Texting 4 Health
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Using Text Messaging to Affect Teen Health

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* Thank you for your interest in this presentation. Please note that analyses
included herein are preliminary. More recent, finalized analyses may be available
by contacting CiPHR for further information.

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Public Health Research
Decoding how technology influences and can improve public health

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Roadmap

1. General indicators of text messaging use among US teens

2. Our 'philosophy' of technology and health (when to use technology, when to use traditional delivery methods)

3. A case study: TXTing 4 Bettering Parenting project

Roadmap

General indicators of text messaging use among US teens

Background: Growing up with Media
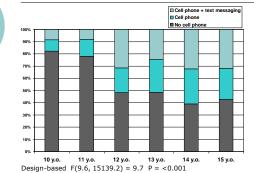
o National longitudinal survey of 1,588 youth

o Youth were 10-15 years of age at baseline

o Baseline data collected August-September, 2006

o Funded by the CDC (U49/CE000206)

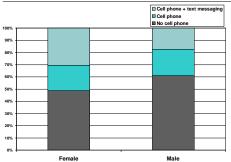## Prevalence of text messaging

- 45% of 10-15 year olds own a cell phone
  - 24% have a cell phone and using text messages

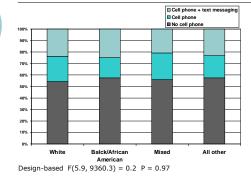- 13% report texting everyday

- 16% texting 1 hour or more a day

Cross-tabulation of **age** and cell phone ownership (n=1,588)

Design-based F(9.6, 15139.2) = 9.7 P = <0.001

Cross-tabulation of **sex** and cell phone ownership (n=1,588)

Design-based F(2.0, 3163.9) = 9.4 P = 0.001

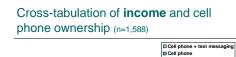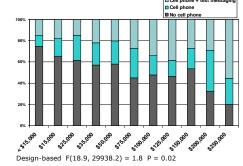## Cross-tabulation of **race** and cell phone ownership (n=1,588)

Design-based F(5.9, 9360.3) = 0.2 P = 0.97

Cross-tabulation of **Hispanic ethnicity** and cell phone ownership (n=1,588)

Design-based F(2.0, 3154.5) = 0.4 P = 0.67

Cross-tabulation of **income** and cell phone ownership (n=1,588)

Design-based F(18.9, 29938.2) = 1.8 P = 0.02

Benefits of text messaging-based interventions

o Girls (AOR: = 2.3, p<.001)
o Older youth (AOR = 1.4, p<.001)
o Youth in households with higher income (AOR = 1.2, p<.001)

o Little differences noted by race or ethnicity

AOR = Adjusted odds ratio

Roadmap

Our 'philosophy' of technology and health (when to use technology, when to use traditional delivery methods)

Advantages of technology-based interventions

○ Scalable

○ Cost effective (fewer personnel and infrastructure costs)

○ Tailoring of the program

Advantages of mobile phones specifically

○ 'Always on' capability reach people wherever they are

○ Active vs. reactive

The philosophy of technology-based interventions

○ In order to reach young people, we need to go where they are (instead of expecting them to come to us)

○ Young people are on mobile phones

○ We need to be on mobile phones

Go where they are; use the technology they've adopted to promote the health behavior we want them to adopt

The philosophy of technology-based interventions

○ Technology is not a replacement of traditional services, it is an enhancement

○ Attract youth who would otherwise not utilize traditional smoking cessation services

○ Not all populations are using newer technologies. Understand who your target population is and where they *are*

Roadmap

A case study: TXTing 4 Bettering Parenting project

Teenage pregnancy

○ The US has the highest teen pregnancy rate in the developed world (Coren et al., 2003).
  ● 41.7 / 1,000 adolescents each year (National Center for Health Statistics, 2004)
○ Adolescent mothers and their children are at risk for a variety medical, psychological, and social challenges (Committee on Adolescence & Committee on Early Childhood, 2001; Coren et al., 2003).

Case study: TXTing 4 Better Parenting

Teen parenting programs struggle to (Gomby et al., 1999):
○ enroll
○ adequately involve
○ retain
○ implement services as intended by their original program models.

New delivery models are needed.

Parent Express

○ Developed in 1992 by Dickinson and Cudaback.
  ● Evaluation studies have consistently reported increases in parenting knowledge and changes in parenting behaviors (Cudaback et al.1985;Cudaback and Jenson, 1992;Martin, et al., 1992;Martin & Weigel, 2001;Riley, 1997;Riley et al., 1991).
  ● Teen mothers increase parent-infant interaction (Riley et al., 1991).

Parent Express

- 8-page newsletter mailed to new parents monthly for up to 3 years

- Age-paced to capitalize on the teachable moment

TXTing 4 Better Parenting

- We propose to use this text-based parenting program as the basis for a text messaging-based teen parenting intervention.

- 3 messages daily:
  - supportive (e.g., promoting self-efficacy),
  - parenting skills (e.g., infant feeding), and
  - 'from the baby' (i.e., helps the mother understand her baby's 'perspective').

TXTing 4 Better Parenting

- Parenting skills: lern 2 recogniZ d hunger cry. She may nt B hngry evry tym shes fusy. She may nd burping, a daiper chng, or jst wan2B held.

- Supportive: B patient W yrslf. Ur nt solo n ur feelins n dis tym of adjustment wl pass

- A message 'from the baby': I lk 2 feel warm, +I don't lk heaps of noyZ

Summary

- Young people are using text messaging (1:4 10-15 year olds)

- We need to harness the technologies they are using (where they are) to reach them

- Don't re-invent the wheel; adapt existing interventions for new technologies