



JOHNS HOPKINS BLOOMBERG SCHOOL *of* PUBLIC HEALTH

CENTER FOR INJURY RESEARCH & POLICY

20 years of making discoveries that make a difference

Where Are All the Youth? Using Respondent-Drive Sampling to Identify Study Participants

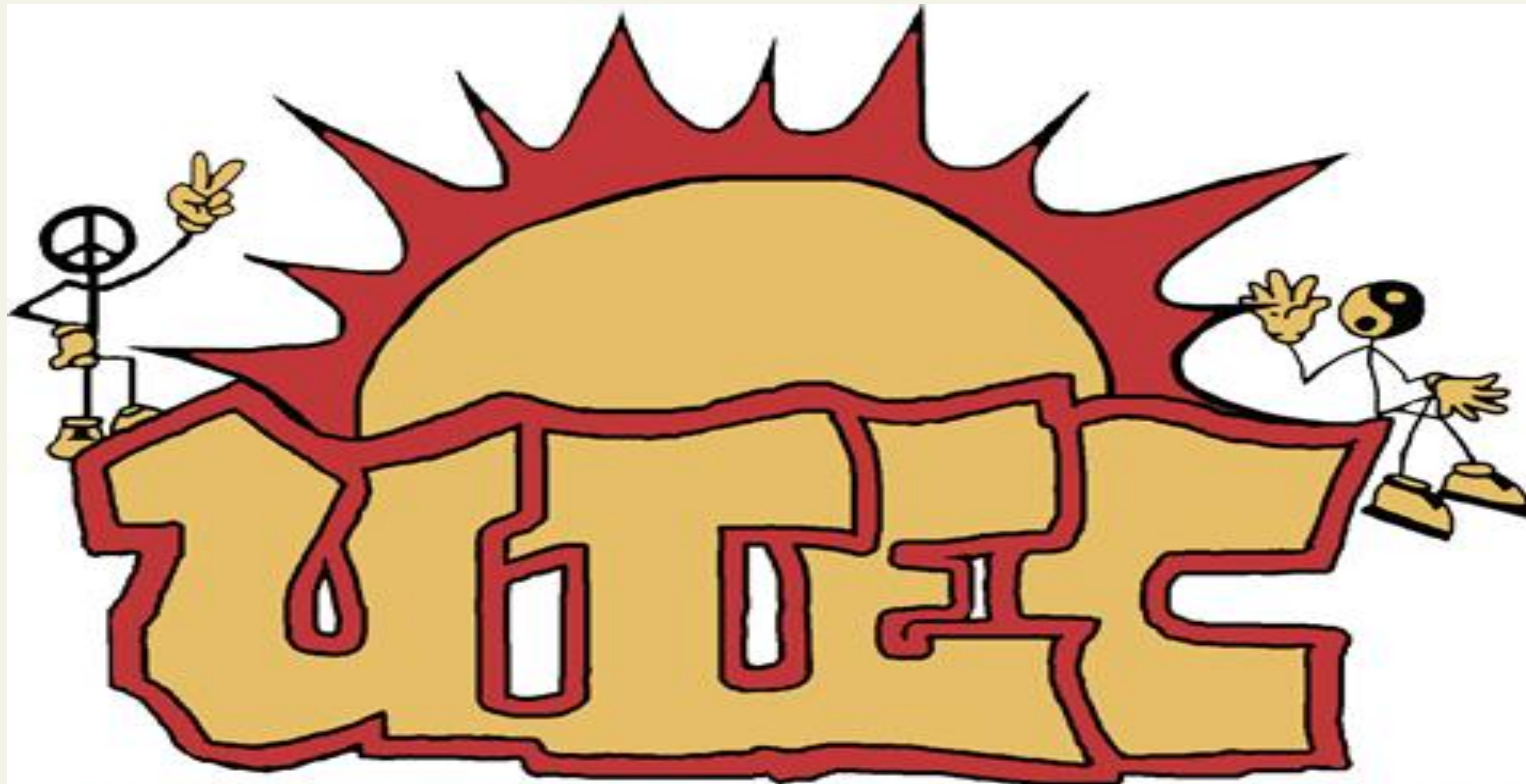
Keshia M. Pollack, Ph.D., M.P.H.
Shannon Frattaroli, Ph.D., M.P.H.

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Innovations in Injury Data and Methodology



Overview

- Provide background on program and evaluation
- Present an overview of sampling strategies to identify “hidden” populations
- Describe respondent driven sampling (RDS)
- Discuss strengths and challenges of RDS
- Describe potential uses of RDS for injury and violence research

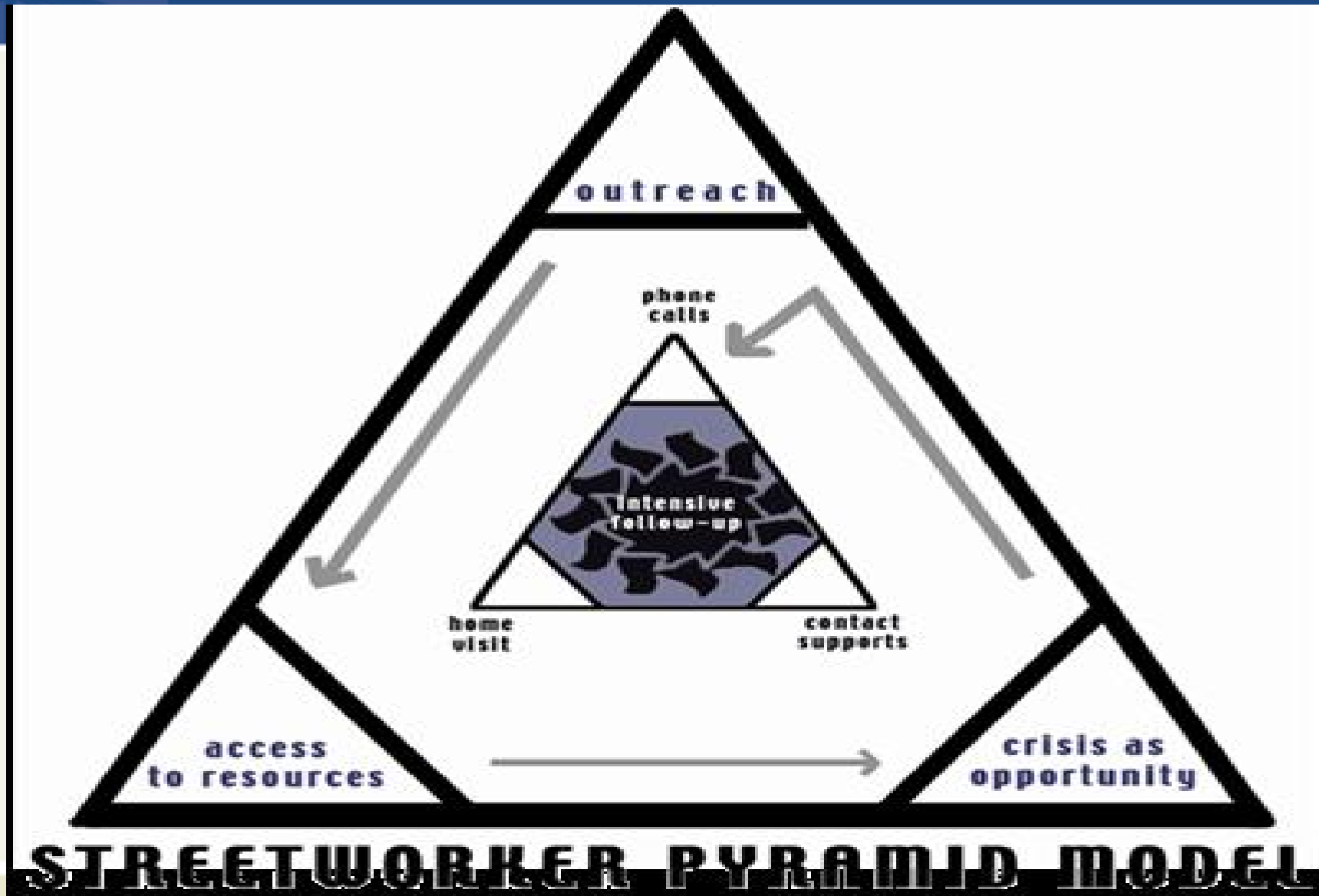


UNITED TEEN EQUALITY CENTER

"PEACE, POSITIVITY, & EMPOWERMENT."

www.utec-lowell.org

UTEC Streetoutreach Workers (SOWs)







Evaluation of the UTEC SOW Program

The specific aims of this evaluation are to:

- To document and describe the characteristics and activities of the SOWs.
- To understand and assess the impact of the SOW program on Lowell youth.
- To develop an empirically-based theoretical model illustrating how the SOW program impacts youth violence.

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Survey of Lowell youth

- N=250 youth
- Topics
 - Awareness of UTEC and SOWs
 - Perceptions of SOWs
 - Interactions with SOWs
 - SOWs role in reducing and mediating youth violence
 - Unmet needs of youth (e.g., jobs, shelter, medical care)



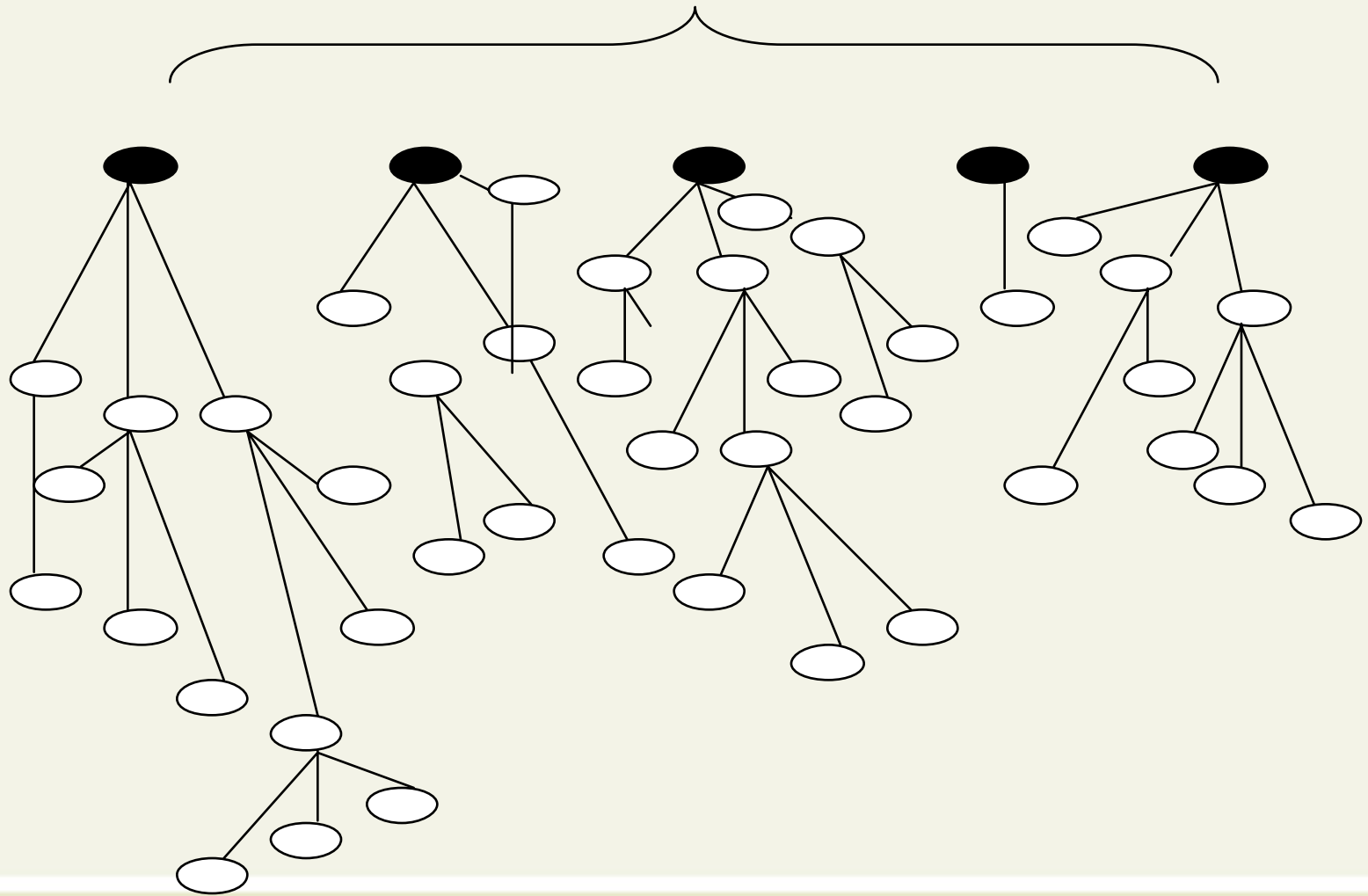
Sampling strategies for “hidden” groups

- Venue-based sampling
- Time-based sampling
- Targeted sampling
- Snowball sampling

Respondent Driven Sampling (RDS)

- Developed to survey hard-to-reach populations
- Modified form of chain-referral sampling
- Combine snowball and mathematical model
- Key components:
 - Formative assessment for selection of “seeds”
 - Recruitment of peers by peers
 - Recruitment quotas
 - Double incentive system

Seeds (N=5)





Common questions about RDS

- How long does RDS take?
- Does RDS yield representative sample?
- Can RDS produce population estimates?
- Key factors
 - Seed selection
 - Network homophily
 - Homophily and waves
 - Composition of sample will stabilize - “equilibrium”
 - Information on networks



Strengths of RDS

- Ability to access hard-to-reach populations
- Peer recruitment based on preexisting relationships
- Oversampling for specific subpopulations
- Can make inferences to population or simply identify study participants
- Extension of Markov chain theory & biased network theory → standard errors
- Free downloadable software



Challenges of RDS

- Requires strong networks; “inactive” seeds
- Substantial time for formative assessment
 - Identify effective seeds
- Expensive: double incentives
- Complicated, need extensive staff oversight
- Administering the survey
- Ethical issues and human subjects



Possible applications of RDS to injury and violence research

- Relevant for identifying study participants
- Examples
 - Youth
 - Commercial sex workers
 - Homeless
 - Migrant farm workers



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Contact information

Keshia M. Pollack

kpollack@jhsph.edu

410-502-6272