Adaptation of an mHealth intervention for Latinx People Living with HIV in the Southern U.S.

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Background

- Latinx people in the United States experience health disparities, including in HIV care and outcomes.
- In the non-urban South, low density of Spanish speaking People Living with HIV (PLWH) and few Spanish-speaking healthcare providers lead to a lack of social support and difficulty accessing services.
- PositiveLinks (PL) is a successful mHealth intervention for PLWH developed with a mostly African-American, English-speaking population.
- PL includes daily tracking of medication adherence, mood and stress; appointment reminders; educational resources; lab results; a community message board; and secure messaging with the clinic.

Objective: Conduct formative work to guide adaptation of PL for Spanish-speaking Latinx PLWH
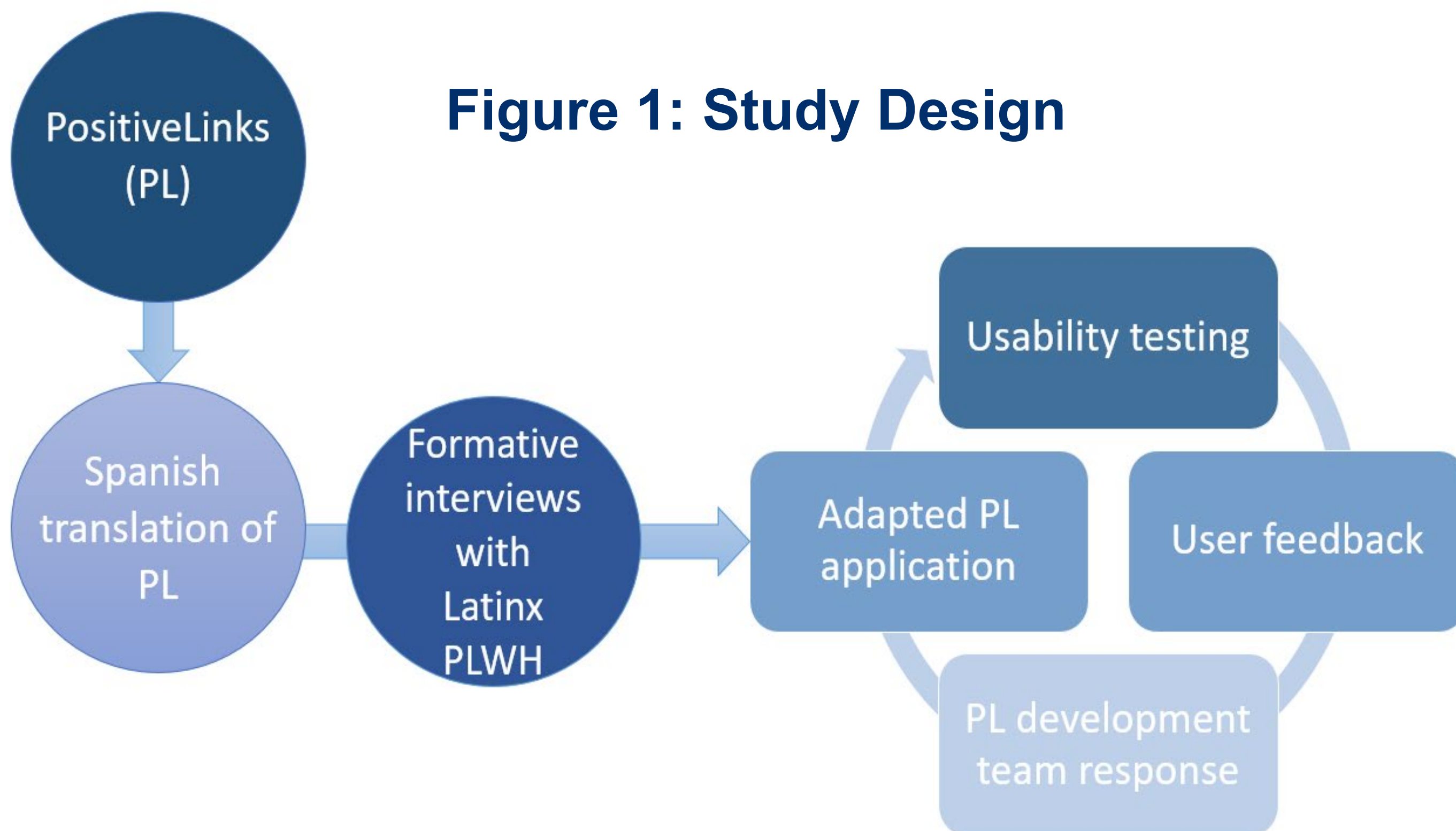
Figure 1: Study Design

PositiveLinks (PL) → Spanish translation of PL → Formative interviews with Latinx PLWH → Adapted PL application → Usability testing → User feedback → PL development team response

- Semi-structured interviews were designed to explore participants' attitudes toward technology, desired mHealth features, feedback on a Spanish-language PL prototype and on app iteration.
- 22 Spanish-speaking Latinx patients were recruited from a non-urban Ryan White HIV/AIDS clinic and a community-based organization.
- Thematic analysis was performed to identify participants' experiences and preferences for mHealth relevant to intervention tailoring.

Involvement of Spanish-speaking Latinx PLWH in the formative process can improve acceptability and usability of mHealth interventions

Table: Key themes

Prior Experiences with Technology
Negative associations: risks of unreliable information and privacy concerns
Use limited by structural and individual barriers
Positive associations: personal connection
Desired mHealth Features
Practical features: access to reliable and trustworthy HIV-related information, appointment reminders, medication reminders
Interpersonal features: support, care connection, social connection
Reaction to Prototype App
Nearly all motivated to use app and felt that the app was linguistically and culturally appropriate
Access to information considered highly valuable
Positive reinforcement/support among peers and care connection were strong sources of motivation to use the app after seeing examples
Individualization of the app was desired to meet particular needs
Reaction to Iteration of Prototype
Features revised based on feedback were felt to be improved

"Lo que no me ayudó son los foros porque se escuchan demasiadas cosas. Entonces, no sabes si todo es real o no, y eso te hace dudar."

"En las primeras etapas del diagnóstico, uno necesita más a alguien que lo motive a que uno pueda seguir viviendo con eso. Que el mundo no se te acaba. "

"Es importante mi salud y es importante también ampliar mi red de apoyo. Entonces, por esas razones la veo como motivante."

"Me sirve para comunicarme con mi familia y amigos, especialmente mi familia que está en mi país."

"A veces andamos en mil cosas y se nos olvida, entonces, un recordatorio sería muy bueno también."

"Uno se informa mucho de todo lo que pasa, de cómo son las cosas, y es muy importante para estar enterado."

Figure 2: Labs Feature Redesign

Left image: original design, which participant feedback identified to be confusing
Right images: redesigned lab results feature incorporating participant input

Main Findings

- Prior negative experience with technology were described by 16 (73%) participants.
- Positive associations with technology included personal connection (n=20, 91%) and access to information (n=15, 68%).
- In discussing PL features, participants expressed desire for access to information (n=19, 86%), positive reinforcement/support (n=18, 82%), personal connection (n=14, 64%), ease of use (n=10, 45%), privacy (n=10, 45%), and connection to their care team (n=9, 41%).
- Most participants (n=16, 64%) suggested improvements. Priorities included creation of an integrated Spanish-language community board to bring together different clinical sites and redesign of labs feature.
- Participants who expressed difficulty with the lab result feature had follow-up interviews for feedback on the redesigned display and reported improved understanding of the visuals and text (see Figure 2).

Conclusions

- Our formative work provides baseline attitudes about mHealth among Latinx PLWH and desired mHealth features.
- Privacy, confidentiality, and reliable information are key desired features.
- Social support through connection with other Spanish-speaking PLWH and with clinic staff provides a strong motivation for app use.
- Larger scale implementation of Spanish PL with investigation of app usage patterns and clinical outcomes is planned.

Acknowledgements