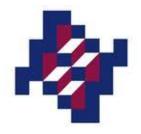
Adaptation of the IPEN Project for Implementation in a Latin American Context: IPEN-MEXICO



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Background: The IPEN Study



OBJECTIVE: To accurately assess the effect of built environment variables upon physical activity using pooled data from all the studied countries

Measurement tools:

- ✓ <u>PA:</u> International Physical Activity Questionnaire (IPAQ) and Accelerometers
- ✓ <u>Built Environment</u>: GIS data, Neighborhood Environment Walkability Scale Survey (NEWS)

Objective and methods

To describe the methodological, structural and practical *adaptations* necessary to implement the *IPEN study in a Mexican setting* (Cuernavaca, Morelos).





- Training with Brazilian and Colombian collegues,
 Multi-country and multi-disciplinary collaboration
- 2. IPEN-Mexico research and coordination *team assembly* and *protocol review and adaptations*
- 3. Field worker training and 2-week pilot test

Theme 1: Sampling Units

IPEN	Situation in Mexico
Primary sampling units -> Neighborhoods	 Neighborhoods are not official administrative units There are no official maps indicating neighborhood limits and characteristics

- Barrier Type: Political and practical
- > Possible Solutions: Use "Localidades" or Census Tracts

Localidades

- Available maps (shapefiles)
- Smallest administrative unit in a city in Mexico
- Vary in size and shape
- 29 in Cuernavaca

Census Tracts

- Available maps (shapefiles)
- Used only for the census
- 18 to 25 blocks
- 126 in Cuernavaca

Theme 2: Logistics

IPEN	Situation in Mexico
Recruitment, survey application and accelerometry \rightarrow Phone and/or mail	Not culturally acceptedLow acceptance and compliance ratesUnreliable postal service

- Barrier Type: Cultural and socioeconomical
- <u>Possible solutions</u>: Door to door recruitment, institutional recruitment (schools, hospitals); in person survey application and accelerometer delivery and recovery

Door to door recruitment

- ↑ Resources
- Field work and planning is more challenging
- Can control which census tracts and blocks the participants come from
- Low labor costs for professional field workers



Theme 3: Measurement Instruments

IPEN	Situation in Mexico
IPAQ and NEWS → Self or phone application	 Field workers are in charge of in person application of the surveys They do not include the assessment of certain characteristics of Latin American environment

Barrier Type: Cultural and practical

Solutions:

- 1. Modify *language for cultural appropriateness*.
- 2. Modify *structure for in person application* (standardized instructions to be read by fieldworker to avoid bias):

 Collaborative effort with Colombian and Brazilian teams.
- 3. New section to assess PA in specific LA settings (soccer fields, shopping malls, plazas): Collaborative effort with Colombian and Brazilian teams.
- 4. New section to assess SES at the individual level for Mexico
- 5. Pilot test for two weeks prior to data collection.

Theme 4: Incentives

IPEN	Situation in Mexico
Many countries provide monetary incentives for participation	It is legally not allowed to provide cash as an incentive for participation in a research study

- Barrier Type: Political and cultural
- > Possible solutions:

No Incentives

- No cost
- Low participation and/or compliance

Alternative monetary incentive

- High Cost
- 8 dollar limit
- Increased participation and/or compliance
- Complicated approval by IRBs
- Safety issues

Feedback

- Lower cost
- Increased participation and/or compliance
- Time consuming
- Human resources required
- Delivery issues

Theme 5: Data Access and quality

IPEN	Situation in Mexico
Many "public access" information is required.	- This information is not always accessible. Eg: GIS shapefiles for land use, crime data at the census tract level, etc.

- Barrier Type: Political and cultural
- Solutions:





Identify an adequate, well respected and influential local partner:

INSP

Optimize the available
data: Eg. Digitalization of
land use data and
participants address

Study outcomes

> Initial aim:

To obtain accelerometry, weight/height and survey data from at least 650 eligible participants within a 6 month period

IPEN Protocol

Adaptations

- √1 month of personnel training
- ✓ 2 weeks of Pilot testing
- √5.5 months of data collection

677 participants with survey data

677 participants with heigh/weight

674 with accelerometry data

672 with both

Only 2 lost accelerometers (65 total)

Conclusions

- Performing high quality physical activity epidemiological research in Latin American countries such as Mexico is challenging
- > A committed, influential local partner is essential for success
- Creative solutions should be favored without sacrificing methodological rigor
- Cost-effective decisions based on the available monetary, time and human resources should be made
- Our study may be used as a model for future studies, programs and policies addressing physical activity and the environment in the Latin American region



THANK YOU!

