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ORIGINAL

Nostalgia and migration: Translocal habitability of Sinaloan families with relatives in the USA

Nostalgia y Migración: Habitabilidad Translocal de Familias Sinaloenses con Familiares en USA

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ABSTRACT

The migration of a relative to the United States transforms the experience of home for those who remain in the place of origin, yet this translocal habitability is rarely measured. Using the preliminary data cut from the pilot survey of project FZ-HAB-0026 on the Factoriza UAS platform, this study described the initial behaviour of a fifteen-item scale with three dimensions, Bond with the home at a distance, Longing for the migrant relative and Attachment to the family dwelling, among Sinaloan families with relatives in the United States. With a cross-sectional design, 12 cases out of a target of 100 were analysed while data collection remained open. Descriptive statistics, Cronbach's alpha, McDonald's omega total and Spearman correlations between dimensions were estimated, and an exploratory factor analysis was attempted. Internal consistency was acceptable for Attachment to the dwelling (α = .719), moderate for Longing (α = .566) and negative for Bond with the home (α = -.948); in all three dimensions, the reverse-worded item did not covary with the rest. The factor analysis was not interpretable because the sample had fewer cases than items, and no correlation between dimensions had an interval excluding zero. Missing the relative and feeling their absence on special dates received the highest ratings. The findings do not yet provide structural validity evidence and point to revisions of the instrument.

Keywords: transnational families; nostalgia; place attachment; translocal habitability

RESUMEN

La migración de un familiar a Estados Unidos transforma la experiencia del hogar de quienes permanecen en el lugar de origen, pero esa habitabilidad translocal rara vez se mide. Este estudio describió, en el corte preliminar del levantamiento piloto del proyecto FZ-HAB-0026 de Factoriza UAS, el comportamiento inicial de una escala de quince reactivos con tres dimensiones: Vínculo con el hogar a distancia, Añoranza del familiar migrante y Apego a la vivienda familiar, en familias sinaloenses con familiares en Estados Unidos. Con diseño transversal, se analizaron 12 casos de una meta de 100, con el levantamiento abierto. Se estimaron descriptivos, alfa de Cronbach, omega total y correlaciones de Spearman entre dimensiones, y se intentó un análisis factorial exploratorio. La consistencia interna fue aceptable en Apego a la vivienda (α = .719), moderada en Añoranza (α = .566) y negativa en Vínculo con el hogar (α = -.948); en las tres dimensiones, el reactivo inverso no covarió con el resto. El análisis factorial no fue interpretable porque la muestra tiene menos casos que reactivos, y ninguna correlación entre dimensiones tuvo un intervalo que excluyera el cero. Extrañar al familiar y sentir su ausencia en fechas especiales fueron los aspectos mejor valorados. Los resultados no aportan todavía evidencias de validez estructural y orientan la revisión del instrumento.

Palabras clave: familias transnacionales; nostalgia; apego al lugar; habitabilidad translocal

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INTRODUCTION

The migration of a family member to the United States transforms the daily life of those who remain in the place of origin. The family dwelling ceases to be only the space inhabited by those present and becomes a place traversed by absence: it is improved with the money that arrives from the north, decisions about it are made at a distance, it is prepared for visits, and it fills with objects and memories of the one who left. Research on transnational families has shown that migration modifies family dynamics without dissolving bonds, and that information and communication technologies have created new ways of maintaining the filial relationship at a distance(Valencia Correa and Moreno Carmona, 2024). That experience has a housing dimension that is rarely measured: translocal habitability, that is, the way in which the home of origin is lived, cared for, and valued in relation to the absent family member.

Remittances are the most visible face of this relationship. In Mexico, the households that receive them are concentrated among female-headed households, households with older adults, and rural contexts with low schooling, and remittances tend to replace lost labor income rather than complement it, which shapes a profile of social vulnerability(Pardo-Montaño and Dávila-Cervantes, 2022). Their effect on multidimensional poverty, which includes deficiencies in housing quality and space, is moderate, because they are mainly allocated to immediate consumption(Librado-Gonzalez et al., 2025). The literature on so-called remittance houses has also shown that housing built or improved with migration money is also a space of memory and negotiation between those who live in it and those who decide from afar(Boccagni and Echeverria, 2023).

In Sinaloa, migration to the United States has given rise to migrant organizations that maintain ties with their communities of origin, such as the migrant clubs that participate in financing public works in municipalities such as El Rosario and Elota(Pintor Sandoval and Sánchez Sánchez, 2019). The emotional and housing experience of the families that remain in the state, by contrast, has been little studied, and no instruments were identified that jointly measure the migrant relative's bond with the home, the longing of those who stay, and attachment to the family dwelling.

The FZ-HAB-0026 project of the Factoriza UAS platform set out to study the translocal habitability of Sinaloan families with relatives in the United States by means of a fifteen-item scale organized into three dimensions: Bond with the home at a distance, Longing for the migrant relative, and Attachment to the family dwelling. This article reports the results of the first pilot survey, in a preliminary data cut of very small size, so its scope is the initial review of the instrument and not the estimation of population parameters.

The general objective was to describe the initial behavior of a translocal habitability scale in the preliminary data cut of its pilot survey with Sinaloan families who have relatives in the United States. The specific objectives were, first, to describe the distribution of responses to each item; second, to estimate the internal consistency of each dimension using alpha and omega coefficients; third, to assess the feasibility of an analysis of the internal structure with the available sample size; and fourth, to explore the relationship between the scores of the three dimensions. The project did not state hypotheses, so the study has a descriptive and exploratory scope.

DEVELOPMENT

Transnational families and the home at a distance

The transnational family maintains relationships, obligations, and shared decisions across places separated by borders. In their documentary review of empirical studies on migrant families from Ibero-American countries, Valencia Correa and MorenoCarmona (2024)found that information and communication technologies, such as video calls and messaging, have created new family dynamics and strengthened filial ties; that remittances are a central bond between those who migrate and those who stay but do not by themselves resolve emotional and child-rearing challenges; and that grandmothers are often the main caregivers in the place of origin. They concluded that migration has transformed transnational families without weakening parenting.

The home occupies a specific place in this relationship.Boccagni and Echeverria (2023) analyzed houses built with remittances in Ecuador based on prolonged stays in them and showed that the memory of the absent relative remains present, or is contested, through domestic routines and material objects; that decisions about the dwelling are made between those who live in it and those who reside far away, often with little mutual supervision; and that the question of whom the house belongs to depends less on legal ownership than on who uses it, gives it mea-

ning, and feels at home in it. The Bond with the home at a distance dimension of the instrument captures these practices: the migrant relative's participation in decisions about the dwelling (R1), the improvement of the dwelling with their support (R2), the relative's presence through video calls (R3), the perception that the relative feels alien to the dwelling (R4, reverse) and the existence of a space reserved for their visits (R5).

These practices do not necessarily vary together. Participation in decisions and economic support depend on the relative's position in the network and on their situation in the place of destination; video calls depend on access to technology and on work schedules; and the reservation of a space depends on the size of the dwelling and on the frequency of visits. The dimension therefore brings together behaviors of a different nature, which could behave as independent indicators rather than as manifestations of the same attribute.

Longing, migratory grief, and nostalgia

The literature on migratory grief has studied above all those who migrate. In Chile, Castillo-Lobos et al. (2023)documented that migrant mothers express grief in terms of the loss of social ties and distance from the place of origin, andCáceres-Titos et al. (2025)found, in refugees and asylum seekers in Spain, that migratory grief is related to nationality, gender, age, legal status and length of residence, and that helplessness and the pact of silence with the family about one's own situation form part of the emotional experience of migration.Mehtab et al. (2026), in Pakistani migrant women in Norway, described nostalgia as an emotional regulator that can at the same time amplify loneliness.

Those who remain in the place of origin live a complementary form of that experience. In Kathmandu,Shrestha et al. (2026)found a high proportion of depressive symptoms in older parents whose children had migrated abroad, with greater risk among those living without a partner. In the Chinese-language literature,Li (2024)described that older adults who remain in the countryside when their children migrate tend to feel loneliness and emptiness, that the emotional support they receive by telephone or video call is limited, and that the return of their children alleviates that feeling. The Longing for the migrant relative dimension captures this experience: missing the relative (R6), thinking about him or her during the day (R7), feeling his or her absence on special dates (R8), having grown accustomed to the distance (R9, reverse) and keeping objects that recall him or her (R10).

Attachment to the family dwelling and ambiguous loss of home

Place attachment designates the affective bond with a meaningful space. The review by KamaniFard and Paydar (2024)noted that social interaction and the characteristics that express history and culture are associated with a stronger bond. In contexts of forced migration,Bunn et al. (2023)described the ambiguous loss of home as a process with four dimensions (safety, social connections and identities, connection with place and dreams of the future) and as a cycle of loss and reconstruction of the sense of home. Although their study refers to those who are displaced, the notion of a home that is lost and remade is useful for thinking about the house of origin as the place to which one hopes to return.

The Attachment to the family dwelling dimension includes the dwelling as the repository of family memories (R11), sadness at the possibility of leaving it (R12), the dwelling as the place to which the migrant relative wants to return (R13), indifference toward the dwelling (R14, reverse) and care of the dwelling so that the family continues to gather in it (R15). Given a cross-sectional design, the relationships between bond at a distance, longing and attachment to the dwelling must be understood as associations and not as relations of dependence.

METHODOLOGY

Design

A quantitative, non-experimental, cross-sectional study with a descriptive and exploratory scope was conducted. The data correspond to survey LEV-0031, "Piloto Sinaloa · Familias con migrantes", of project FZ-HAB-0026 of the Factoriza UAS platform, and to the frozen dataset DST-0030, with a cutoff date of 9 October 2026. The survey constitutes an independent sample and is the only one in the project.

Population, sample and data cut

The survey population was defined as persons aged 18 years or older from Sinaloan families with a relative living in the United States. The territory comprises localities in Sinaloa selected by the project lead, so the selection was not probabilistic. According to the Factoriza log, 28 persons opened the questionnaire and 12 completed it; no cases were excluded by quality control, so 12 cases were analyzed (Table 2).

The data cut analyzed is preliminary: it comprises 12 cases out of a target of 100, and the survey remained open, in field status, as of the data cut date. With 12 cases for 15 items, the ratio is 0.8 cases per item, so the inter-item correlation matrix is not invertible. Data and sample adequacy is the first condition that the methodological literature requires verifying in item factor analysis(Ferrando et al., 2022; Goretzko et al., 2021).

Instrument

The Translocal Habitability Scale in Families with Migrants was administered; it consists of fifteen items with a five-point response format, from Strongly disagree (1) to Strongly agree(5), organized into three dimensions of five items each: Bond with the home at a distance (R1 to R5), Longing for the migrant relative (R6 to R10) and Attachment to the family dwelling (R11 to R15). Three items are reverse-worded, R4 (“My migrant relative feels alien to our dwelling”), R9 (“I have grown accustomed to the distance from my relative”) and R14 (“My dwelling is a matter of indifference to me”), and are already recoded in the data matrix. After recoding, a higher score indicates a closer bond of the relative with the home, more longing and more attachment to the dwelling. Table 1 presents the code, the dimension, the text and the direction of each item.

Table 1. Structure of the instrument.

Code	Dimension	Item	Reverse
R1	Bond with the home at a distance	My migrant relative takes part in decisions about the dwelling	No
R2	Bond with the home at a distance	With support from my migrant relative, we have improved the dwelling	No
R3	Bond with the home at a distance	Video calls keep my migrant relative present in the home	No
R4	Bond with the home at a distance	My migrant relative feels alien to our dwelling	Yes
R5	Bond with the home at a distance	In my dwelling there is a space reserved for when my relative visits us	No
R6	Longing for the migrant relative	I miss my relative who lives in the United States	No
R7	Longing for the migrant relative	I think about my migrant relative during the day	No
R8	Longing for the migrant relative	Special dates remind me of my relative’s absence	No
R9	Longing for the migrant relative	I have grown accustomed to the distance from my relative	Yes
R10	Longing for the migrant relative	I keep objects that remind me of my migrant relative	No
R11	Attachment to the family dwelling	My dwelling holds important memories of my family	No
R12	Attachment to the family dwelling	I would feel sad if I had to leave this dwelling	No
R13	Attachment to the family dwelling	My dwelling is the place my migrant relative wants to return to	No
R14	Attachment to the family dwelling	My dwelling is a matter of indifference to me	Yes
R15	Attachment to the family dwelling	I take care of this dwelling so that the family can continue to gather here	No

Note. Translocal habitability scale in families with migrants. 5-point response scale (Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree). Reverse items are already recoded in the delivered matrix. Source: Factoriza UAS, project FZ-HAB-0026, survey LEV-0031, dataset DST-0030.

Procedure

Responses were collected through the survey questionnaire managed in Factoriza UAS, which records express online informed consent before the first item and does not collect identifying data. Factoriza froze dataset DST-0030 with a cryptographic fingerprint, generated the matrix with the reverse items recoded, and produced the descriptive statistics and internal consistency analyses (runs RUN-00168 to RUN-00174). The complementary analyses were run using the data file and the item dictionary exported by the platform.

Data analysis

In a first stage, Factoriza UAS calculated the mean, standard deviation, skewness, kurtosis and response percentages at the extreme values of each item, as well as the internal consistency of each dimension using Cronbach's alpha(Cronbach, 1951), with the corrected item-total correlation and alpha if the item is deleted. In a second stage, the program analisis_psicometrico.py, version 1.0, was run in Python 3.13.16(Python Software Foundation, 2026), with NumPy 2.5.3(Harris et al., 2020), SciPy 1.18.1(Virtanen et al., 2020)and pandas 3.0.5. The program applies fixed, declared procedures, with no manual intervention in the calculations.

The program estimated McDonald's omega total(McDonald, 1999/2013)for each dimension from a one-factor model, without reversing items; when any item correlates or loads negatively with respect to the rest of its dimension, the program does not report omega because the coefficient ceases to be interpretable. It also attempted the exploratory factor analysis of the fifteen items, preceded by the global and item-level sample adequacy(Lorenzo-Seva and Ferrando, 2021) and by the test of sphericity, with the number of factors determined by parallel analysis, extraction by minimum residual and oblimin rotation. Lastly, it estimated the relationship between the mean dimension scores with Spearman's coefficient and its 95% confidence interval, using Fisher's transformation with the standard error of Bonett and Wright (2000).

The reference values for interpreting the psychometric indices are treated as guidelines and not as decision rules(Ferrando et al., 2022). No item was eliminated; the program flags problematic items and leaves the decision to the authors. No confirmatory factor analysis was run, which is proposed as future work.

Ethical considerations

Participation was voluntary and anonymous. Factoriza UAS records express online informed consent and does not collect names, emails or other identifying data. In a study with families of migrants, anonymity is particularly important, because information about relatives residing in another country may be sensitive.

Declaration on the use of artificial intelligence

During the preparation of this manuscript, the following were used: the Factoriza UAS platform, for data management and descriptive statistics and internal consistency analyses; an analysis program in Python with fixed and validated procedures, for omega, exploratory factor analysis, and correlations between dimensions; and the Claude Opus language model (Anthropic), to run that program, assist in the literature search, draft the manuscript, and assemble the document from the results. The authors reviewed, corrected, and approved the entire text, verified every reference, and assume full responsibility for the content of the article.

RESULTS

Sample composition

Table 2 summarizes the flow of cases. Of the 28 people who opened the questionnaire, 12 completed it and were analyzed, with no exclusions for quality control. More than half of those who started the questionnaire did not complete it, which should be reviewed in the field application, particularly given that the topic carries an emotional burden. All analyzed cases answered the fifteen items.

Table 2. Sample composition.

Indicator	Value
People who opened the questionnaire	28
Completed questionnaires	12
Cases excluded for quality control	0
Cases analyzed	12
Items	15

Note. Survey "Piloto Sinaloa · Familias con migrantes" (LEV-0031); population: people aged 18 or older from Sinaloan families with a relative living in the United States; territory: Sinaloa, in localities selected by the project lead. Dataset DST-0030, fingerprint e2677f8da21417c2. Source: Factoriza UAS. Preliminary data cut: n = 12 of a target of 100, with the survey open.

Descriptive statistics

Table 3 and Figure 1 present the descriptive statistics. The highest means in the set corresponded to two longing items: R6, missing the migrant relative who lives in the United States (M = 4.25, SD = 0.97), with 50 % of responses at the maximum value, and R8, feeling their absence on special dates (M = 4.25, SD = 0.75). These were followed by R13, the dwelling as the place to which the migrant relative wants to return (M = 4.08, SD = 1.00), and by R10 and R11, keeping objects that recall the migrant relative and the dwelling as the repository of memories, both with M = 3.92 (SD = 1.16). Taken together, longing and attachment to the dwelling received high ratings.

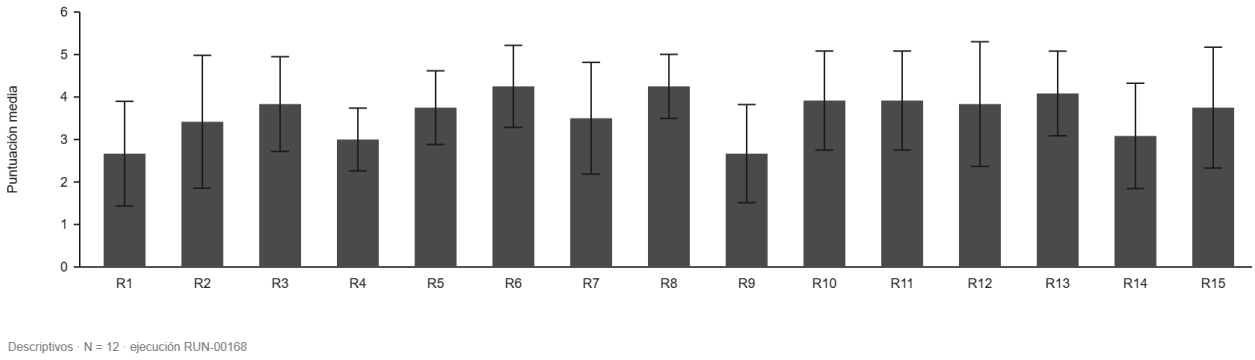
In Bond with the home at a distance, the highest mean was that of R3, the migrant relative's presence through video calls (M = 3.83, SD = 1.11), with a distribution skewed toward high values (skewness = -1.51). It was followed by R5, the space reserved for visits (M = 3.75, SD = 0.87), while the lowest was that of R1, the migrant relative's participation in decisions about the dwelling (M = 2.67, SD = 1.23). Home improvement with the migrant relative's support (R2) showed the greatest dispersion in the set (M = 3.42, SD = 1.56), which suggests that financial support for the dwelling is highly unequal across families. Two reverse items obtained low means in their recoded version: R9, having become accustomed to the distance (M = 2.67, SD = 1.15), which indicates that some of the respondents have indeed become accustomed, and R14, indifference toward the dwelling (M = 3.08, SD = 1.24).

Table 3. Descriptive statistics of the items.

Item	M	SD	Skewness	Kurtosis	Floor	Ceiling
R1	2.67	1.23	0.42	-0.45	17%	8%
R2	3.42	1.56	-0.16	-1.88	8%	42%
R3	3.83	1.11	-1.51	3.21	8%	25%
R4	3.00	0.74	0.00	-0.86	25%	25%
R5	3.75	0.87	-0.44	0.23	8%	17%
R6	4.25	0.97	-1.32	1.41	8%	50%
R7	3.50	1.31	-0.58	-0.61	8%	25%
R8	4.25	0.75	-0.48	-0.87	17%	42%
R9	2.67	1.15	0.36	0.30	17%	8%
R10	3.92	1.16	-0.64	-1.01	17%	42%
R11	3.92	1.16	-0.64	-1.01	17%	42%
R12	3.83	1.47	-0.90	-0.68	8%	50%
R13	4.08	1.00	-0.85	-0.01	8%	42%
R14	3.08	1.24	-0.53	-0.34	17%	8%
R15	3.75	1.42	-0.84	-0.63	8%	42%

Note. N = 12. Floor and ceiling indicate the percentage of responses at the minimum and maximum values. The item-total correlation column across the fifteen items is omitted because it combines three dimensions; the item-total correlation by dimension is presented in Table 4. Factoriza UAS run RUN-00168. Preliminary data cut: n = 12 of a target of 100, with the survey open.

Figure 1. Mean scores by item with one-standard-deviation bars.



Note. N = 12. Scale from 1 to 5; reverse items R4, R9 and R14 are shown recoded. Factoriza UAS run RUN-00168. Preliminary data cut: n = 12 of a target of 100, with the survey open.

Internal consistency

Table 4 gathers the item analysis by dimension calculated by Factoriza, and Table 5 presents the coefficients from the complementary program. The alpha values coincided in both calculations. Attachment to the family dwelling obtained α = .719 and Longing for the migrant relative α = .566; in both, omega is not reported because a reverse-worded item correlated negatively with the rest of its dimension, R14 in Attachment and R9 in Longing. Bond with the home at a distance obtained a markedly negative alpha, α = -.948, and the five items of the dimension correlated negatively with the rest, so its total score does not represent a common attribute and should not be interpreted as such.

The item-by-item analysis locates the problems. In Attachment to the dwelling, R15, caring for the dwelling for family gatherings (.760), R12, sadness at the possibility of leaving it (.739), and R11 (.611) were the most coherent items, whereas R14 presented a correlation of -.095 and its elimination would raise alpha to .862. In Longing, R10, keeping objects (.766), and R6, missing the relative (.754), were the most coherent, whereas R9 presented a correlation of -.153 and R7, thinking about the relative during the day, of .083; eliminating R9 would raise alpha to .758. In Bond with the home, the correlations were all negative, from -.506 in R4 to -.102 in R2, and the alpha values if the item is eliminated, also negative, confirm that the dimension, as composed, lacks internal consistency in this sample.

Table 4. Item analysis by dimension.

Dimension	Item	Corrected item-total r	α if the item is eliminated
Bond with the home at a distance	R1	-.369	-.328
Bond with the home at a distance	R2	-.102	-1.924
Bond with the home at a distance	R3	-.272	-.611
Bond with the home at a distance	R4	-.506	-.325
Bond with the home at a distance	R5	-.181	-.834
Longing for the migrant relative	R6	.754	.269
Longing for the migrant relative	R7	.083	.672
Longing for the migrant relative	R8	.609	.407
Longing for the migrant relative	R9	-.153	.758
Longing for the migrant relative	R10	.766	.193
Attachment to the family dwelling	R11	.611	.622
Attachment to the family dwelling	R12	.739	.543
Attachment to the family dwelling	R13	.549	.655
Attachment to the family dwelling	R14	-.095	.862
Attachment to the family dwelling	R15	.760	.535

Note. N = 12. The corrected item-total correlation excludes the item itself from its dimension total. Cronbach's α for the complete dimension, with 5 items each: Bond with the home at a distance = -.948 (RUN-00169); Longing for the migrant relative = .566 (RUN-00171); Attachment to the family dwelling = .719 (RUN-00173). When the mean covariance among items is negative, alpha is no longer bounded between 0 and 1, which explains the negative values of the first dimension. Source: Factoriza UAS, Tables 4, 6 and 8 of the package, compiled without modifying values. Preliminary data cut: n = 12 of a target of 100, with the survey open.

Internal structure

The planned exploratory factor analysis could not be estimated in an interpretable way, and its results are not presented in tables. With 12 cases and 15 items, the correlation matrix is not invertible, so the overall measure of sampling adequacy, the item-level adequacy, and the test of sphericity could not be computed. The parallel analysis suggested one factor, but with fewer cases than items that solution has no support. These results are recorded in the reproducibility appendix, but they provide no evidence on the dimensionality of the instrument and should not be cited as such.

Relationship between the dimensions

Table 6 presents the Spearman correlations between the mean scores of the three dimensions, with 12 cases. All three relationships were positive, but none of their confidence intervals excluded zero: Bond with the home at a distance and Attachment to the family dwelling, ρ = .546, 95% CI [-.087, .865], p = .066; Longing and Attachment to the family dwelling, ρ = .544, 95% CI [-.091,

.864], p = .068; and Bond with the home at a distance and Longing, ρ = .392, 95% CI [-.258, .798], p = .208. Because the Bond with the home at a distance score had a negative alpha, its correlations with the other dimensions lack a clear substantive interpretation.

Table 5. Internal consistency by dimension.

Dimension	Items	n	α	ω	Observation
Bond with the home at a distance	5	12	-.948	n/a	Reverse-worded items: R1, R2, R3, R4, R5; ω not interpretable
Longing for the migrant relative	5	12	.566	n/a	Reverse-worded items: R9; ω not interpretable
Attachment to the family dwelling	5	12	.719	n/a	Reverse-worded items: R14; ω not interpretable

Note. α = Cronbach's alpha; ω = McDonald's omega total from a one-factor minimum residual model, without reversing items. Complete cases per dimension. Source: own elaboration with analisis_psicometrico.py 1.0 (Python 3.13.16), dataset DST-0030_FZ_HAB_0026. Preliminary data cut: n = 12 of a target of 100, with the survey open.

Discussion of results

The purpose of this study was to describe the initial behavior of a translocal habitability scale with Sinaloan families who have relatives in the United States. The central result is uneven across dimensions. Attachment to the family dwelling showed acceptable internal consistency, which would increase without reverse-worded item R14; Longing showed moderate consistency, also limited by its reverse-worded item; and Bond with the home at a distance did not behave as a scale. With 12 cases, all coefficients are provisional: the simulation literature on alpha and omega coefficients has been developed with much larger samples(Malkewitz et al., 2023), and the internal structure could not be estimated.

Table 6. Correlations between dimensions.

Pair of dimensions	n	ρ	IC 95 %	p
Bond with the home at a distance and Longing for the migrant relative	12	.392	[-.258, .798]	.208
Bond with the home at a distance and Attachment to the family dwelling	12	.546	[-.087, .865]	.066
Longing for the migrant relative and Attachment to the family dwelling	12	.544	[-.091, .864]	.068

Note. Spearman ρ between the mean scores of each dimension (cases with all items of both). Interval by Fisher transformation with the Bonett and Wright standard error. Cross-sectional design: associations, not effects. Source: own elaboration with analisis_psicometrico.py 1.0 (Python 3.13.16), dataset DST-0030_FZ_HAB_0026. Preliminary data cut: n = 12 of a target of 100, with the survey open.

The lack of consistency of Bond with the home is consistent with the heterogeneity of its contents, noted in the theoretical framework. Participation in decisions, financial support for the dwelling, video calls, the perception of foreignness and the reservation of a space for visits are practices that depend on different conditions, and the literature on remittance houses shows that decisions about the dwelling are negotiated unequally between those who live in it and those who reside far away(Boccagni and Echeverria, 2023). That the improvement of the dwelling with support from the relative was the most dispersed item is also compatible with the evidence that remittances are mainly allocated to immediate consumption and reach households in very diverse conditions(Librado-Gonzalez et al., 2025; Pardo-Montaño and Dávila-Cervantes, 2022). These results suggest that the dimension might work better as a set of indicators of translocal practices than as a reflective scale.

The three reverse-worded items, R4, R9 and R14, showed a common pattern: none of them covaried with its dimension. This pattern, repeated across the three dimensions, is compatible with a wording effect. Scales with items worded in both directions require more careful reading, and a portion of respondents answer inconsistently to the positive and negative items of the same dimension (Steinmann et al., 2022); detecting such responses can appreciably reduce wording effects (García-Batista et al., 2021). In the case of R9, a substantive explanation is also possible: having grown accustomed to distance may coexist with longing for the relative, as suggested by the description of nostalgia as both an emotional regulator and an amplifier of loneliness (Mehtab et al., 2026).

The descriptive statistics point to an experience of intense absence tied to the home. Longing for the migrant relative, feeling their absence on special dates and conceiving of the dwelling as the place the relative wants to return to received the highest ratings, in line with studies that describe the loneliness and emptiness of those who stay behind when their relatives migrate(Li, 2024; Shrestha et al., 2026)and with the notion of a home that is maintained as a place of return(Bunn et al., 2023). The high rating of video calls, compared with the low participation of the relative in

decisions about the dwelling, suggests that presence at a distance is more affective than decisional, which coincides with the observation that technologies strengthen filial ties without replacing physical presence(Valencia Correa and Moreno Carmona, 2024).

Finally, response quality should be reviewed before the final analysis, because in small samples patterns of careless or invariant responding can markedly distort correlations(Ward and Meade, 2023).

CONCLUSIONS

The study met its objective within the scope allowed by a preliminary data cut of 12 cases. In its pilot survey, the translocal habitability scale of project FZ-HAB-0026 showed acceptable internal consistency in Attachment to the family dwelling (α = .719), moderate internal consistency in Longing for the migrant relative (α = .566) and negative internal consistency in Bond with the home at a distance (α = -.948). In all three dimensions, the reverse-worded item did not covary with the rest. The exploratory factor analysis could not be estimated in an interpretable way, because the sample has fewer cases than items, and none of the correlations between dimensions had an interval that excluded zero. The results do not yet provide evidence of structural validity, but they indicate that longing and attachment to the dwelling are promising dimensions and that the bond at a distance requires reformulation.

The limitations are substantial. The sample of 12 cases, against a target of 100, with 0.8 cases per item, prevents estimating the internal structure and makes all statistics unstable; the survey was still open and more than half of those who started the questionnaire did not complete it. The localities were selected by the project lead, and no information is available on kinship with the migrant relative, time elapsed since migration, frequency of contact or receipt of remittances, variables that the literature considers central. The matrix contains response patterns that require review. The cross-sectional design prevents establishing dependency relationships, and no confirmatory factor analysis was performed.

These results give rise to decisions for the authors. The first is to review the Bond with the home at a distance dimension and assess whether its items should be treated as separate indicators of translocal practices. The second is to verify the recoding of R4, R9 and R14 and, if it is correct, assess whether they should be reworded in a direct sense. The third is to review R7 in Longing. The fourth is to record kinship, time of absence, frequency of contact and receipt of remittances. None of these decisions was made in the present analysis, which retains the fifteen original items.

As future lines, we propose completing the survey up to the planned target, repeating the exploratory factor analysis when the number of cases allows it, and then evaluating the resulting structure by means of confirmatory factor analysis in an independent sample. The survey could be complemented with interviews and with the recording of material changes to the dwelling associated with migration, in order to understand how translocal habitability is constructed in Sinaloan families. An instrument with documented validity evidence would make it possible to support these families from social work, community mental health and housing policy, recognizing that the home of origin remains a space shared at a distance.

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CONFLICT OF INTEREST

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