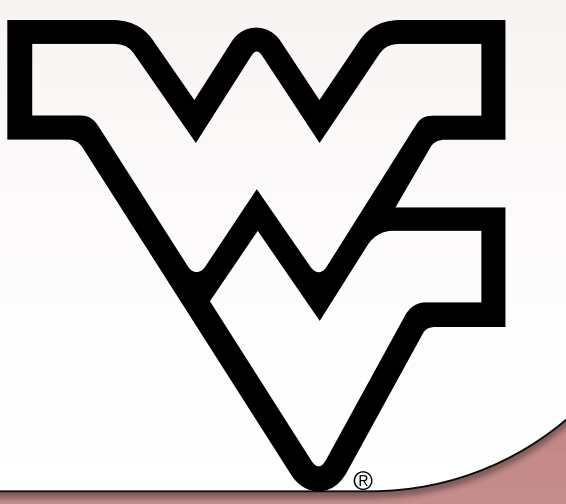


Evaluation of Video Intervention on Sex-Related Psychosocial and Behavioral Outcomes in a Randomized Controlled Trial of Female Adolescents

Pamela J. Murray[†] MD, MHP, Amie M. Ashcraft[†], PhD, MPH, and Julie S. Downs^{*}, PhD

Carnegie Mellon University

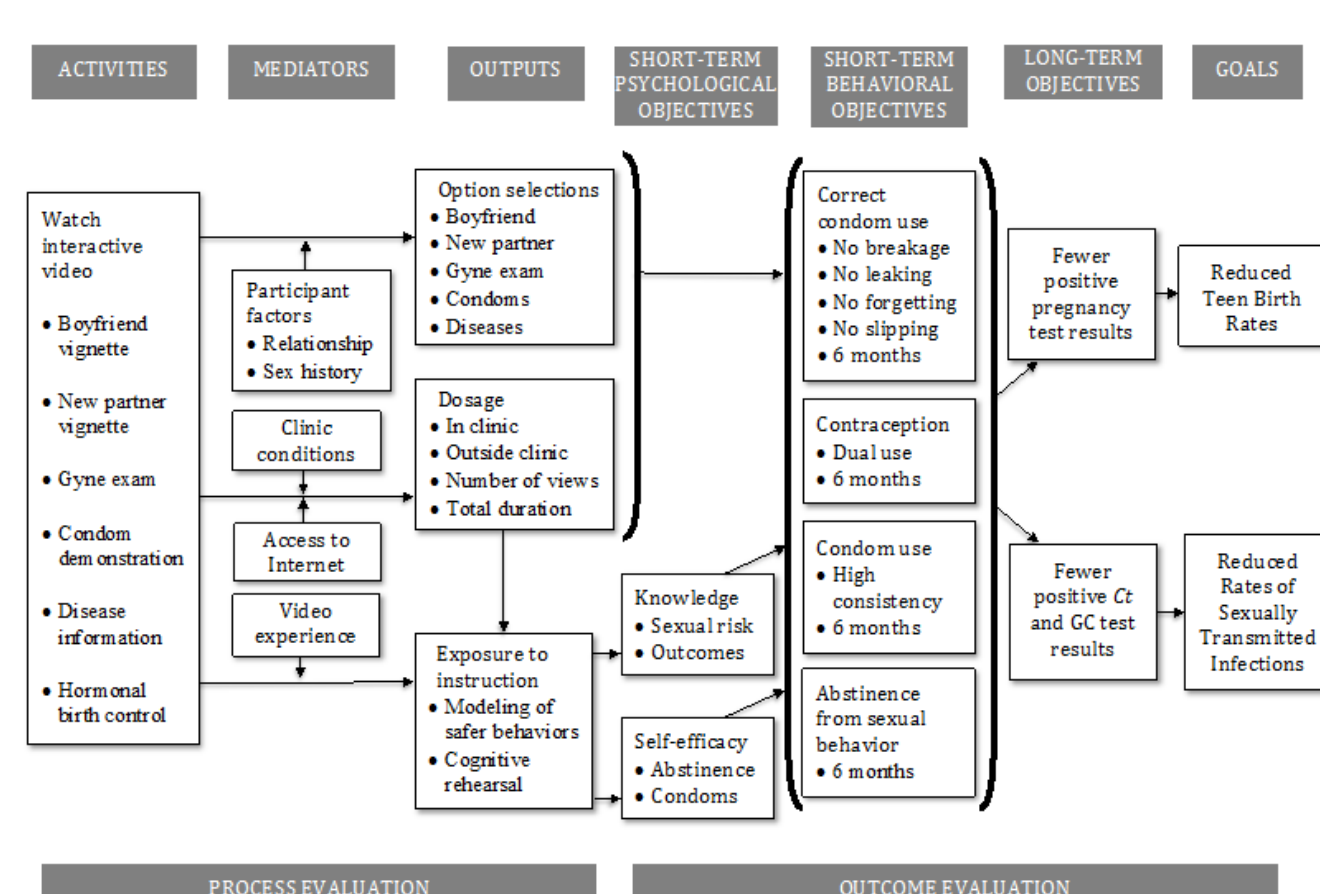
[†]West Virginia University and ^{*}Carnegie Mellon University



Background

Seventeen Days is a theory-based, medically-accurate, interactive video intervention to reduce STIs and unplanned pregnancies in female adolescents. While the primary goal was behavior change, the intervention also attempted to effect important precursors to behavior change, such as increased knowledge about sex and improvement in self-efficacy for condom use.

Logic Model for *Seventeen Days*



Objective

To assess the effects of the interactive *Seventeen Days* video relative to an interactive control video, *Driving Skills for Life*, on knowledge about sex and self-efficacy for condom use 6 months after the intervention was offered.

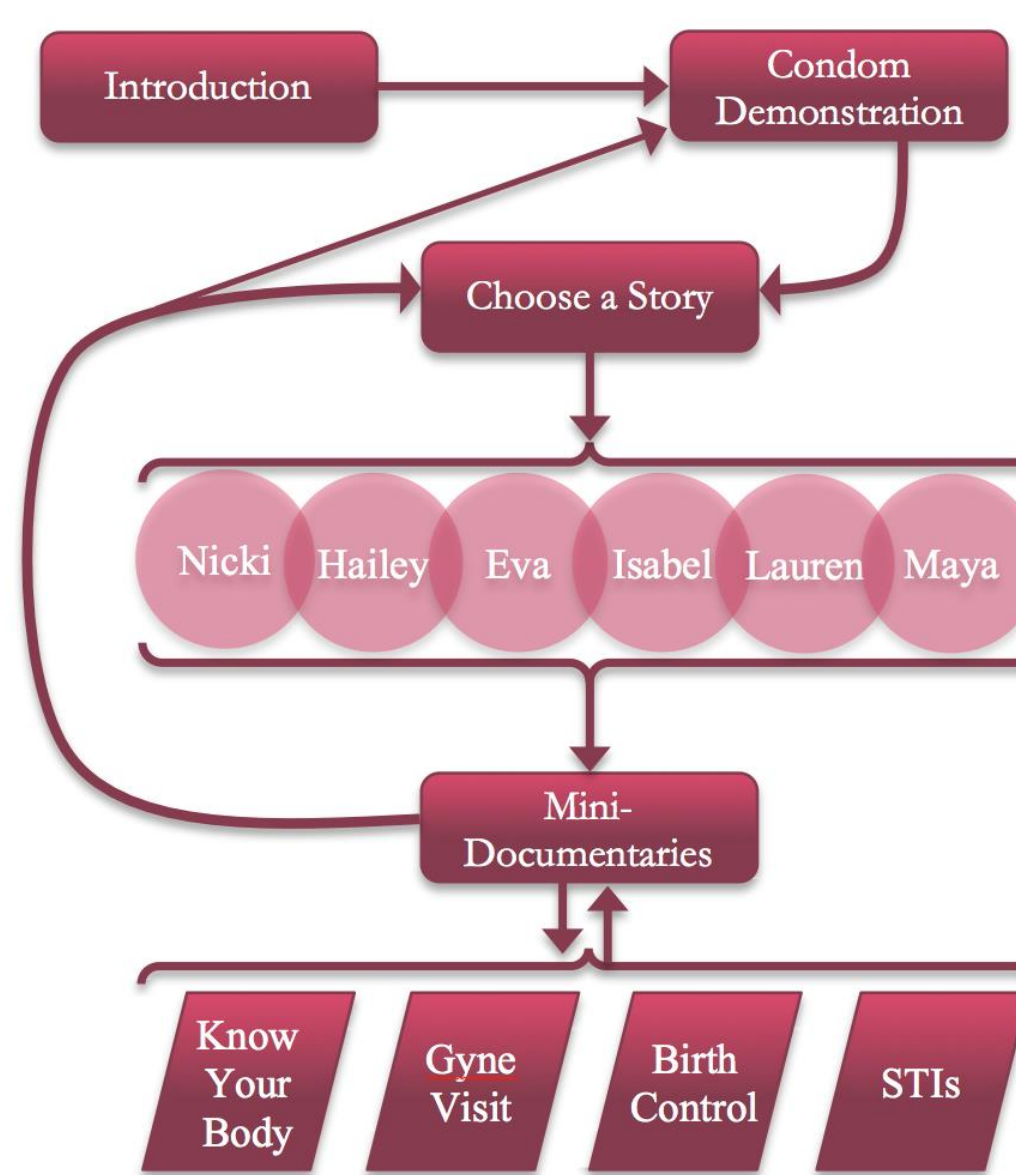
Sample

- **Eligibility criteria:** 1) female, 2) age 14-19, 3) sexually active in the last 6 months, 4) not currently pregnant
- **Setting:** 20 clinics in PA, WV, and OH
- **N = 674**
- 1,317 participants recruited and randomly assigned
- 53% response rate for 6-month survey



For more information go to seventeendays.org

Site Map of Video



Methods and Analysis

- **Intervention delivery:** individually on electronic tablet
- **Safer sexual behavior:** dichotomous outcome measure classifying which teens engaged in self-reported safer behavior either through abstinence or by using condoms during sex
- **Knowledge of sexual health:** 4 questions assessing participants' knowledge about sexual health and safe sexual behavior
- **Self-efficacy to use condoms:** 7 questions asking participants to indicate on a 5-point scale how sure they are of being able to perform activities related to using condoms, such as purchasing, using correctly, and refusing sex if a partner would not use a condom
- **Analysis:** ANCOVAs
- **Covariates:** baseline self-efficacy for condom use, safer sexual behavior, demographics (age, race)

Demographic and clinical characteristics at baseline	Seventeen Days intervention (n = 334*)	Driving Skills for Life control (n = 340*)	p-value
Race^a			
Black / African American, not Hispanic	32.6%	32.1%	.808
White, no other categories checked	52.7%	54.1%	.960
Hispanic	5.7%	5.0%	.691
Other race or more than one category checked, not Hispanic	9.0%		
Age	M = 17.18	M = 17.25	.653
Safer sexual behavior at baseline			
Yes	36.4% (n = 261)	36.5% (n = 271)	.975
Ever been pregnant			
Yes	9.9%	12.1%	.366
Self-efficacy for condom use at baseline			
Condom acquisition (scaled from 3 to 15)	12.23 (SE = 0.12)	12.19 (SE = 0.32)	.801
Condom negotiation (scaled from 3 to 15)	11.79 (SE = 0.14)	11.45 (SE = 0.14)	.084

^a Participants were permitted to check more than one racial category. This table specifies mutually exclusive categories.
* Group n is identical across all variables other than safer sex, as noted.

Methodological Challenges

- Remote delivery of video intervention was intended to provide fidelity flexibility but instead provided little accountability to complete viewing.
- Only 61% of total sample viewed baseline dosage (35 minutes for both interventions).
- Technology limitations created inequities across populations.
- Timeline follow-back calendar was intended to provide rich behavioral data but high participant burden and programming challenges resulted in noisy data.

Results

- Participants viewing *Seventeen Days* showed a significant increase in knowledge of sexual health (an average 2% increase in scores) relative to participants viewing *Driving Skills for Life* (an average 1% decrease in scores) 6 months after the intervention was offered, $F(1, 673) = 4.88, p = .028$.
- Participants viewing *Seventeen Days* showed a significant increase in self-efficacy to get condoms (an average .25 increase in scores) relative to participants viewing the driving video (an average .08 increase in scores) 6 months after the intervention was offered, $F(1, 680) = 5.31, p = .021$.
- Study was underpowered to detect differences in behavior.

Conclusions

Video interventions show promise for pregnancy and STI prevention, but must be combined with features of traditional interventions (e.g., connectedness, sense of responsibility) to reach and engage target audience.

Acknowledgements

We gratefully acknowledge the support of the Office of Adolescent Health through cooperative agreement TP1AH000040.