum Service Package (MSP), Guide IASC. 2024 [ <https://www.mhpssmhp.org/en/lesson/key-consideration-s-examples-how-mhpss-can-be-integrated-programming-across-different-sectors#page-1> ]
23. Bass J, Murray S, Cole G, Bolton P, Poulton C, Robinette K, et al. Economic, social and mental health impacts of an economic intervention for female sexual violence survivors in Eastern Democratic Republic of Congo. *Glob Ment Health (Camb)*. 2016;3:e19.
24. Zimmerman A, Garman E, Avendano-Pabon M, Araya R, Evans-Lacko S, McDaid D et al. The impact of cash transfers on mental health in children and young people in low-income and middle-income countries: a systematic review and meta-analysis. *BMJ Glob Health*. 2021;6(4).
25. Lund C, Brooke-Sumner C, Baingana F, Baron EC, Breuer E, Chandra P, et al. Social determinants of mental disorders and the Sustainable Development Goals: a systematic review of reviews. *Lancet Psychiatry*. 2018;5(4):357–69.
26. World Health Organization. A conceptual framework for action on the social determinants of health Geneva: WHO; 2010 [ [https://iris.who.int/bitstream/handle/10665/44489/9789241500852\\_eng.pdf?sequence=1](https://iris.who.int/bitstream/handle/10665/44489/9789241500852_eng.pdf?sequence=1) ]
27. Lund C. Global mental health and its social determinants: how should we intervene? *Behav Res Ther*. 2023;169:104402.
28. HIAS. Promote Economic Inclusion Silver Spring: HIAS. 2024 [ <https://hias.org/what/promote-economic-inclusion/> ]
29. BRAC. BRAC's ultra-poor graduation programme: an end to extreme poverty in our lifetime. Dhaka, Bangladesh: BRAC; 2017.
30. Rahman A, Bhattacharjee A, Nisat R, Das N. Graduation approach to poverty reduction in the humanitarian context: evidence from Bangladesh. *J Int Dev*. 2023;35(6):1287–317.
31. Seff I, Leeson K, Stark L. Measuring self-reliance among refugee and internally displaced households: the development of an index in humanitarian settings. *Confl Health*. 2021;15(1):56.
32. HIAS. Economic inclusion Resource Package. Silver Spring, MD: HIAS; 2022.
33. Inter-Agency Standing Committee Task Force on Mental, van Ommeren H, Wessells M. M. Inter-agency agreement on mental health and psychosocial support in emergency settings. *Bull World Health Organ*. 2007;85(11):822.
34. HIAS. Apoyar la salud mental comunitaria Silver Spring: HIAS. 2024 [ <https://hias.org/es/que/support-community-mental-health/> ]
35. Antonacci G, Lennox L, Barlow J, Evans L, Reed J. Process mapping in health-care: a systematic review. *BMC Health Serv Res*. 2021;21(1):342.
36. Weiner BJ, Lewis CC, Stanick C, Powell BJ, Dorsey CN, Clary AS, et al. Psychometric assessment of three newly developed implementation outcome measures. *Implement Sci*. 2017;12(1):108.
37. Lyon AR, Pullmann MD, Jacobson J, Osterhage K, Al Achkar M, Renn BN et al. Assessing the usability of complex psychosocial interventions: the intervention usability scale. *Implement Res Pract*. 2021;2.
38. Tennant R, Hiller L, Fishwick R, Platt S, Joseph S, Weich S, et al. The Warwick-Edinburgh Mental Well-being scale (WEMWBS): development and UK validation. *Health Qual Life Outcomes*. 2007;5:63.
39. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. *J Gen Intern Med*. 2001;16(9):606–13.
40. Spitzer RL, Kroenke K, Williams JB, Lowe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. *Arch Intern Med*. 2006;166(10):1092–7.
41. Serrano-Duenas M, Serrano M, Mafía D, Martínez-Martin P. Evaluation of the metric properties of the WHODAS 2.0, WHODAS-S, and RADS in the assessment of disability in parkinsonian patients. *Clin Neurol Neurosurg*. 2020;194:105872.

42. World Health Organization. Measuring Health and disability: Manual for WHO Disability Assessment schedule (WHODAS 2.0). Geneva: World Health Organization; 2010.
43. Vahedi S, World Health Organization Quality-of-Life Scale (WHOQOL-BREF). Analyses of their Item Response Theory Properties based on the graded responses Model. *Iran J Psychiatry*. 2010;5(4):140–53.
44. Herforth AW, Wiesmann D, Martinez-Steele E, Andrade G, Monteiro CA. Introducing a suite of low-Burden Diet Quality indicators that reflect healthy Diet patterns at Population Level. *Curr Dev Nutr*. 2020;4(12):nzaa168.
45. De Silva MJ, Harpham T, Tuan T, Bartolini R, Penny ME, Huttly SR. Psychometric and cognitive validation of a social capital measurement tool in Peru and Vietnam. *Soc Sci Med*. 2006;62(4):941–53.
46. Hamilton AB, editor. Qualitative methods in rapid turn-around health services research. VA HSRD Cyberseminar Spotlight Womens Health; 2013; Online: Veterans Affairs.
47. Gale RC, Wu J, Erhardt T, Bounthavong M, Reardon CM, Damschroder LJ, et al. Comparison of rapid vs in-depth qualitative analytic methods from a process evaluation of academic detailing in the Veterans Health Administration. *Implement Sci*. 2019;14(1):11.
48. Nevedal AL, Reardon CM, Opra Widerquist MA, Jackson GL, Cutrona SJ, White BS, et al. Rapid versus traditional qualitative analysis using the Consolidated Framework for Implementation Research (CFIR). *Implement Sci*. 2021;17:67.
49. Taylor B, Henshall C, Kenyon S, Litchfield I, Greenfield S. Can rapid approaches to qualitative analysis deliver timely valid findings to clinical leaders? A mixed methods study comparing rapid and thematic analysis. *BMJ Open*. 2018;8(10):e019993.
50. Lund C, Breen A, Flisher AJ, Kakuma R, Corrigall J, Joska JA, et al. Poverty and common mental disorders in low and middle income countries: a systematic review. *Soc Sci Med*. 2010;71(3):517–28.
51. Agudelo-Suarez AA, Vargas-Valencia MY, Vahos-Arias J, Ariza-Sosa G, Rojas-Gutierrez WJ, Ronda-Perez E. A qualitative study of employment, working and health conditions among Venezuelan migrants in Colombia. *Health Soc Care Community*. 2022;30(5):e2782–92.
52. DeSa S, Gebremeskel AT, Omonaiye O, Yaya S. Barriers and facilitators to access mental health services among refugee women in high-income countries: a systematic review. *Syst Rev*. 2022;11(1):62.
53. Hynie M. The Social Determinants of Refugee Mental Health in the Post-migration Context: a critical review. *Can J Psychiatry Revue canadienne de psychiatrie*. 2018;63(5):297–303.
54. van Daalen KR, Dada S, James R, Ashworth HC, Khorsand P, Lim J et al. Impact of conditional and unconditional cash transfers on health outcomes and use of health services in humanitarian settings: a mixed-methods systematic review. *BMJ Glob Health*. 2022;7(1).
55. United Nations High Commissioner for Refugees. Global Compact on Refugees New York: UNHCR. 2018 [ <https://www.unhcr.org/media/global-compact-refugees-booklet> ]
56. World Health Organization. Doing What Matters in Times of Stress: An Illustrated Guide. 2020.
57. Fernández Capriles I, Armijos A, Angulo A, Schojan M, Wainberg ML, Bonz AG, et al. Improving Retention in Mental Health and Psychosocial Support interventions: an analysis of Completion Rates across a Multi-site Trial with Refugee, migrant, and Host Communities in Latin America. *Int J Environ Res Public Health*. 2024;21(4):397.
58. Greene MC, Bonz AG, Cristobal M, Angulo A, Armijos A, Guevara ME, et al. Mixed-methods evaluation of a group psychosocial intervention for refugee, migrant and host community women in Ecuador and Panamá: results from the Entre Nosotras Cluster randomized feasibility trial. *Global Mental Health*. 2023;10:E42.
59. IOM. MHPSS and livelihood integration (MLI) manual. IOM; 2022.
60. World Health Organization, United Nations High Commissioner for Refugees. mhGAP Humanitarian Intervention Guide (mhGAP-HIG): Clinical management of mental, neurological and substance use conditions in humanitarian emergencies. 2015.
61. Ho S, Javadi D, Causevic S, Langlois EV, Friberg P, Tomson G. Intersectoral and integrated approaches in achieving the right to health for refugees on resettlement: a scoping review. *BMJ Open*. 2019;9(7):e029407.
62. Rousseau C, ter Kuile S, Muñoz M, Nadeau L, Ouimet M-J, Kirmayer L, et al. Health Care Access for refugees and immigrants with Precarious Status. *Can J Public Health*. 2008;99(4):290–2.
63. Carlén K, Zdravkovic S, World Health Organization. Regional Office for E. promoting refugees' right to health and social inclusion: a systematic approach. *Public Health Panorama*. 2016;02(04):442–8.
64. Russo A, Koch R, McBride J. Promoting social inclusion among asylum seekers and refugees living in the South East region of Melbourne, Australia, through volunteering. *Health Promotion J Australia*. 2023;34(4):932–42.
65. Lester E. Work, the right to work, and durable solutions: a study on Sierra Leonean refugees in the Gambia. *Int J Refugee Law*. 2005;17(2):331–93.

## Publisher's note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.