SSM - Mental Health 7 (2025) 100383

Contents lists available at ScienceDirect

SSM - Mental Health

journal homepage: www.journals.elsevier.com/ssm-mental-health

Understanding linkages between self-reliance and mental health among forcibly displaced women in Colombia

Ilana Seff [a], Arturo Harker Roa [c], Raymond Atwebembere [a], Jennie Cottle [a], Ned Meerdink [d], Adriana Monar [b], Diany Castellar [b], Lindsay Stark [a,*]

[a] Washington University in St. Louis, 1 Brookings Dr, St. Louis, Missouri, 63130, United States
[b] HIAS, Washington D.C., United States
[c] Universidad de los Andes, Bogota, Colombia
[d] Refugee Self-Reliance Initiative, United States

ARTICLE INFO

Handling Editor: Dr A C Tsai

Keywords:
Refugees
Colombia
Internally displaced persons
Self-reliance
Mental health
Women

ABSTRACT

This study explores the relationship between household-level self-reliance and mental health outcomes—specifically, depression symptoms and resilience—among forcibly displaced women in Colombia. Using baseline data from 348 women participating in an entrepreneurial program with a gender lens, we employed multiple regression analyses to examine self-reliance, measured via the Self-Reliance Index (SRI), and its association with depressive symptoms (PHQ-9) and resilience (Brief Resilient Coping Scale). Results revealed a strong inverse relationship between self-reliance and depressive symptoms, particularly for self-reliance related to food security, financial resources, and debt. However, no significant association was found between self-reliance and resilience. Perceived control and community support also played significant roles: women who reported feeling controlled by others exhibited higher levels of depression, while those who felt supported by their communities demonstrated greater resilience. These findings underscore the importance of addressing both self-reliance, economic stability and social support in interventions aimed at improving the mental health and resilience of forcibly displaced women.

1. Introduction

Forced displacement across the globe has reached unprecedented levels in recent years. At the end of 2023, 117.3 million people-nearly 1.5% of the world's population-were forcibly displaced, reflecting a significant increase from the previous decade (UNHCR, 2024a). This surge in displacement has been driven by a rise in increasingly protracted conflicts and complex humanitarian crises. The scale and persistence of these crises have created immense challenges for both displaced populations and the international and local communities tasked with responding to their needs. Forcibly displaced populations face ongoing conflict-related violence, breakdown of family and social structures, and changes to law enforcement and protective measures, placing them in situations of heightened vulnerability (European Commission, 2024; UNHCR, 2024b).

Displaced women face unique and intersecting vulnerabilities that exacerbate their experiences of displacement (Arango et al., 2021; Stark et al., 2020). For example, while both forcibly displaced men and women may have difficulty securing safe employment, women in particular are often consequently more vulnerable to resorting to sex work and experiencing sexual harassment (Rohwerder, B, 2016). Women are also much more likely to be trafficked than are men (Deshpande and Nour, 2013). Women also face increased threats to their safety as many known predictors of intimate partner violence–such as disruption to community networks, household stress, financial instability, and substance abuse–are exacerbated during displacement (Rubenstein et al., 2020). Due to limited protective systems and financial insecurity during the migration process, forcibly displaced women are also vulnerable to other forms of gender-based violence (GBV) such as non-partner sexual violence and sexual exploitation. (Amnesty International, 2022; Stark et al., 2020; UNHCR & HIAS, 2023; Vu et al., 2014). These challenges are further compounded by mental health issues, with research showing that risks of mental illness are substantially greater in conflict-affected settings and that women are often more impacted than men. Research shows that forcibly displaced women face elevated rates of depression, anxiety and post-traumatic stress (Charlson

* Corresponding author.
E-mail address: lindsaystark@wustl.edu (L. Stark).

https://doi.org/10.1016/j.ssmmh.2024.100383
Received 23 September 2024; Received in revised form 18 December 2024; Accepted 19 December 2024
Available online 19 December 2024

et al., 2019; Devakumar et al., 2021). Addressing these interrelated vulnerabilities is essential for developing comprehensive support systems that promote the safety, well-being, and resilience of forcibly displaced women.

In Colombia, decades of violent internal conflict have led to large-scale internal displacement. The country's shared border with Venezuela, facing its own humanitarian and migration crisis, has also made Colombia a key destination for Venezuelan migrants. As of 2023, Colombia hosted 6.9 million internally displaced people, 2.9 million forcibly displaced Venezuelan migrants, and 500,000 Colombian returnees (UNHCR, 2024a). While all forcibly displaced individuals in Colombia face heightened vulnerabilities, women face additional risks related to human trafficking, exploitation and GBV. Previous evidence from Colombia demonstrates a strong relationship between women's various experiences of violence and distress, self-harm, and suicidal ideation (Brown et al., 2023; Vahedi et al., 2024; Vyas et al., 2021). Extreme economic precarity, challenges meeting basic needs, and increased pressure on women to generate incomes during displacement have also been shown to contribute to mental distress (Hynes et al., 2016; International Crisis Group, 2022; Zamora-Moncayo et al., 2021).

The concept of self-reliance has emerged as a critical factor in enhancing the long-term well-being and stability of forcibly displaced populations. A household's self-reliance, defined as its ability to meet basic needs independently of external formal assistance, is increasingly recognized as a key strategy in humanitarian interventions aimed at fostering sustainable outcomes for displaced populations (Leeson et al., 2020; Seff et al., 2021; UNHCR, 2019). While self-reliance has historically been linked almost exclusively to sustainable livelihoods, recent discourse on refugee self-reliance emphasizes the importance of expanding the term's conceptualization to include other factors that support a household's ability to meet its basic needs, such as safety and social supports (Seff et al., 2021; Skran and Easton-Calabria, 2020). Research has shown that both social and human capital are critical to displaced populations' resilience and ability to "reconstruct a sustainable livelihood" (Cottyn, 2018). In contrast, evidence indicates that refugees' dependency on formal aid to meet their basic needs can negatively impact their self-esteem and broader well-being (Slaughter, 2020). While a nascent body of literature points to the potential value of household self-reliance in improving the mental health and well-being of its members, evidence on these relationships for forcibly displaced women is limited and tends to focus on women's economic empowerment-as opposed to household-level self-reliance-as the predictor (Annan et al., 2017; Gibbs et al., 2020). Further, to our knowledge, no evidence on these relationships exists in the context of forced displacement in Latin America.

Given the recent push to promote household self-reliance for forcibly displaced populations through targeted programming, including through livelihoods support for women, there is a need to more clearly understand the potential added benefits of household self-reliance on women's mental health and resilience. An ongoing evaluation of one such program for forcibly displaced women in Colombia, HIAS' Entrepreneurship School with a Gender Lens (ESGL), offers the opportunity to further explore these relationships. The ESGL program was developed by HIAS to respond to the particular needs of women who are at risk of or have experienced GBV and helps participants develop and incubate a business idea, provides them with small amounts of seed capital, and promotes information, support and services around GBV and mental health. Using baseline data collected as part of this program's evaluation, we examine the relationships between household-level self-reliance–and its constituent domains–and two key measures of women's mental well-being: depression symptoms and resilience.

2. Study setting, participants, and procedures

This analysis draws on data collected as part of a cross-sectional baseline survey administered to forcibly displaced women in Colombia. Data were collected in March 2024 to establish baseline data measures a pilot randomized controlled trial (RCT) evaluation of HIAS' ESGL program across four sites in Colombia: Cali, Ipiales, Pasto, and Popayan. Study sites were selected based on high levels of GBV identified by HIAS in previous projects. The survey was administered to capture baseline information on women's household-level self-reliance, mental health and resilience, and other relevant variables prior to the implementation of HIAS' ESGL program. Full details on the pilot RCT have been published elsewhere (Stark et al., Unpublished results).

Potential participants were identified by HIAS through existing databases, external referrals from other organizations in the field and open calls, and were then prescreened according to a predefined set of criteria. Specifically, women were eligible to participate in the study if they were: at least 18 years of age; were at risk of or had ever experienced GBV; were Colombian or Venezuelan (with a Temporary Protection Permit); had been residing in Colombia for at least six months; and had an entrepreneur profile assessed through HIAS' profile scanning process. These criteria were determined in order to reach women in need of GBV-related protection and livelihoods assistance, but who also exhibited enough overall stability to benefit from entrepreneurship training. Similarly, the requirement for Venezuelan participants to have a Temporary Protection Permit (PPT) was included because the program aims to promote long-term integration and having a PPT allows individuals to access the Colombian financial system and regularize their business, both of which are key to improving sales and income sustainably. Participants were asked to produce a physical copy of the PPT during the prescreening phase. The same inclusion criteria were applied to all four sites, which include the western coast and interior (Cali and Popoyán) and the southwestern border with Ecuador (Pasto and Ipiales).

Informed consent was obtained from all participants before administering the baseline survey. During the consenting process, a member of the research team provided an explanation of the study purpose, procedures, potential risks, benefits and safeguards to mitigate any potential harm. Participants were made aware that their participation was voluntary and that they could choose not to participate at any time, with no penalty or consequences for participating in later studies or other HIAS programs. All procedures were carried out in Spanish and participants were encouraged to ask any questions about the study processes before consenting to participate in the study.

To guarantee the implementation of these ethical standards, external data collectors not associated with HIAS were hired and trained on the study tools, evaluation protocol, humanitarian principles and its current practice, safeguarding policies, Psychological First Aid (PFA) gender and GBV, and research ethics and best practices. Referral pathways were handled by HIAS according to their referral protocols and case management system and were provided to anyone in need of services or other types of assistance. Referrals were provided based on HIAS' network with other humanitarian organizations and institutions in order to guarantee the protection of participants. Further details of the ethical and data collection protocols are available through the pilot RCT study protocol publication (Stark et al., forthcoming.).

Once prescreening and consent processes were completed, individuals were administered a baseline survey questionnaire using computer-assisted personal interview (CAPI) software. An additional criterium was applied for inclusion in the study following data collection; only those who scored between 2 and 4.25 on the Self-Reliance Index (SRI; see below for additional information on this measure) were considered eligible for inclusion. Women who scored below a '2' on the SRI were considered to be in need of acute aid and unlikely to be in a position to take advantage of an entrepreneurial program. Women who scored above a 4.25 were considered to exhibit an adequate level of self-reliance that would not allow for substantial improvement. As such, while survey questionnaires were administered to 379 individuals, only 348 women were deemed eligible for the full pilot RCT and completed the baseline survey questionnaire in the four study sites: Cali (n = 87), Ipiales (n = 95), Pasto (n = 86), and Popayan (n = 80).

All study procedures were approved by the Universidad de los Andes Institutional Review Board (IRB).

3. Analysis

3.1. Instruments

The baseline survey focused on three primary measures of interest: self-reliance, depressive symptoms and resilience. To measure these outcomes, the SRI (Seff et al., 2021), the PHQ-9 (Kroenke et al., 1999), and the Brief Resilient Coping Scale (Sinclair and Wallston, 2004) were used.

Depressive symptoms were measured using the Patient Health Questionnaire-9 (PHQ-9). The measurement is based on nine criteria identifying depressive symptoms, including feelings of depression or hopelessness, difficulty sleeping, low energy, poor appetite, suicidal thoughts or thoughts involving self-harm. Participants indicated the frequency of each symptom during the two weeks preceding the survey; response options included 0 = not at all, 1 = several days, 2 = more than half the days, and 3 = nearly every day. For example, respondents were asked, "over the last two weeks, how often have you been bothered by feeling little interest of pleasure in doing thing?" Other example items include "trouble falling or staying asleep or sleeping too much," "poor appetite or overeating," and "trouble concentrating on things, such as reading the newspaper or watching television." The final score reflects the sum of all items and assumes a value from 0 to 27, with higher levels indicating greater presence of depressive symptoms. This tool has been validated in clinical and non-clinical samples and among Venezuelan immigrants/refugees, as well as in a Colombian population, demonstrating excellent reliability (alpha = 0.90) and validity for a unidimensional model of depression and a two-dimensional model of depression (somatic and affective depressive symptoms) (Cassiani-Miranda et al., 2021). The reliability of the PHQ9 in the present sample was found to be alpha = 0.78.

Resilience was captured using the Brief Resilient Coping Scale (BRCS), which measures one's tendencies to cope with stress adaptively (Sinclair and Wallston, 2004). The BRCS asks participants to respond to the following four items: 1) I look for creative ways to alter difficult situations; 2) Regardless of what happens to me, I believe I can control my reaction to it; 3) I believe I can grow in positive ways by dealing with difficult situations; and 4) I actively look for ways to replace the losses I encounter in life. Responses are provided using a 5-point scale, including 1 = does not describe me at all, 2 = does not describe me, 3 = neutral, 4 = describes me, and 5 = describes me very well. The final score represents the average across all four items, whereby higher scores signal greater resilient coping. Cronbach's alpha for this scale in the present sample was 0.63.

Self-reliance, the primary predictor of interest of the present analysis, was measured using the Self-Reliance Index (SRI). The SRI defines self-reliance as the social and economic ability of a household to meet its essential needs in a sustainable manner. The tool contains twelve domains focused on a household's basic needs, resources, and sustainability. Domains measure conditions and assets that increase the likelihood that refugees will be able to continue meeting their needs in the future. Each study participant provided answers to the SRI questions on behalf of their households. The SRI is conversational in nature and thus, while there are guiding questions to support the interviewer in initiating the discussion for each domain, there are no specifically phrased items to which the respondent provides a response. The final self-reliance score may take a value from 1 to 5, with higher scores reflecting greater self-reliance. Both domain-specific and overall SRI scores were considered in this analysis. These domains include: housing, food, health status, safety, employment, financial resources, assistance, debt, savings and social capital. The SRI domains measuring rent, schooling, and healthcare access were not included in the regression models as they assume no value for respondents who were not required to pay rent, do not have school-aged children in their household, and did not need healthcare in the last three months, respectively. Members of the study team previously validated the SRI with Venezuelan migrants in Colombia in 2022.

A measure of gender inequitable attitudes, which have been shown to be associated with mental health for women (Baird et al., 2019; Ibala et al., 2021; Seff and Stark, 2022) was also included in the models. Respondents were asked whether they agreed, disagreed, or neither agreed nor disagreed with three statements: (i) men have the final say, (ii) a good wife obeys her husband and, (iii) a woman is free to decide if she wants to work. The final score was operationalized as a count of statements the respondent agreed with (with the third statement reverse coded), whereby the final score assumed a value from 0 to 3, with higher scores signaling more gender inequitable attitudes. Models also included a measure of gender-equitable intrahousehold decision making. Respondents were asked to indicate who in the household made decisions on household purchases, healthcare, and whether the respondent can visit family and friends. The measure included in the analysis was operationalized as a count of decisions made either solely by the respondent or jointly with her partner, where the final measure assume a value from 0 to 3 and higher values signaled greater gender equity in decision-making.

The conceptualization of self-reliance employed in the present analysis recognizes the importance of a household's social networks and social support in achieving self-reliance, defining a lack of self-reliance as a household's dependence on *formal* assistance only. Additionally, for forcibly displaced women who may be at risk of GBV or face additional barriers to employment, the ability to act without being controlled by others is paramount to achieving self-reliance. As such, two items from the HIAS Knowledge and Perception of GBV risks and Women's Empowerment tool were also included in the present analysis to proxy for autonomy and social support. The HIAS tool was adapted based on other tools used in the Latin American region (HIAS, 2023). The two items pertain to self-reported perceptions of feeling supported by the community and feeling controlled by one or more people. These were measured using a Likert scale from 1 to 4, where 1 = never, 2 = rarely, 3 = frequently, and 4 = always, in response to the statement "I feel controlled by one or more persons" and "I feel supported by the community."

3.2. Data analysis

Other individual-level covariates included in the regression analyses include age, a dichotomous variable signaling primary school completion, nationality (Colombian or Venezuelan), marital status, household size, and the dependency ratio, defined as the ratio of the number of children and elderly to the number of working-age adults in the household.

Descriptive statistics were used to summarize the above variables for the full sample. Multivariate analyses were then employed to estimate the relationship between the independent variables and the two primary outcomes of interest–depressive symptoms and resilient coping–controlling for all covariates. All assumptions of linear regression models were tested. The only assumption that was not met was heteroscedasticity of the model residuals. As such, robust standard errors (using vce(robust), in Stata) were used. All analyses were conducted using Stata16.

4. Results

Data were collected from 348 participants distributed across four cities: Cali (n = 87), Ipiales (n = 95), Pasto (n = 86), and Popayan (n = 80). Participants' mean age was 38.66 years (SD = 11.23), ranging from 19 to 74 years. As summarized in Table 1 below, participants lived in households averaging 3.89 members (SD = 1.59), with household sizes ranging from 1 to 11 members. Educational and relationship

Table 1
Participant characteristics.

Variables	Mean (SD)/n (%)	Min - Max
Age	38.66 (11.23)	19–74
Completed primary school	262 (75.71%)	
Partnered	151 (43.39%)	
Colombian Nationality	90 (25.86%)	
Household size	3.89 (1.59)	1–11
Dependency ratio	1.11 (0.91)	0–5
PHQ-9	8.23 (5.05)	0–24
Resilience	16.87 (2.06)	8–20
Self-Reliance Index	3.25 (0.54)	2–4.25
Domain 1a: Housing	4.42 (0.71)	2–5
Domain 1b: Rent	3.24 (1.88)	1–5
Domain 2: Food	4.40 (1.02)	1–5
Domain 3: Education	3.49 (2.22)	1–5
Domain 4: Health care	3.36 (1.88)	1–5
Domain 5: Health status	2.40 (0.84)	1–3
Domain 6: Safety	2.51 (1.34)	1–5
Domain 7: Employment	3.11 (1.40)	1–5
Domain 8: Financial resources	3.09 (0.66)	1–5
Domain 9: Assistance	4.52 (1.09)	1–5
Domain 10: Debt	2.86 (1.21)	1–5
Domain 11: Savings	2.34 (1.26)	1–5
Domain 12: Social capital	3.64 (1.27)	1–5
Perceived control and support		
Feels supported by my community frequently or always	122 (35.06%)	
Feels controlled by one or more people frequently or always	28 (8.05)	
City		
Cali	87 (25.0%)	
Ipiales	95 (27.30%)	
Pasto	86 (24.71%)	
Popayan	80 (22.99%)	

Note: Continuous variables are summarized as means (SD) and dichotomous variables as n (%).

characteristics showed that 262 (75.71%) of the 348 participants had completed primary school. Additionally, 151 participants (43.39%) were partnered.

On average, participants scored 8.23 (SD = 5.05) on the PHQ-9 and 16.87 (SD = 2.06) on the resilience measure. The mean Self-Reliance Index (SRI) score in the sample was 3.25 (SD = 0.54) and ranged from 2.02 to 4.25. Approximately one-third of participants (35.06%) reported feeling supported by their community frequently or always and 28 participants (8.05%) reported feeling controlled by one or more people frequently or always.

4.1. Depression symptoms score (PHQ-9)

Table 2 presents the results from regression analyses estimating the PHQ-score. Two models are presented: the first model includes the full SRI score and the second model includes domain-specific scores only. Higher scores on the SRI were significantly associated with lower depression symptoms as measured by the PHQ-9. Specifically, each additional point on the SRI was associated with a 1.89 (95% CI [−2.85, −0.93], P < 0.001) decrease in the PHQ-9 score. Because a one-point increase in the SRI is equivalent to an increase of approximately two standard deviations (SD = 0.54, see Table 1) and a 1.89-point decrease in the PHQ-9 is equivalent to approximately 0.37 decreased standard deviations (SD = 5.05, see Table 1), this finding suggests that a rather large increase in the SRI (two standard deviations) is needed to observe a relatively small decrease in the PHQ-9 (0.37 standard deviations).

Resilience was also found to be a significant predictor of depression symptoms. After controlling for other covariates, the resilience score was found to be associated with a 0.36 (95% CI [−0.61, −0.12], P = 0.001) decrease in the PHQ-9. Similarly, based on the standard deviations presented in Table 1, this means that an increase in the resilience score of one-half a standard deviation is associated with a decrease in the PHQ-9 score of 0.07 standard deviations.

Table 2
Estimating PHQ-9, by overall SRI score and SRI domains.

	Model 1 Adjusted Beta coefficient [CI 95%]	Model 2 Adjusted Beta coefficient [CI 95%]
Age	−0.03	−0.03
	[-0.08,0.02]	[-0.08,0.02]
Partnered	0.35	0.31
	[-0.75,1.44]	[-0.79,1.42]
Completed primary school	−1.25	−1.45*
	[-2.54,0.03]	[-2.76,-0.14]
Colombian nationality	−0.65	−0.94
	[-1.81,0.51]	[-2.19,0.32]
Household size	−0.34	−0.38*
	[-0.71,0.03]	[-0.75,-0.02]
Dependency ratio	0.07	0.06
	[-0.54,0.69]	[-0.54,0.65]
Resilience	−0.36**	−0.42***
	[-0.61,-0.12]	[-0.66,-0.17]
Overall SRI score	−1.89***	
	[-2.85,-0.93]	
Domain 1a: Housing		−0.47
		[-1.36,0.42]
Domain 2: Food		−0.69**
		[-1.18,-0.19]
Domain 5: Health status		−0.37
		[-1.04,0.29]
Domain 6: Safety		−0.38
		[-0.80,0.03]
Domain 7: Employment		0.05
		[-0.34,0.44]
Domain 8: Financial resources		−1.10**
		[-1.87,-0.33]
Domain 9: Assistance		−0.08
		[-0.56,0.39]
Domain 10: Debt		−0.59*
		[-1.05,-0.14]
Domain 11: Savings		−0.09
		[-0.49,0.32]
Domain 12: Social capital		0.16
		[-0.25,0.58]
Feels controlled by one or more people	3.71***	3.44***
	[1.74,5.68]	[1.47,5.40]
Feels supported by community	−0.43	−0.43
	[-1.59,0.73]	[-1.62,0.76]
City		
Ipiales	0.49	−0.22
	[-0.95,1.93]	[-1.80,1.36]
Pasto	0.81	0.43
	[-0.63,2.26]	[-1.04,1.91]
Popayan	0.2	0.41
	[-1.25,1.65]	[-1.05,1.88]
R^2	0.154	0.207

Note: Cali is the reference group for City. Beta coefficients are statistically significant at *P < 0.05, **P < 0.01, and ***P < 0.001.

"*Feeling controlled by one or more people*" was significantly and highly associated with greater depression symptoms. In the adjusted model, participants who reported feeling controlled had significantly higher PHQ-9 scores ($\widehat{\beta}$ = 3.71, 95% CI [1.74, 5.68], P = 0.001).

Model 2, which examines the relationship between the specific SRI domains and depressive symptoms, found the food ($\widehat{\beta}$ = −0.69, 95% CI [−1.18,-0.19], P = 0.007), financial resources ($\widehat{\beta}$ = −1.10, 95% CI [−1.87, −0.33], P = 0.005), and debt domains ($\widehat{\beta}$ = −0.59, 95% CI [−1.05, −0.14], P = 0.010) to be associated with PHQ-9 after controlling for all covariates.

4.2. Resilience

Table 3 presents the results from regression analyses estimating the

Table 3
Estimating Resilience, by overall SRI score and SRI domains.

	Model 1 Adjusted Beta coefficient [CI 95%]	Model 2 Adjusted Beta coefficient [CI 95%]
Age	0.02 [-0.00,0.04]	0.02 [-0.00,0.04]
Partnered	−0.5 [-1.04,0.03]	−0.57* [-1.11,-0.02]
Completed primary school	−0.39 [-0.97,0.19]	−0.45 [-1.05,0.15]
Colombian nationality	−0.35 [-0.93,0.23]	−0.42 [-0.99,0.15]
Household size	−0.06 [-0.21,0.08]	−0.08 [-0.23,0.06]
Dependency ratio	0.13 [-0.15,0.41]	0.15 [-0.12,0.42]
Overall SRI score	0.09 [-0.30,0.49]	
Domain 1a: Housing		0.15 [-0.16,0.46]
Domain 2: Food		−0.12 [-0.34,0.10]
Domain 5: Health status		−0.09 [-0.37,0.20]
Domain 6: Safety		−0.13 [-0.32,0.06]
Domain 7: Employment		0.18* [0.00,0.35]
Domain 8: Financial resources		−0.03 [-0.36,0.29]
Domain 9: Assistance		−0.04 [-0.23,0.15]
Domain 10: Debt		−0.01 [-0.20,0.18]
Domain 11: Savings		0.07 [-0.12,0.25]
Domain 12: Social capital		0.13 [-0.06,0.32]
Feels controlled by one or more people	−0.88 [-1.86,0.09]	−0.84 [-1.80,0.11]
Feels supported by community	0.66** [0.21,1.10]	0.66** [0.21,1.11]
City		
Ipiales	−0.07 [-0.71,0.57]	−0.17 [-0.85,0.51]
Pasto	0.24 [-0.36,0.83]	0.24 [-0.37,0.85]
Popayan	−0.74** [-1.29,-0.19]	−0.65* [-1.23,-0.06]
R^2	0.109	0.138

Note: Cali is the reference group for City. Beta coefficients are statistically significant at *P < 0.05, **P < 0.01, and ***P < 0.001.

resilience score using the same modeling approach presented in Table 2. Notably, the self-reliance score was not found to be associated with resilience. Participants who felt supported by their community had significantly higher resilience score when controlling for other covariates ($\widehat{\beta}$ = 0.67, 95% CI [0.21, 1.10], P = 0.004). When including the SRI domain scores in the regression analyses (see Model 2), the employment score was the only domain found to be statistically significantly associated with resilience ($\widehat{\beta}$ = 0.18, 95% CI [0.00, 0.35], P = 0.044).

5. Discussion

The present study examined the relationship between household-level self-reliance and two outcomes of mental well-being (depression symptoms and resilience) among forcibly displaced women in Colombia. Findings demonstrated a strong inverse relationship between self-reliance and depression symptoms, although the effect size was small in magnitude. Additional analysis suggests this correlation was predominantly driven by greater self-reliance scores on the food security, financial resources, and debt domains. In contrast, self-reliance was not found to be associated with resilience. Perceived control and community support also played significant roles in mental health outcomes. Participants who reported feeling controlled by one or more individuals had significantly higher depression scores and those who reported having community support exhibited greater resilience. These findings highlight the complex interplay between self-reliance, social support, and mental health, emphasizing the need for supportive community and economic environments to support income-generation, enhance resilience and reduce depression among displaced women.

Our findings augment an already robust body of evidence on the relationship between food security/nutrition and mental well-being. This existing evidence emphasizes the distress associated with household hunger and the importance of adequate nutrition in mental functioning (Firth et al., 2020; Hernández-Vásquez et al., 2023; Sparling et al., 2022). While our analysis was conducted with women only, drawing on previous research can help to elucidate underlying mechanisms that may explain how this relationship operates among women specifically. For example, domestic responsibilities including family food consumption tend to fall overwhelmingly to women, suggesting women may face greater risk of mental distress through this pathway (Quinonez et al., 2019; Santos et al., 2022). Understanding this relationship for forcibly displaced women in Colombia is critical as Latin America faces one of the highest and most rapidly expanding levels of food insecurity in the world (Quinonez et al., 2019; Santos et al., 2022) and risks are particularly elevated for migrant populations in the region (Deschak et al., 2022; Hernández-Vásquez et al., 2023; Orjuela-Grimm et al., 2022). Further, research demonstrates that while women globally are at greater risk of food insecurity than men, the largest food insecurity gender gap is found in Latin America (Santos et al., 2022). Efforts to support the mental health of forcibly displaced women in the region–particularly those who have experienced or are at risk of GBV–must move beyond the provision of MHPSS services to also include food assistance and the promotion of pathways for women to sustainably meet their household's food consumption needs.

The present study also found a correlation between household-level debt and individual depressive symptoms. Previous research has demonstrated the relationship between indebtedness and depression as well as the potential for debt relief to result in lower levels of anxiety among low income households (Hojman et al., 2016; Ong et al., 2019). The measure of debt employed in the present study reflects a household's outstanding debt as incurred for housing, food, healthcare, and/or education, specifically, suggesting that households with lower scores on this domain are not generating enough income to cover even their most basic needs. Indeed, our analysis also found an association between lower scores on the financial resources domain and depressive symptoms. Together, these findings point to the potential utility of debt relief and livelihoods programming in not only improving households' financial stability but also bolstering female members' mental health. However, the causal relationship may also operate in the other direction, whereby women with depression have more difficulty obtaining and maintaining sufficient employment (Bridges and Disney, 2010); as a result, these women and their households may need to borrow money in order to meet their basic needs. Ultimately, the relationship between debt and depression is likely to be bidirectional and efforts to induce sustained change for either outcome must comprise multi-pronged approaches that include both livelihoods and mental health support.

Importantly, while our study found a significant inverse relationship between household-level self-reliance and depressive symptoms among forcibly displaced women in Colombia, no such association was observed between self-reliance and resilience. This finding suggests that being better able to meet your household's basic needs may not translate to improved capacity to adapt positively in the face of adversity (Herrman et al., 2011). Further, the lack of relationship observed between self-reliance and resilience supports the claim that self-reliance

cannot be achieved through mindset alone (Betancourt et al., 2015). Instead, improvements to self-reliance likely require policy environments that ensure refugees' right to work, access to financial services, and unrestricted food access, among others (Bhagat, 2021; Easton-Calabria and Omata, 2018; Skran and Easton-Calabria, 2020). As such, while enhancing self-reliance through structural changes may support reductions in depression, fostering resilience may require a more targeted approach that focuses on bolstering individual capacities. Further, women in this study who reported feeling supported by their communities exhibited greater resilience, pointing to the importance of women's collectives and other community groups in fostering women's sense of resilience, agency, and self-worth (Seff et al., 2024). Although the SRI includes a domain on social capital, this domain was not found to be statistically significantly associated with resilience, suggesting nuanced differences between having social capital and feeling supported by social networks. Future research should continue to explore the relationship between social capital, social support, and resilience among forcibly displaced populations.

Importantly, reporting feeling controlled by one or more persons was found to be the strongest predictor of depression symptoms in the study sample. While women were not asked to specify the individual(s) who exhibited controlling behavior, half of the women reporting feeling controlled were currently partnered. Research demonstrates that men's coercive control within intimate relationships is highly linked conceptually and empirically to IPV (Beck and Raghavan, 2010; Dutton and Goodman, 2005), which in turn has been widely proven to be associated with depression for survivors (Beydoun et al., 2012). Nonetheless, a non-trivial proportion of women reporting feeling controlled were likely considering someone other than an intimate partner when answering this question. Future research should explore the relationship between feeling controlled by non-partners–for example, by work supervisors, family members, and community members–and depression, and program planners targeting mental health for this population should consider developing mechanisms to identify controlling individuals in women's lives.

This study's findings underscore the need for programs and policies that bolster economic inclusion of forcibly displaced women in Colombia, not just with the aim of supporting their financial stability and self-reliance but also as a means to improving their mental health. Policymakers must prioritize breaking down barriers that limit migrant women's participation in entrepreneurial and economic empowerment programs, such as lack of documentation, discrimination, a lack of information on rights or labor exploitation, among others. For example, advocacy efforts should promote the availability of free or low-cost legal assistance for migrant women in Colombia to help them navigate work permits and other legal issues around employment. Local organizations might also provide professional orientation workshops and collaborate with local companies to promote the hiring of migrants. Entrepreneurial programs tailored to women have also shown promise in improving the well-being of participants, though limited evidence on the impacts of such programs for migrant women, specifically, is available (Seyfert and Alonso, 2023). More robust evidence is needed to uncover the mechanisms through which female entrepreneurial interventions may lead to greater self-reliance and improved mental health for forcibly displaced women. Finally, while policies bolstering the economic inclusion of forcibly displaced women may help to reduce their burden of mental illness, findings highlight the importance of simultaneously developing and resourcing social support networks to enable women's connection, the sharing of resources, and integration.

Findings from this study should be considered alongside a couple limitations of note. First, the data employed in this analysis are cross-sectional and thus causality cannot be demonstrated. While our discussion of findings has conceptualized self-reliance as a predictor of depression, it is also a possibility that women with depression feel less motivation–a standard symptom of depression–to engage in employment and sustain or contribute to their household financially. Future research on this topic should include the collection of longitudinal data as establishing temporality would enable researchers to identify whether changes in self-reliance precede changes in depression, or vice versa. Second, the measure of depressive symptoms, the PHQ9, was not administered by clinically trained psychologists and thus cannot and should not serve as a formal diagnosis of depression. Nonetheless, the PHQ9 has been widely used in survey questionnaires in similar contexts and offers valuable insight into populations' mental illness symptomatology.

6. Conclusion

This study highlights the critical role of household self-reliance in mitigating depression among forcibly displaced women in Colombia, particularly through enhanced food security, financial stability, and reduced debt. However, the lack of a significant association between self-reliance and resilience suggests that economic stability alone may not foster the capacity to adapt in the face of adversity. Our findings also emphasize the profound impact of perceived control and community support on women's mental well-being, with feelings of control contributing to higher depression levels and community support bolstering resilience. These results point to the need for holistic interventions that address both economic empowerment and the social environments surrounding displaced women. Policies promoting financial inclusion and reducing barriers to sustainable livelihoods, coupled with strengthened community support networks, can play a vital role in improving both mental health and resilience outcomes for this vulnerable population. Future research should focus on the longitudinal impacts of self-reliance and explore the nuanced relationship between social support and resilience to inform comprehensive programming for displaced women globally.

CRediT authorship contribution statement

Ilana Seff: Writing – review & editing, Writing – original draft, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Arturo Harker Roa:** Methodology, Investigation, Funding acquisition, Conceptualization. **Raymond Atwebembere:** Writing – review & editing, Writing – original draft, Formal analysis, Data curation. **Jennie Cottle:** Writing – review & editing, Writing – original draft. **Ned Meerdink:** Writing – review & editing, Methodology. **Adriana Monar:** Writing – review & editing, Project administration, Funding acquisition. **Diany Castellar:** Writing – review & editing, Project administration. **Lindsay Stark:** Writing – review & editing, Methodology, Investigation, Funding acquisition, Conceptualization.

Data availability statement

Deidentified data from this study may be made available upon reasonable request to the authors.

Funding

This study was made possible by the support of the American people through the US State Department Bureau of Population, Refugees, and Migration. The findings of this study are the sole responsibility of the contributing authors and do not necessarily reflect the views of the US government.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

We would like to thank Neetu Mahil, Annie Bonz, María Vitores, Andrea Armijos, Joseph Mejía for their contributions and insights on this work.

References

Amnesty International, 2022. Venezuelan refugees face increasing gender-based violence. Amnesty International. https://www.amnesty.org/en/latest/news/2022/07/colombia-peru-venezuelan-women-face-gender-based-violence/.

Annan, J., Falb, K., Kpebo, D., Hossain, M., Gupta, J., 2017. Reducing PTSD symptoms through a gender norms and economic empowerment intervention to reduce intimate partner violence: a randomized controlled pilot study in Côte D'Ivoire. Global Mental Health (Cambridge, England) 4, e22. https://doi.org/10.1017/gmh.2017.19.

Arango, D.J., Kelly, J., Klugman, J., Ortiz, E., 2021. *Forced Displacement and Violence against Women: A Policy Brief* [Text/HTML]. World Bank. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/593151638940044686/Forced-Displacement-and-Violence-Against-Women-A-Policy-Brief.

Baird, S., Bhutta, Z.A., Hamad, B.A., Hicks, J.H., Jones, N., Muz, J., 2019. Do restrictive gender attitudes and norms influence physical and mental health during very young Adolescence? Evidence from Bangladesh and Ethiopia. SSM - Population Health 9, 100480. https://doi.org/10.1016/j.ssmph.2019.100480.

Beck, C.J.A., Raghavan, C., 2010. Intimate partner abuse screening in custody mediation: the importance of assessing coercive control. Fam. Court Rev. 48 (3), 555–565. https://doi.org/10.1111/j.1744-1617.2010.01329.x.

Betancourt, T.S., McBain, R.K., Newnham, E.A., Brennan, R.T., 2015. The intergenerational impact of war: longitudinal relationships between caregiver and child mental health in postconflict Sierra Leone. JCPP (J. Child Psychol. Psychiatry) 56 (10), 1101–1107. https://doi.org/10.1111/jcpp.12389.

Beydoun, H.A., Beydoun, M.A., Kaufman, J.S., Lo, B., Zonderman, A.B., 2012. Intimate partner violence against adult women and its association with major depressive disorder, depressive symptoms and postpartum depression: a systematic review and meta-analysis. Soc. Sci. Med. 75 (6), 959–975. https://doi.org/10.1016/j.socscimed.2012.04.025.

Bhagat, A., 2021. Experimental financial inclusion as refugee management: shelter insecurities at the bottom of the pyramid in Kenya. International Journal of Housing Policy 21 (4), 484–504. https://doi.org/10.1080/19491247.2020.1818051.

Bridges, S., Disney, R., 2010. Debt and depression. J. Health Econ. 29 (3), 388–403. https://doi.org/10.1016/j.jhealeco.2010.02.003.

Brown, D., Meinhart, M., Poulton, C., Stark, L., 2023. The economic burden of intimate partner violence in Colombia: estimated health costs among females aged 13–24. J. Interpers Violence 38 (3–4), 3215–3243. https://doi.org/10.1177/08862605221104531.

Cassiani-Miranda, C.A., Cuadros-Cruz, A.K., Torres-Pinzón, H., Scoppetta, O., Pinzón-Tarrazona, J.H., López-Fuentes, W.Y., Paez, A., Cabanzo-Arenas, D.F., Ribero-Marulanda, S., Llanes-Amaya, E.R., 2021. Validez del Cuestionario de salud del paciente-9 (PHQ-9) para cribado de depresión en adultos usuarios de Atención Primaria en Bucaramanga, Colombia. Rev. Colomb. Psiquiatr. 50 (1), 11–21. https://doi.org/10.1016/j.rcp.2019.09.001.

Charlson, F., van Ommeren, M., Flaxman, A., Cornett, J., Whiteford, H., Saxena, S., 2019. New WHO prevalence estimates of mental disorders in conflict settings: a systematic review and meta-analysis. Lancet (London, England) 394 (10194), 240–248. https://doi.org/10.1016/S0140-6736(19)30934-1.

Cottyn, I., 2018. Livelihood trajectories in a context of repeated displacement: empirical evidence from Rwanda. Sustainability 10 (10). https://doi.org/10.3390/su10103521. Article 10.

Deschak, C.I., Infante, C., Mundo-Rosas, V., Aragón-Gama, A.C., Orjuela-Grimm, M., 2022. Food insecurity and coping strategies in international migrants in transit through Mexico. Journal of Migration and Health 5, 100099. https://doi.org/10.1016/j.jmh.2022.100099.

Deshpande, N.A., Nour, N.M., 2013. Sex trafficking of women and girls. Reviews in Obstetrics & Gynecology 6 (1), e22–e27.

Devakumar, D., Palfreyman, A., Uthayakumar-Cumarasamy, A., Ullah, N., Ranasinghe, C., Minckas, N., Nadkarni, A., Oram, S., Osrin, D., Mannell, J., 2021. Mental health of women and children experiencing family violence in conflict settings: a mixed methods systematic review. Conflict Health 15 (1), 74. https://doi.org/10.1186/s13031-021-00410-4.

Dutton, M.A., Goodman, L.A., 2005. Coercion in intimate partner violence: toward a new conceptualization. Sex. Roles 52 (11), 743–756. https://doi.org/10.1007/s11199-005-4196-6.

Easton-Calabria, E., Omata, N., 2018. Panacea for the refugee crisis? Rethinking the promotion of 'self-reliance' for refugees. Third World Q. 39 (8), 1458–1474. https://doi.org/10.1080/01436597.2018.1458301.

European Commission, 2024. Forced displacement—European commission. https://civil-protection-humanitarian-aid.ec.europa.eu/what/humanitarian-aid/forced-displacement_en.

Firth, J., Gangwisch, J.E., Borsini, A., Wootton, R.E., Mayer, E.A., 2020. Food and mood: how do diet and nutrition affect mental wellbeing? BMJ 369, m2382. https://doi.org/10.1136/bmj.m2382.

Gibbs, A., Corboz, J., Chirwa, E., Mann, C., Karim, F., Shafiq, M., Mecagni, A., Maxwell-Jones, C., Noble, E., Jewkes, R., 2020. The impacts of combined social and economic empowerment training on intimate partner violence, depression, gender norms and livelihoods among women: an individually randomised controlled trial and qualitative study in Afghanistan. BMJ Glob. Health 5 (3), e001946. https://doi.org/10.1136/bmjgh-2019-001946.

Hernández-Vásquez, A., Visconti-Lopez, F.J., Rojas-Cueva, A.C., Grendas, L.N., Azañedo, D., 2023. Food insecurity and mental health among Venezuelan migrants and refugees living in Peru: secondary data analysis of a cross-sectional survey. Nutrients 15 (14). https://doi.org/10.3390/nu15143102. Article 14.

Herrman, H., Stewart, D.E., Diaz-Granados, N., Berger, E.L., Jackson, B., Yuen, T., 2011. What is resilience? Canadian Journal of Psychiatry. Revue Canadienne De Psychiatrie 56 (5), 258–265. https://doi.org/10.1177/070674371105600504.

HIAS, 2023. Knowledge and Perception of GBV Risks and Women's Empowerment Tool.

Hojman, D.A., Miranda, Á., Ruiz-Tagle, J., 2016. Debt trajectories and mental health. Soc. Sci. Med. 167, 54–62. https://doi.org/10.1016/j.socscimed.2016.08.027.

Hynes, M.E., Sterk, C.E., Hennink, M., Patel, S., DePadilla, L., Yount, K.M., 2016. Exploring gender norms, agency and intimate partner violence among displaced Colombian women: a qualitative assessment. Global Publ. Health 11 (1–2), 17–33. https://doi.org/10.1080/17441692.2015.1068825.

Ibala, R.-M., Seff, I., Stark, L., 2021. Attitudinal acceptance of intimate partner violence and mental health outcomes for female survivors in Sub-Saharan Africa. Nt. J. Environ. Res. Public Health 18 (10), 5099. https://doi.org/10.3390/ijerph18105099.

International Crisis Group, 2022. Hard times in a safe haven: protecting Venezuelan migrants in Colombia | crisis group. https://www.crisisgroup.org/latin-america-caribbean/andes/colombia-venezuela/hard-times-safe-haven-protecting-venezuelan.

Kroenke, K., Spitzer, R.L., Williams, J.B.W., 1999. Patient Health Questionnaire-9 (PHQ-9). APA PsycTests. https://doi.org/10.1037/t06165-000.

Leeson, K., Bhandari, P.B., Myers, A., Buscher, D., 2020. Measuring the self-reliance of refugees. J. Refug. Stud. 33 (1). https://doi.org/10.1093/jrs/fez076. Article 1.

Ong, Q., Theseira, W., Ng, I.Y.H., 2019. Reducing debt improves psychological functioning and changes decision-making in the poor. Proc. Natl. Acad. Sci. U.S.A. 116 (15), 7244–7249. https://doi.org/10.1073/pnas.1810901116.

Orjuela-Grimm, M., Deschak, C., Aragon Gama, C.A., Bhatt Carreño, S., Hoyos, L., Mundo, V., Bojorquez, I., Carpio, K., Quero, Y., Xicotencatl, A., Infante, C., 2022. Migrants on the move and food (In)security: a call for research. J. Immigr. Minority Health 24 (5), 1318–1327. https://doi.org/10.1007/s10903-021-01276-7.

Quinonez, H.M., de Sousa, L.R.M., Figueroa, L.S., 2019. P37 food insecurity and gender inequality in Latin America. J. Nutr. Educ. Behav. 51 (7), S49. https://doi.org/10.1016/j.jneb.2019.05.413.

Rohwerder, B., 2016. *Women And Girls in Forced and Protracted Displacement* (GSDRC Helpdesk Research Report 1364. GSDRC, University of Birmingham. https://www.academia.edu/28881368/Women_and_girls_in_forced_and_protracted_displacement.

Rubenstein, B.L., Lu, L.Z.N., MacFarlane, M., Stark, L., 2020. Predictors of interpersonal violence in the household in humanitarian settings: a systematic review. Trauma Violence Abuse 21 (1), 31–44. https://doi.org/10.1177/1524838017738724.

Santos, M.P., Brewer, J.D., Lopez, M.A., Paz-Soldan, V.A., Chaparro, M.P., 2022. Determinants of food insecurity among households with children in Villa El Salvador, Lima, Peru: the role of gender and employment, a cross-sectional study. BMC Publ. Health 22 (1), 717. https://doi.org/10.1186/s12889-022-12889-4.

Seff, I., Leeson, K., Stark, L., 2021. Measuring self-reliance among refugee and internally displaced households: the development of an index in humanitarian settings. Conflict Health 15 (1), 56. https://doi.org/10.1186/s13031-021-00389-y.

Seff, I., Meinhart, M., Sarraf, D., Abu Zuhair, A., Sofia, J., Atuheire, R., Lee, J., Ahmed, N., Poulton, C., Stark, L., 2024. Women's collectives and social support: exploring pathways and impacts among forcibly displaced women. Frontiers in Sociology 9. https://doi.org/10.3389/fsoc.2024.1409332.

Seff, I., Stark, L., 2022. The role of social norms: a case study of intimate partner violence among adolescent girls in Nigeria. In: Ssewamala, F.M., Sensoy Bahar, O., McKay, M. M. (Eds.), Child Behavioral Health in Sub-saharan Africa. Springer International Publishing, pp. 157–180. https://doi.org/10.1007/978-3-030-83707-5_9.

Seyfert, K., Alonso, H., 2023. Social protection for refugees and migrants: examining access to benefits and labour market interventions. Int. Soc. Secur Rev. 76 (4), 23–43. https://doi.org/10.1111/issr.12347.

Sinclair, V.G., Wallston, K.A., 2004. The development and psychometric evaluation of the Brief resilient coping scale. Assessment 11 (1), 94–101. https://doi.org/10.1177/1073191103258144.

Skran, C., Easton-Calabria, E., 2020. Old concepts making new history: refugee self-reliance, livelihoods and the 'refugee entrepreneur.'. J. Refug. Stud. 33 (1), 1. https://doi.org/10.1093/jrs/fez061.

Slaughter, A.G., 2020. Fostering refugee self-reliance: a case study of an agency's approach in nairobi. J. Refug. Stud. 33 (1), 107–124. https://doi.org/10.1093/jrs/fez060.

Sparling, T.M., Deeney, M., Cheng, B., Han, X., Lier, C., Lin, Z., Offner, C., Santoso, M.V., Pfeiffer, E., Emerson, J.A., Amadi, F.M., Mitu, K., Corvalan, C., Verdeli, H., Araya, R., Kadiyala, S., 2022. Systematic evidence and gap map of research linking food security and nutrition to mental health. Nat. Commun. 13, 4608. https://doi.org/10.1038/s41467-022-32116-3.

Stark, L., Seff, I., Monar, S., Castellar, D., Mahi, N., & Harker Roa, A. (Unpublished results). Measuring Self-Reliance and Wellbeing Among Forcibly Displaced Populations Enrolled in a Gender-Focused Economic Empowerment Program: A Protocol for a Pilot Randomized Controlled Trial in Colombia. Under Review.

Stark, L., Seff, I., Reis, C., 2020. Gender-based violence against adolescent girls in humanitarian settings: a review of the evidence. Lancet 5 (3). https://doi.org/10.1016/S2352-4642(20)30245-5. Article 3.

UNHCR, 2019. Refugee self-reliance initiative. The Global Compact on Refugees | UNHCR. https://globalcompactrefugees.org/news-stories/refugee-self-reliance-initiative.

UNHCR, 2024a. *Colombia.* Global focus. https://reporting.unhcr.org/operational/operations/colombia.
UNHCR. (2024b). Resettlement data finder [Data set]. https://rsq.unhcr.org/en/#yq5B.
UNHCR & HIAS. (2023). Nuestro derecho a la seguridad: Colocando a las mujeres refugiadas en el centro de la búsqueda de soluciones frente a la violencia de género. segurasenmovilidad.org/wp-content/uploads/2022/12/Nuestro-derecho-a-la-seguridad-estudio-regional-ES.pdf.
Vahedi, L., Seff, I., Meinhart, M., Roa, A.H., Villaveces, A., Stark, L., 2024. The association between youth violence and mental health outcomes in Colombia: a cross sectional analysis. Child Abuse & Neglect 150, 106336. https://doi.org/10.1016/j.chiabu.2023.106336.
Vu, A., Adam, A., Wirtz, A., Pham, K., Rubenstein, L., Glass, N., Beyrer, C., Singh, S., 2014. The prevalence of sexual violence among female refugees in complex humanitarian emergencies: a systematic review and meta-analysis. PLoS Currents 6. https://doi.org/10.1371/currents.dis.835f10778fd80ae031aac12d3b533ca7 ecurrents.dis.835f10778fd80ae031aac12d3b533ca7.
Vyas, S., Meinhart, M., Troy, K., Brumbaum, H., Poulton, C., Stark, L., 2021. The economic cost of violence against women and girls in low- and middle-income countries: a systematic review of the evidence. Trauma Violence Abuse, 152483802110160. https://doi.org/10.1177/15248380211016018.
Zamora-Moncayo, E., Burgess, R.A., Fonseca, L., González-Gort, M., Kakuma, R., 2021. Gender, mental health and resilience in armed conflict: listening to life stories of internally displaced women in Colombia. BMJ Glob. Health 6 (10), e005770. https://doi.org/10.1136/bmjgh-2021-005770.