



**The Challenges of Study
Design, Implementation,
and Data Collection for
Physical activity in Urban
Latino Neighborhoods in the
United States, Colombia,
Mexico, and Brazil**

**Active Living Research Annual Conference
International Symposium
March 9th, 2014**



Physical Inactivity in the World

- Not just a first-world problem
 - 9% of premature deaths worldwide (5.3 million)
 - Similar to tobacco
 - Responsible for $\geq 15\%$ of all cause mortality in countries as diverse as Argentina, Saudi Arabia, Namibia, Turkey, Japan, Dominican Republic, Malaysia, and the UK
- Why try to change it?
 - 25% reduction in inactivity = 1.3 million lives saved
 - Even making a dent makes a big difference!



Inactivity in Latinos

- Inactivity-related deaths are among the highest in Latin America
- In the U.S., Latinos report high levels of physical inactivity (59.8% vs. 47.4% in Non-Latino Whites)



Unique Challenges

- Heterogeneity of subgroups
 - Inactivity varies greatly (66% in Cubans vs. 47% in Mexicans)
 - Diverse cultural influences on behavior
 - Translating isn't enough!
 - Varying levels of acculturation within groups



Environmental Barriers

- Transportation
- Walkable neighborhoods
- Safety
- Heat
- Immigration worries



Incorporating Technology

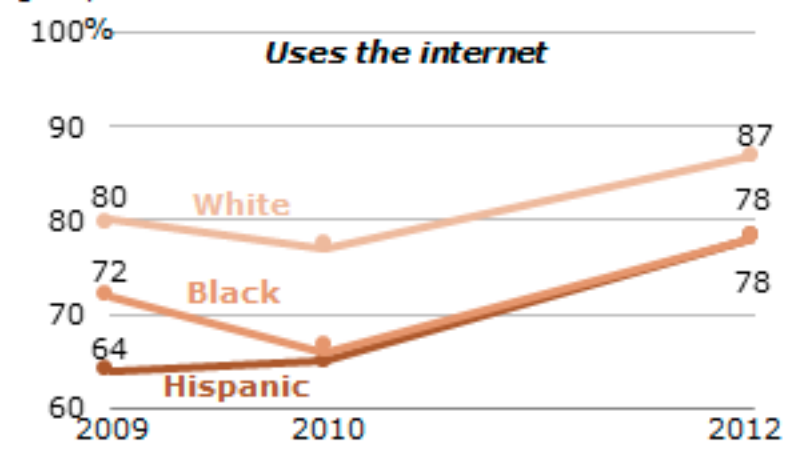
- “Digital Divide”
- Differs by media channel
 - Web vs. cell phones vs. smart phones
- Cultural preferences for technology use



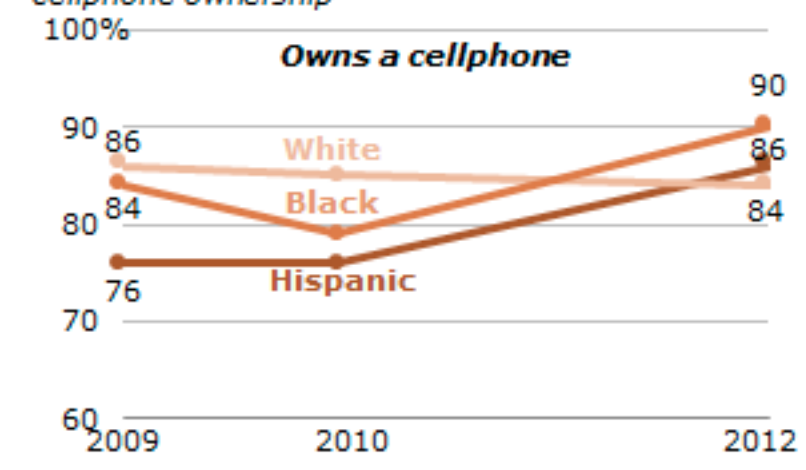
Internet Use and Cellphone Ownership Trends, 2009-2012

(% saying they use the internet or send or receive email at least occasionally)

Internet use is on the rise among all racial and ethnic groups ...



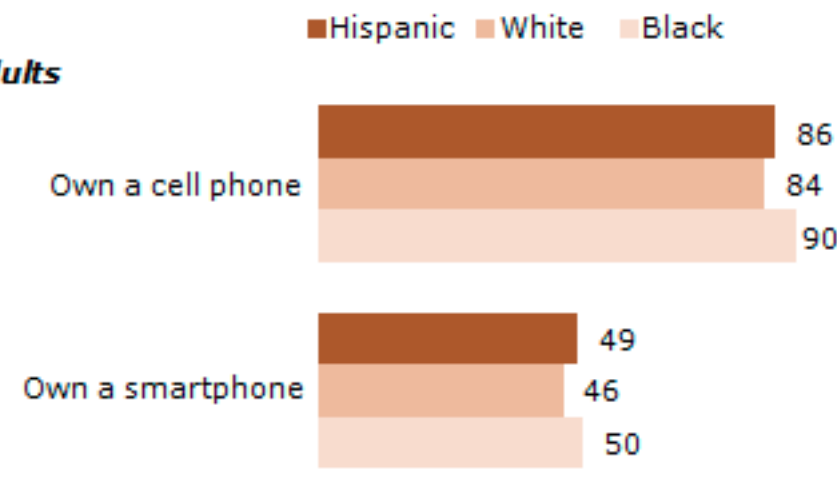
... but only minority groups are seeing a rise in cellphone ownership



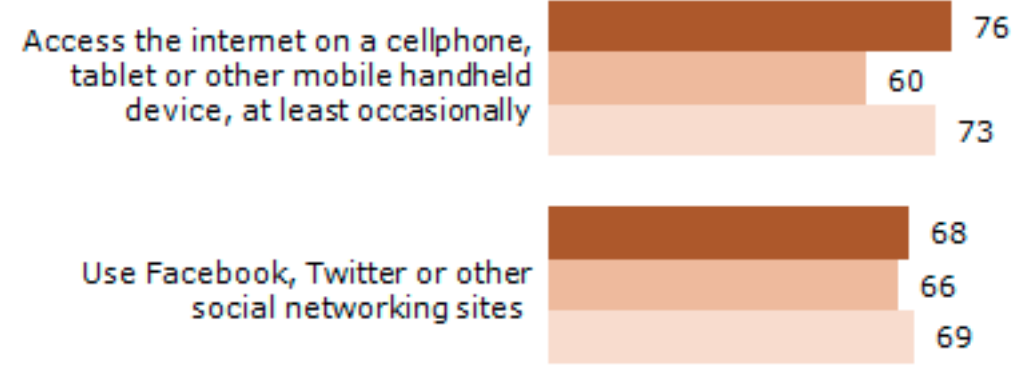
Smartphone Ownership, Mobile Internet Use, and Social Networking Site Use, 2012

(% saying they ...)

Among all adults



Among internet users





Men?

- What about Latino men?
 - 80% overweight or obese in US
 - Excluded from most interventions
- Gender & cultural adaptations
 - Qualitative interviews
 - Demonstration trial of modified intervention
 - Follow-up interviews
- Technology-based intervention?

The Challenges of Study Design, Implementation, and Data Collection for Physical activity in Urban Latino Neighborhoods in the United States, Colombia, Mexico, and Brazil



Chair: Bess Marcus, Ph.D., University of California, San Diego

Speakers:

Rodrigo Reis, PhD, Pontiff Catholic University of Parana, Curitiba, Brazil

Deborah Salvo, PhD, Stanford University, California, and National Public Health Institute, Cuernavaca, Mexico

Olga Lucia Sarmiento, MD, PhD, los Andes University, Bogota, Colombia

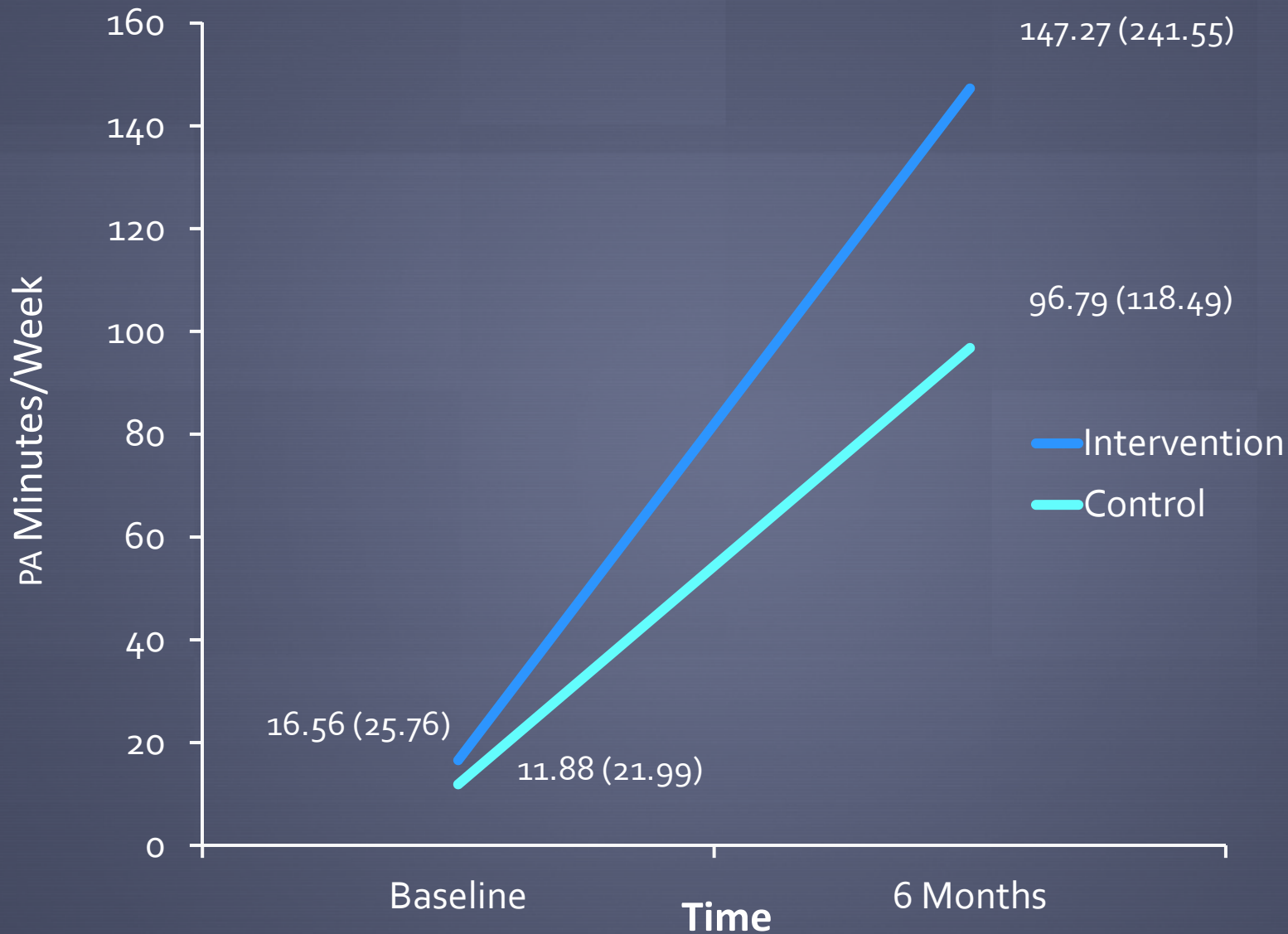
Elva Arredondo, PhD, San Diego State University



Seamos Activas

- Culturally adapted print-based individually tailored physical activity intervention
- Mostly Colombian, Dominican, Puerto Rican women
- Cultural adaption
 - Translation & back-translation
 - 25 cognitive interviews
 - Focus groups to identify cultural themes

SEAMOS ACTIVAS

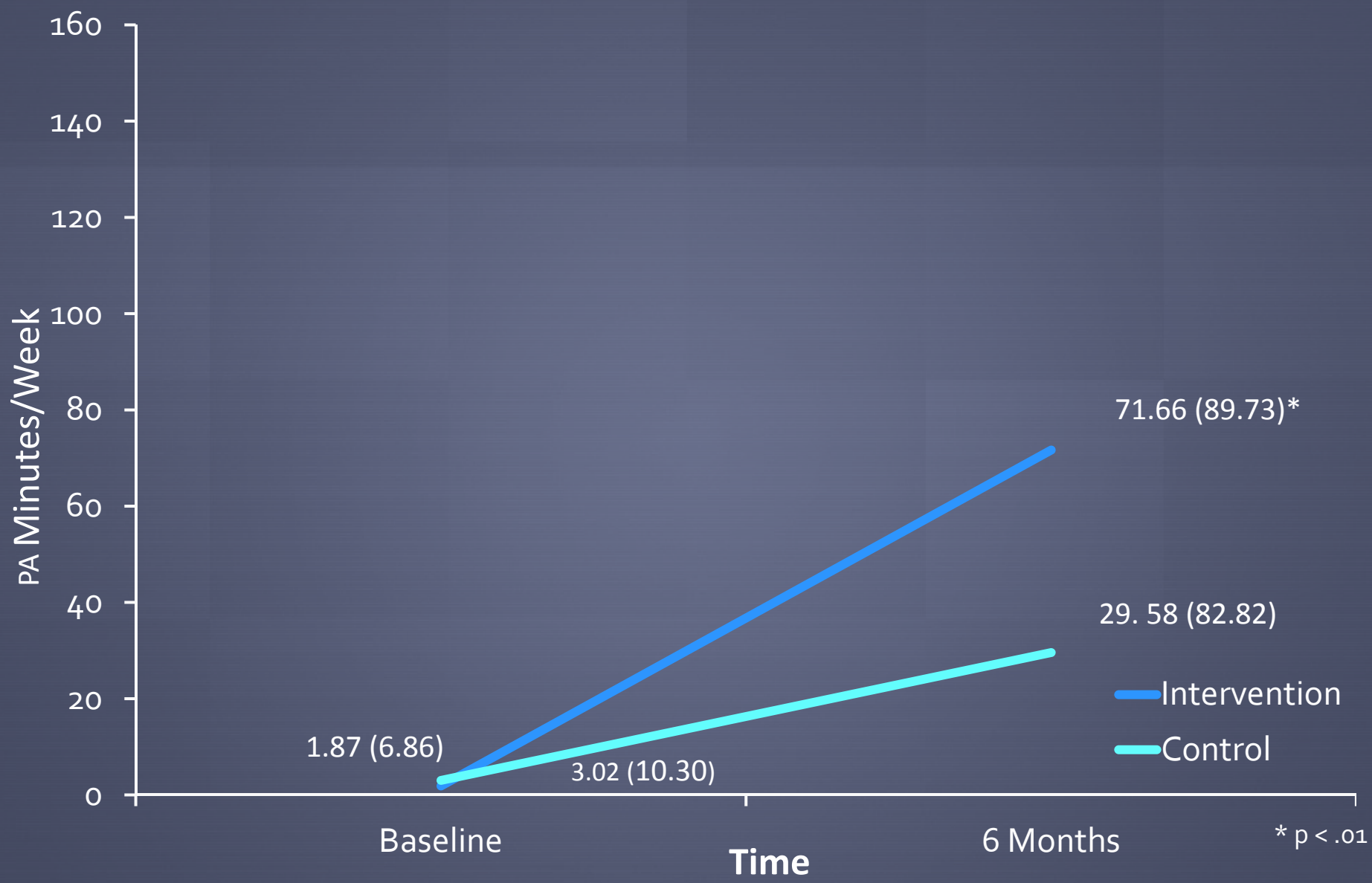




Seamos Saludables

- **Primary Aim: To test the efficacy of a culturally adapted print-based individually tailored physical activity intervention in fully-powered RCT**
- **First PA intervention with Latinas using mailed printed intervention materials**
- **Effective in hard-to-reach groups: majority of the women were low income, first generation, low acculturation**
- **Next step: incorporating technology with web-based activity intervention with Latinas**

SEAMOS SALUDABLES



Marcus BH, Dunsiger SI, Pekmezi DW, et al. (2013). The Seamos Saludables study: A randomized controlled physical activity trial of Latinas. *American Journal of Preventive Medicine*, 45(5):598-605.

Pasos Hacia La Salud

- Culturally adapted web-based physical activity intervention
- All Mexican American women
- Adaptations for technology AND cultural differences

Pasos Hacia La Salud Homepage

▶ ¿Como le va?

▶ Consejos útiles

▶ Pregunte A Un Experto

▶ Maneras de ser activa

▶ Preguntas Comunes

PASOS HACIA LA SALUD

MI LISTA DE TAREAS PENDIENTES

- Fijar mis metas semanales
- Registrar mi actividad
- Comience El Cuestionario

¿QUE HAY DE NUEVO?

Nuevo grupo de encuesta:

¡Nuevas respuestas en Preguntele al Experto! [más >>](#)

NUESTRA COMUNIDAD

Mensajes

Mensaje:

Estado de actualización

illumina, [Ayer 01:55pm]
Voy a caminar en el parque

admin, [12/07 09:47pm]
Estoy cansado! Quiero tomar una siesta!

illumina, [Ayer 01:55pm]
yo tambien :-)

illumina, [12/07 04:46pm]
hola

illumina, [11/30 01:12pm]
Yey

[más mensajes >>](#)

MEDIDOR DE ACTIVIDAD RAPIDO

Fecha:

Actividad:

Minutos:

Pasos (opcional):

GUARDAR

¿Sabía Usted?

Quehaceres activos afuera de la casa.

¿Recuerde cuando sus padres le decían que saliera a jugar? Hágalos caso. Los quehaceres afuera de la casa se pueden hacer al nivel de intensidad moderada, como cortar el pasto, lavar el carro, y jardinería.

Último inicio de sesión:
viernes, 18 de noviembre de 2011 05:47:01 p.m.

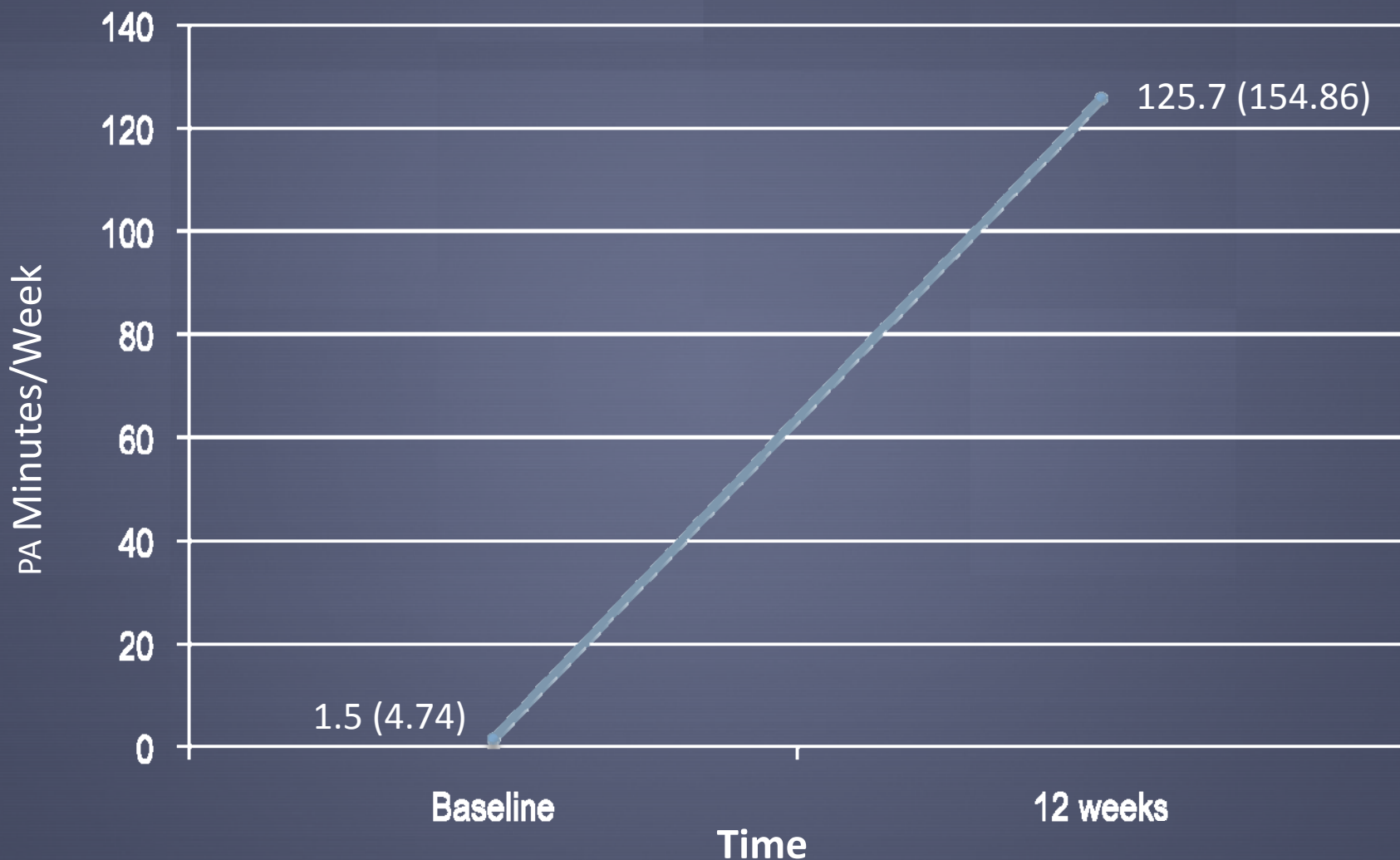
Esto es el tiempo para hacer el cuestionario otra vez.

Lo(a) echamos de menos y queremos que tenga éxito. Los controles continuos son una buena manera de mantener la motivación.

— **Becky Marquez, Ph.D.**



ACTIVO



Larsen BA, Dunsiger SI, Hartman S, et al. (In Press). Activo: Assessing the feasibility of designing and implementing a physical activity intervention for Latino men. *International Journal of Men's Health*.



Lingering Issues

- Recruitment & retention of “hard to reach” populations
- Targeting multiple behaviors
 - Diet
 - Sedentary Behavior
- Beyond leisure time physical activity
- Whole family activity