

**Integrated Theory of Reasoned
Action Predicts Later Condom
Use Among Low-Income
Inner-City Women**

**Lorraine Devos-Comby, Danielle McCarthy,
Heather Ferris, & Peter Salovey
Yale University**

**Department of Psychology &
Center for Interdisciplinary Research on AIDS**

CIRA AIDS SCIENCE DAY – APRIL 12, 2002

Many Thanks to CIRA Staff and Also to...

Christina Acampora Anne Marie Aponovitch Natasha Archer

Marisol Arroyo-Pratts Meredith Benson Juliana Capatosto

Katrina Clark Jessica Cohen Pierrette Comulada Dennie Edlund

Anita Fofie Greer Gaines Luz Gonzales Kimberly Gray

Jessica Guerrette Sarah Hammond Penny Herscovitch

Jessica Kadis Kitty Koo Marie-Jane Lamihaute Jane Lee

Dominick Maldonado Zohar Massey Trudy Brown Ripin

Susan Rivers Shilpa Sayana Erika Schapero Julianna Schantz

Shayna Silverstein Melanie Swenson Melissa Tepe

Amanda Turullo Mary Beth Walsh Sarah Wert Alison Woolery

Today's Talk

- Theory-grounded factors that account for condom use
- How theory-based research can throw light on safer sex practices of community samples
- How one can *predict* condom use
- Practical implications for interventions
- All data from **CIRA Project 1 Study 2**

Theory of Reasoned Action (TRA)

(Ajzen & Fishbein, 1980)

- How can a theory of *reasoned* action account for sexual practices?
- Hypothesis that most behavior is contemplated, or reasoned through, and under people's control
- Three factors govern performance of behavior: *intentions, attitudes toward the behavior, and subjective norms*

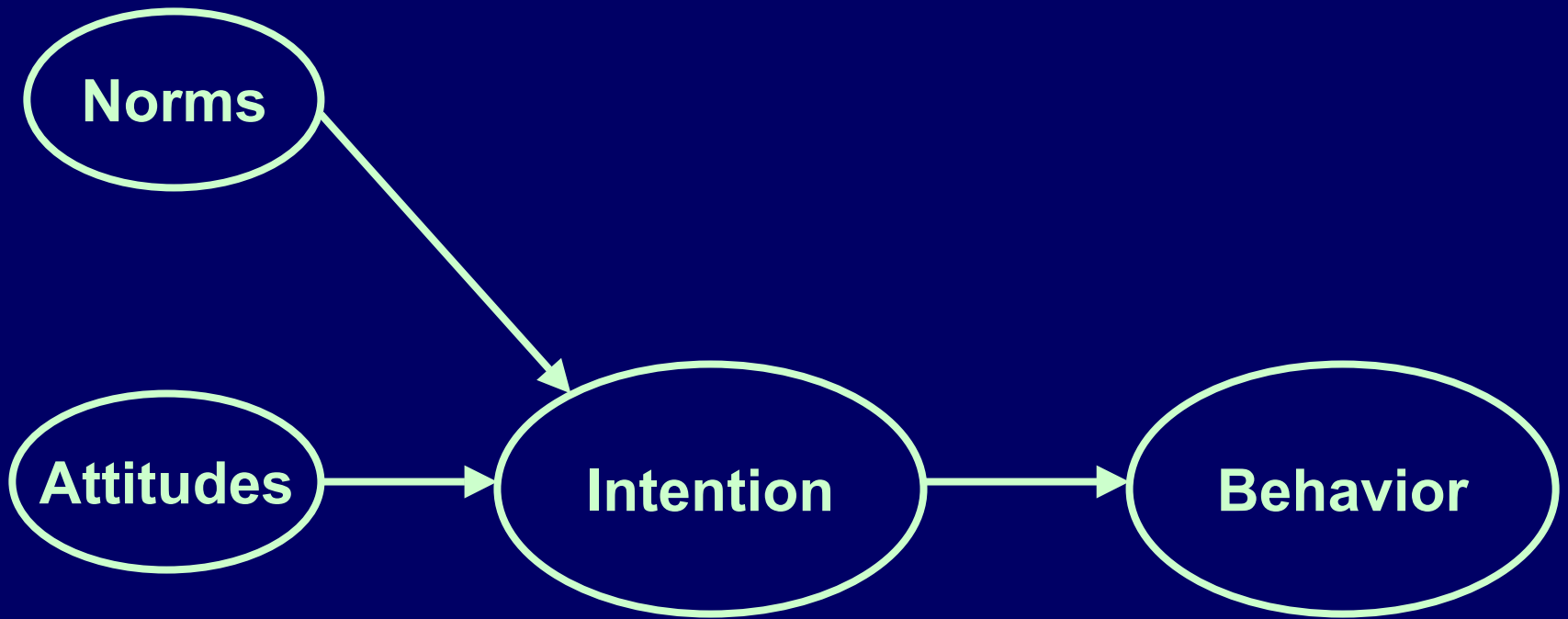
The Three Components of the TRA

- ***Intention***: Motivation, how hard people are willing to try, how much efforts they are planning to exert, to perform the behavior
- ***Attitude***: Judgment that performing the behavior is good or bad; beliefs and feelings about its consequences
- ***Subjective Norm***: Belief that close others endorse the behavior

TRA & Condom Use: Examples

- **Intention:** How motivated is a woman to use condoms? How hard is she planning to try to convince her partner to use them? To what extent is she willing to get out of her way to get them?
- **Attitude:** How does she feel about using condoms? To her, is it a good thing or a bad thing? What kind of consequences does she foresee if she uses condoms?
- **Subjective Norm:** Does she think her friends consider condom use as important? Does she believe they use condoms?

Theory of Reasoned Action

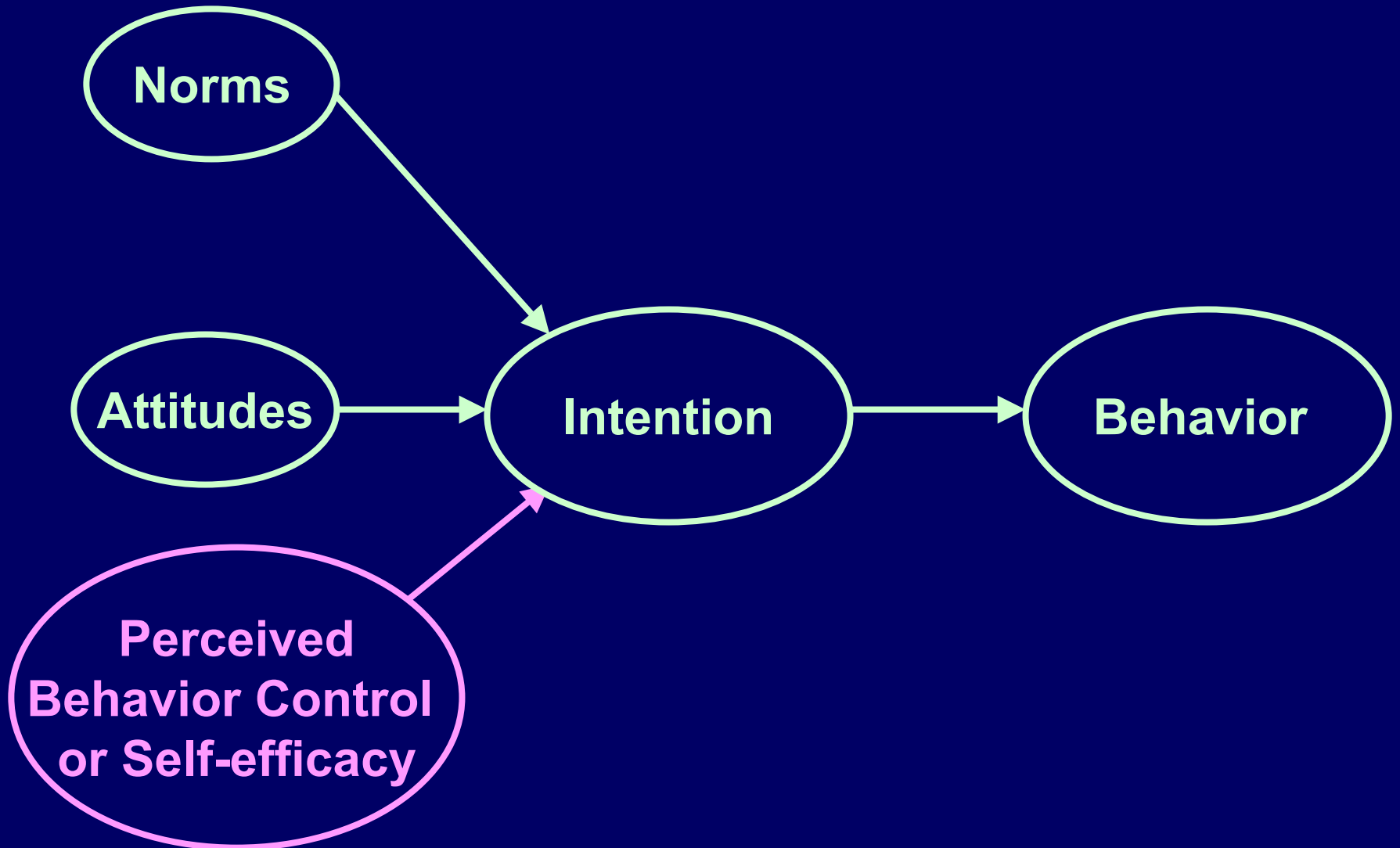


Integrating a Fourth Component in the TRA (Fishbein, 2002)

- **What if the behavior is not totally under volitional control, like it's the case with condom use?**
- **Integrating self-efficacy & perceived behavioral control**

- ***Self-Efficacy***: Belief that one can successfully perform the behavior
- ***Perceived Behavioral Control***: One's perception of control over the behavior
- ***Examples***: A woman's belief that she can get her partner to use a condom, that she knows how to use a condom, or that she can always keep condoms available (S-E); how easy for her she thinks these behaviors are (PBC)

Integrated Theory of Reasoned Action



Method

Sample

**516 low income inner-city women from
Greater New Haven:**

52% African American

36% Latina

8% Caucasian

4% Other

Ages: between 18 and 58

Participants Included in the Analyses

- Only those sexually active within 30 days prior to each assessment

Baseline: 342 (66% of total)

One-month follow up: 271 (64% of valid)

Three-month follow up: 243 (62% of valid)

Procedure

- **Participants recruited in public housing or health centers of Greater New Haven**
- **Baseline questionnaire on sexual behavior, attitudes toward safer sex, beliefs about HIV**
- **Watched an educational video on condom use framed positively vs. negatively**
- **Contacted 1 month & 3 months later to complete follow-up questionnaires over the phone**

Indicators

Norms at Baseline (3 items – 5-point scales)

- How important is condom use to your friends or people you hang out with?
- About how many of your friends (or people you hang out with) use condoms when they have sex?
- How important is condom use to the people you have had sex with?

Attitudes at Baseline (6 items – 5-point scales)

- **An advantage of using condoms is that you worry less when you use them**
- **An advantage of using condoms is that you feel cleaner when you use them**

Self-Efficacy at Baseline (3 items – 5-point scales)

- **Do you think you could always keep condoms around the house for times when you want to have sex?**
- **Do you think you could ask your partner(s) to use a condom?**

Intention at Baseline (2 items – 5-point scales)

- **In the next 30 days do you plan to use condoms during sex?**
- **In the next 30 days about how often do you plan to use condoms during sex?**

Condom Use at Baseline & Follow-ups (2 items)

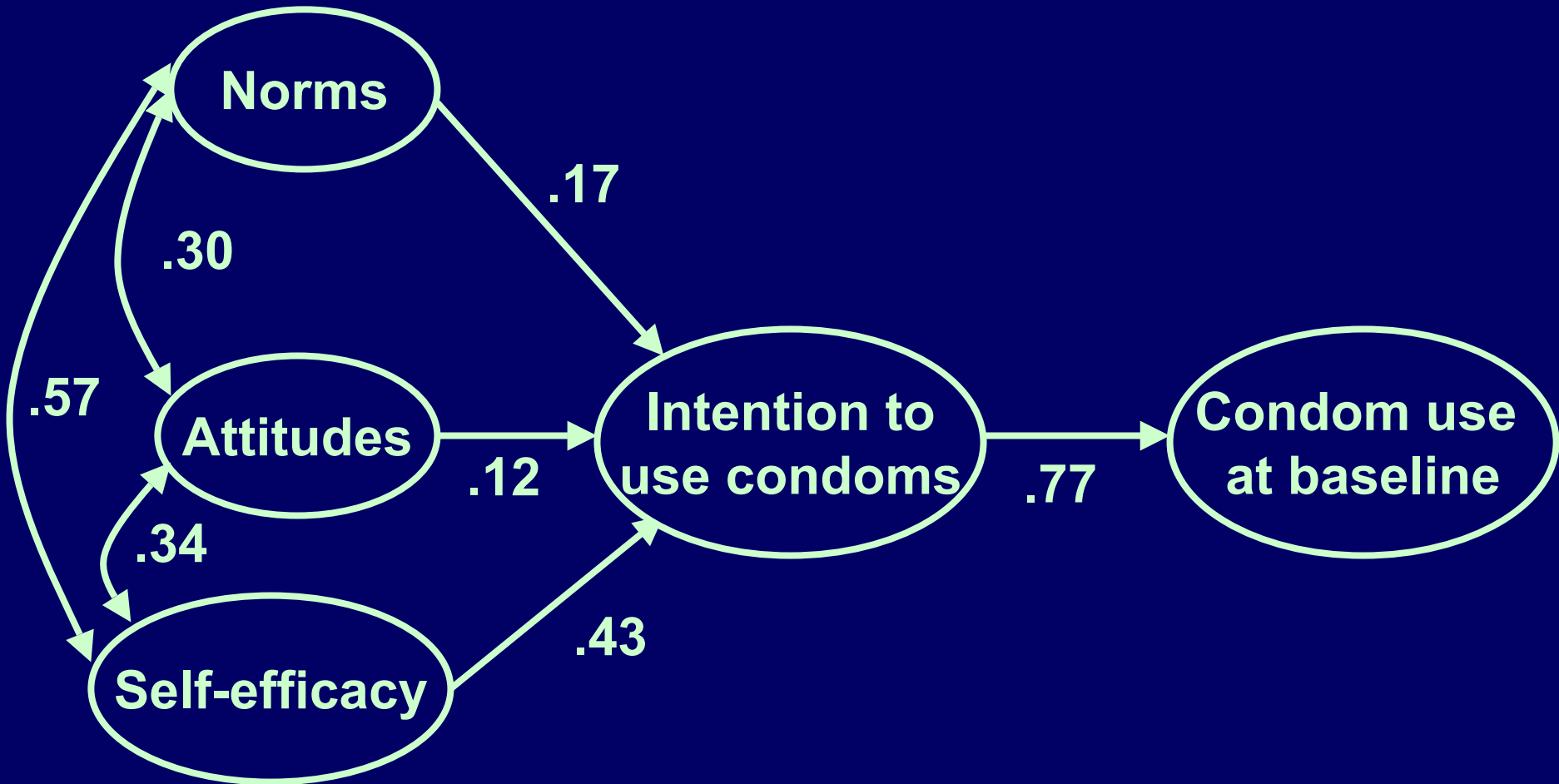
- **In the last 30 days about how often did you use condoms during vaginal sex with the person you had sex with the most? (5-point scales)**
- **In the last 30 days, how many times did you use condoms during vaginal sex? (open-ended)**

Means, standard deviations, reliabilities, and correlation matrix of measured variables

	1.	2.	3.	4.	5.	6.	7.
1. Norms	(.58)						
2. Attitudes	.25	(.79)					
3. Self-efficacy	.31	.24	(.72)				
4. Intentions	.26	.22	.49	(.92)			
5. Baseline cdm use	.16	.16	.31	.61	(.88)		
6. Cdm use - 1 Mth	.19	.15	.26	.44	.50	(.84)	
7. Cdm use - 3 Mths	.24	.18	.27	.45	.46	.79	(.89)
Mean	3.36	4.04	4.36	3.02	2.14	3.18	3.33
SD	.99	.75	1.35	1.75	3.08	4.52	3.71

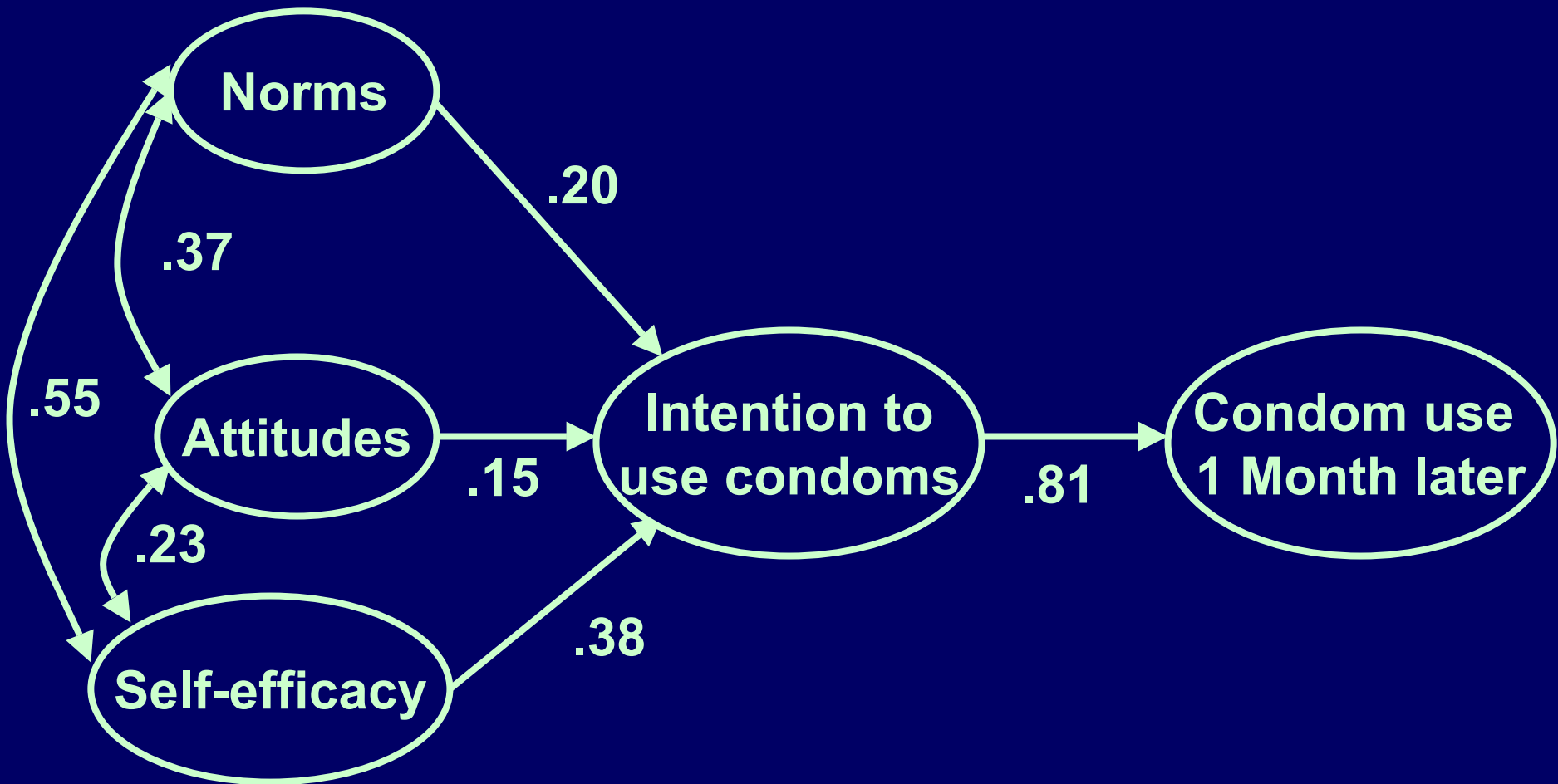
Note: Numbers on the main diagonal denote Cronbach's alphas (#1 to #4) or Pearson correlation coefficients (#5-#7).

Predicting Condom Use at Baseline



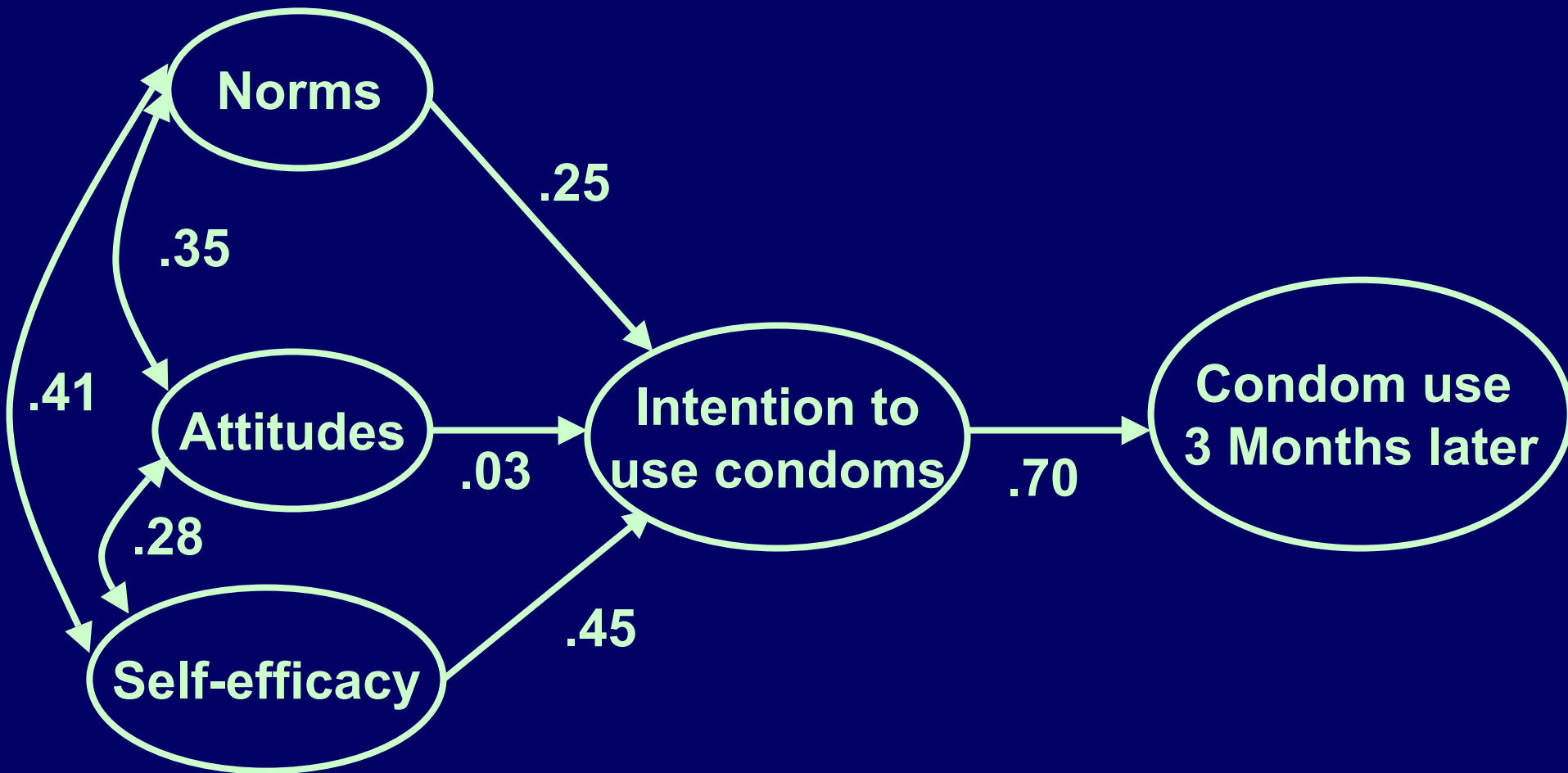
Chi² (58, N = 342) = 80.34, $p < .03$; **RMSEA = .034**

Predicting Condom Use 1 Month Later



$\chi^2 (58, N = 271) = 136.40, p < .001; \text{RMSEA} = .071$

Predicting Condom Use 3 Months Later



Chi² (58, N = 243) = 135.57, $p > .001$; RMSEA = .074

Discussion

- Overall, the integrated theory of reasoned action accounts for past condom use (baseline), and later condom use (as late as 3 months after intentions were assessed)
- Condom use self-efficacy is the best predictor of intention to use condoms, followed by norms, and finally attitudes

- **For women especially, condom use is not a completely volitional behavior – whether they think that they can successfully perform this behavior is crucial in determining their motivation to adopt the behavior**
- **Therefore, interventions with similar populations should not only target attitudes toward the behavior and perceived norms, but most of all, self-efficacy in performing safer sex**

- **Motivation (intention) plays a central role in mediating the impact of attitudes, norms, and self-efficacy, on behavior**
- **Assessing intention provides a good indication of self-reported condom use over several months**