

IT'S NOT JUST ABOUT IF YOU LIKE IT

A REASONED ACTION APPROACH TO PREDICTING CONSUMER BEHAVIOR

April 2, 2019
Quirks Chicago

kjtgroup
INSIGHT BY DESIGN

• Rochester • Amsterdam • Dallas • Indianapolis • Philadelphia • Research Triangle Park •



About Me...

- Ph.D. in Social Psychology from Iowa State University
- Former Professor [some of my classes:]
 - Social Psychology
 - Motivation
 - Behavioral Science Research Methods
 - Health Psychology
- Joined KJT Group in 2018
 - Analytics Associate



Basic Concepts of Motivation

Hedonism

People approach what they like, and avoid what they don't like.

What type of product will people like?

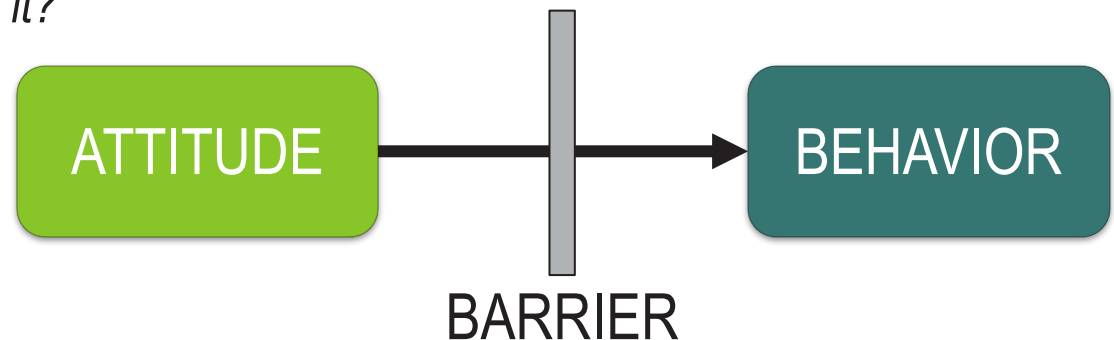
If I like it, I will buy it.
If I don't like it, I won't buy it.



Barriers

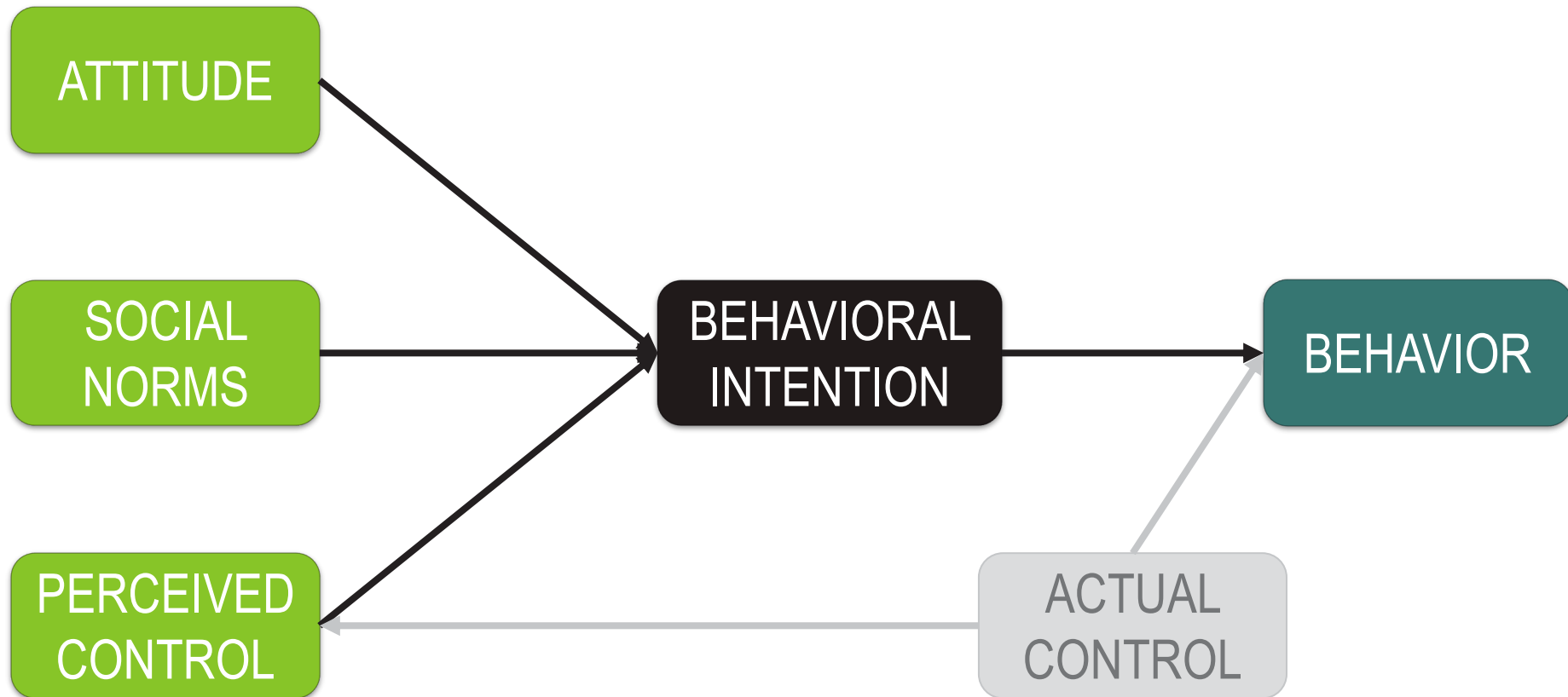
If they like it, what will prevent them from obtaining it?

How do we remove barriers?



The Reasoned Action Approach

The Theory of Reasoned Action and Planned Behavior



The Reasoned Action Approach

Assumption: Intentions are the precursor to behavior

Measuring Behavioral Intention

How likely are you to receive the new treatment?

0 1 2 3 4 5 6 7 8 9 10
Not at all Extremely
Likely Likely

For how many of your next 100 patients would you prescribe the new treatment? _____

BEHAVIORAL INTENTION

I plan to receive the new treatment

I plan to prescribe the new treatment

BEHAVIOR

I receive the new treatment

I prescribe the new treatment

The Reasoned Action Approach

The Role of Actual Control

Actual Barriers

I planned to receive the new treatment

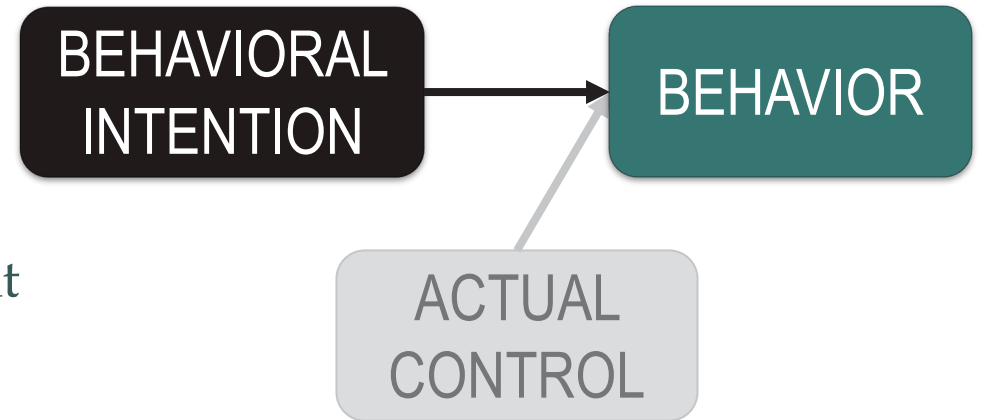
I thought my insurance company would cover the cost, but they denied my claim

I didn't receive the new treatment

I planned to prescribe the new treatment

I thought it would be approved by the FDA, but it wasn't.

I didn't prescribe the new treatment



Actual Behavior and Actual Control are best assessed in retrospective studies.

Predictive studies should focus on predictors of behavioral intention

The Reasoned Action Approach

Predictors of Behavioral Intention: Attitudes

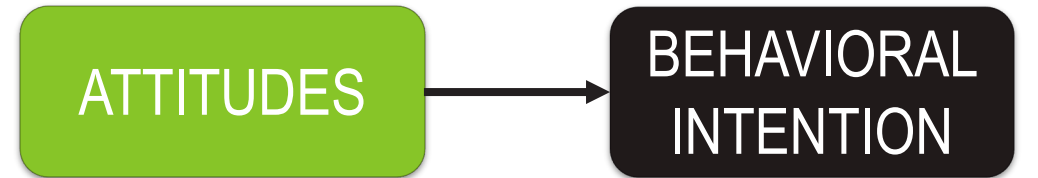
Attitudes about the OBJECT

- I like the cost of the new treatment
- I like the ease of the new treatment
- I like the features of the new treatment
- I like the new treatment

Vs.

Attitudes about the BEHAVIOR

- I like the idea of receiving the new treatment
- I like the ease of receiving the new treatment
- I like the benefits of receiving the new treatment
- I like the process of receiving the new treatment



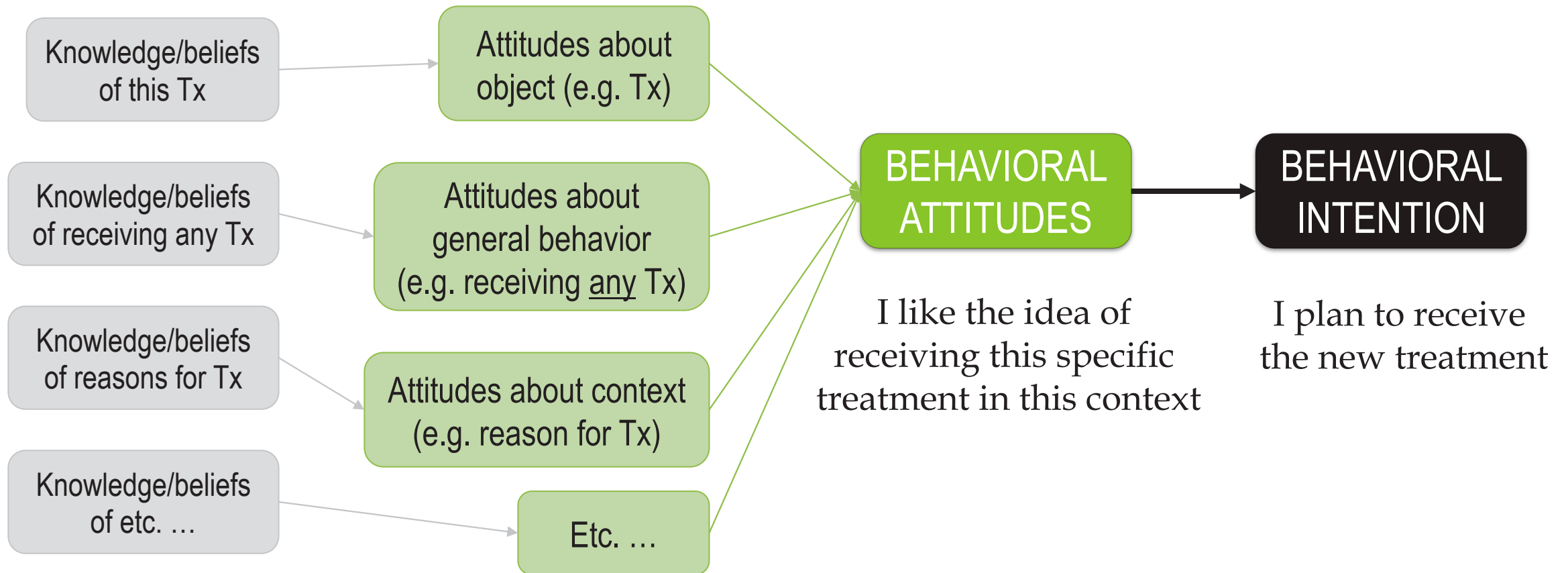
I plan to receive the new treatment

Treatment itself may be easy.

Steps to getting the treatment may not be.

The Reasoned Action Approach

Predictors of Behavioral Intention: Attitudes



Behavioral Attitudes as Predictors of Behavioral Intention

An Empirical Demonstration

- **Methods**
 - 88 respondents (64% female)
 - Series of questions about Company-Sponsored Wellness Program participation
 - Part of larger, 149 question study about wellness program participation (n = 1250)
 - 88 were those not currently participating in a program and asked the “likelihood to participate” question
 - 22 Likert-type items, answered by all 88 respondents, were the focus for this analysis
 - Target 22 items were a mix of different attitude objects:

How appropriate do you think it is for employers to offer each of the following type of wellness offerings? ... e.g. Weight, General Fitness

I am more productive at work because I have participated in wellness program activities.

Wellness programs are a waste of employer resources.

Based on what you know, how well do you feel your employer’s wellness program offerings compare to those at other companies?

Employers are responsible for the health and well-being of their employees.

Behavioral Attitudes as Predictors of Behavioral Intention

An Empirical Demonstration

- Analyses Results

- 1) Factor Analysis

Factor 1

Appropriateness – 6 items

- How appropriate do you think it is for employers to offer each of the following type of wellness offerings?
 - Weight, Financial, Stress Relief, Mental Health, General Fitness, Smoking Cessation

Factor 2

Behavioral Attitudes – 5 items

- I am more productive at work because I have participated in wellness program activities
- The well programs or benefits offered by my employer have had a positive impact on me

Factor 3

Barriers – 6 items

- Wellness programs are a waste of employer resources
- I don't have the extra time available to participate in company-sponsored wellness programs

Factor 4

Company Relations – 3 items

- The wellness programs or benefits offered by my employer make me feel like my employer cares about my well-being.
- My colleagues at work also participate in company-sponsored wellness programs.

Factor 5

Contribution – 1 item

- How likely would you be to help organize a wellness program activity at your current employer?

Behavioral Attitudes as Predictors of Behavioral Intention

An Empirical Demonstration

- Analyses Results
 - 1) Factor Analysis
 - 2) Regression Analysis

Outcome Variable: How likely are you to participate in a company-sponsored wellness program in the next 3 months?

Factor	B	Std. Error	p-value
1. Appropriateness	-.13	.15	.366
2. Behavioral Attitude	.63	.14	.000
3. Barriers	.03	.16	.866
4. Company Relations	-.24	.15	.099
5. Contribution	.44	.09	.000

Conclusion:

Items that ask about the specific behavior are more predictive of behavioral intentions.

The Reasoned Action Approach

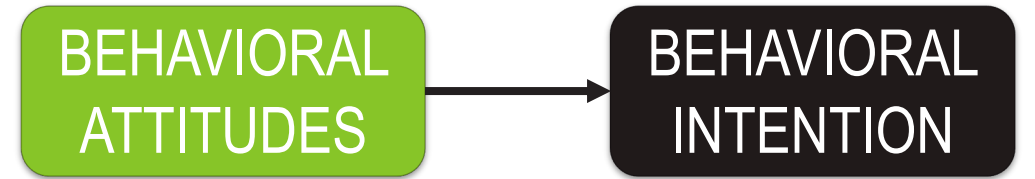
Predictors of Behavioral Intention: Behavioral Attitudes

Measuring Behavioral Attitudes

Direct Question(s)

How appealing is the idea of receiving the new treatment?

1	2	3	4	5	6	7
Extremely Unappealing			Neutral			Extremely Appealing



I like the idea of receiving this specific treatment in this context

[Attitude Score]

I plan to receive the new treatment

The Reasoned Action Approach

Predictors of Behavioral Intention: Behavioral Attitudes

Measuring Behavioral Attitudes

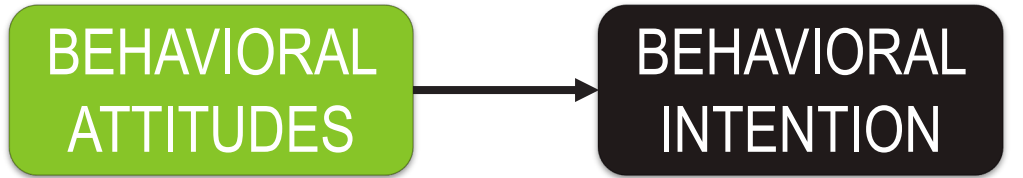
Semantic Differential

Receiving the new treatment would be

Unappealing	1	2	3	4	5	6	Appealing
Exciting*	1	2	3	4	5	6	Frightening*
Harmful	1	2	3	4	5	6	Beneficial
Unpleasant	1	2	3	4	5	6	Pleasant

Scoring:

1. Reverse code the * item(s)
2. Average or sum = Attitude Score



I like the idea of receiving this specific treatment in this context

[Attitude Score]

I plan to receive the new treatment

The Reasoned Action Approach

Predictors of Behavioral Intention: Behavioral Attitudes

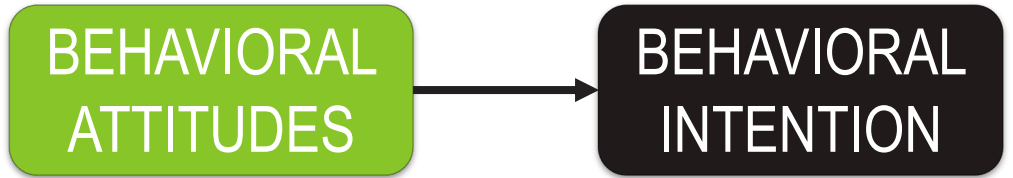
Measuring Behavioral Attitudes Expected Utility/Outcome Evaluations

Outcome Likelihood	Unlikely						Likely
A. Tx would reduce symptom 1.	1	2	3	4	5	6	7
B. Tx would reduce symptom 2.	1	2	3	4	5	6	7
C. Tx would have side effect A.	1	2	3	4	5	6	7

Outcome Desirability	Undesirable				Desirable		
a. Tx would reduce symptom 1.	-3	-2	-1	0	1	2	3
b. Tx would reduce symptom 2.	-3	-2	-1	0	1	2	3
c. Tx would have side effect A.	-3	-2	-1	0	1	2	3

Scoring:

$$\text{Attitude Score} = (A \times a) + (B \times b) + (C \times c)$$



I like the idea of receiving this specific treatment in this context

[Attitude Score]

I plan to receive the new treatment

The Reasoned Action Approach

Predictors of Behavioral Intention: Social Norms

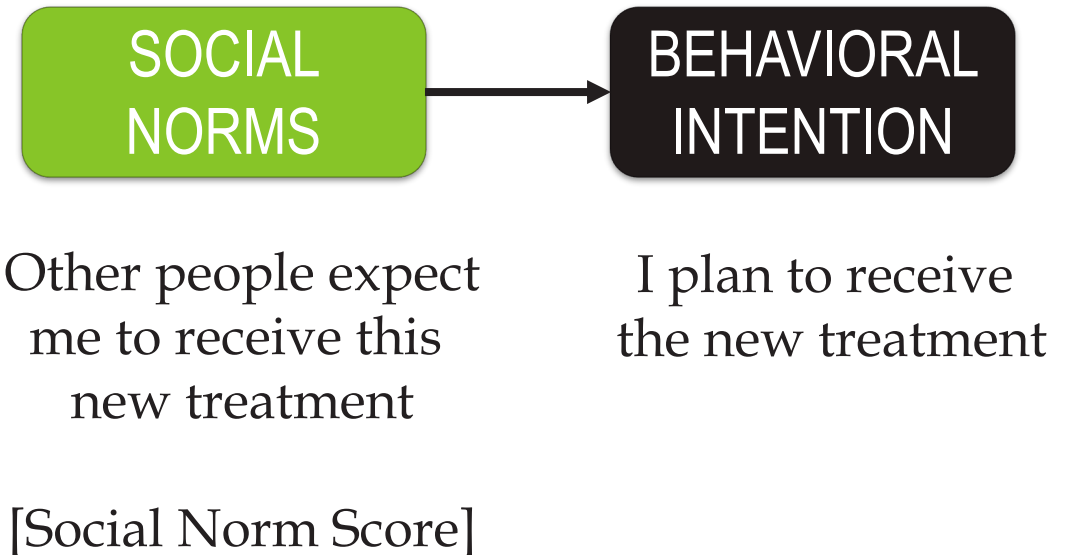
- The Role of Peer Pressure
 - Can encourage or discourage intention

Measuring Social Norms

Direct Question(s)

How supportive would your spouse be of you receiving the new treatment?

1	2	3	4	5	6	7
Extremely Unsupportive			Neutral			Extremely Supportive



The Reasoned Action Approach

Predictors of Behavioral Intention: Social Norms

Measuring Social Norms

Importance and Influence

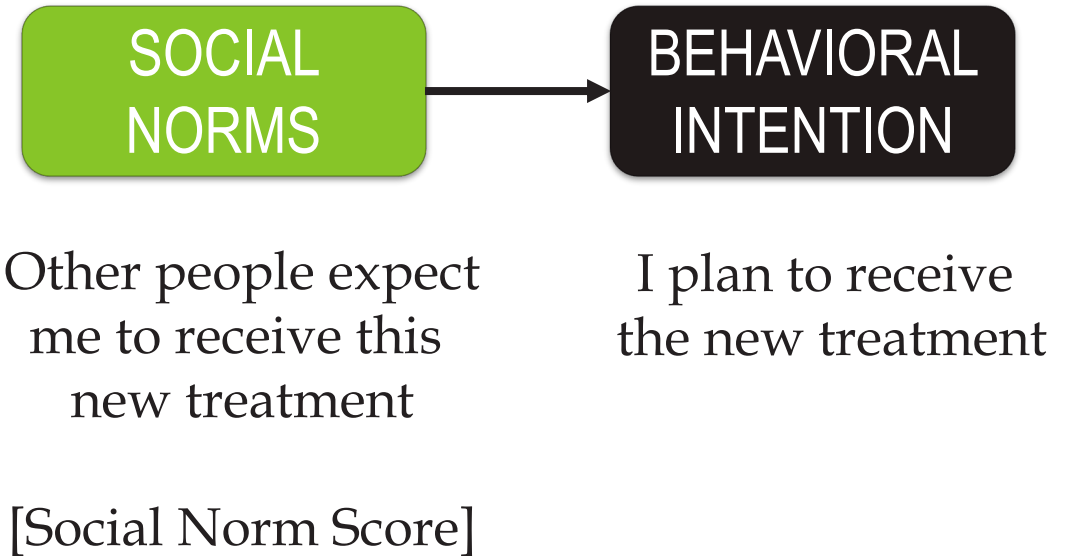
How supportive would the following people be of the Tx?

	Unsupportive				Supportive		
A. Spouse	1	2	3	4	5	6	7
B. Doctor	1	2	3	4	5	6	7
C. Parent	1	2	3	4	5	6	7

How important are the following people's opinion in your decision?

	Unimportant				Very Important		
a. Spouse	1	2	3	4	5	6	7
b. Doctor	1	2	3	4	5	6	7
c. Parent	1	2	3	4	5	6	7

Scoring: Norm Score = (A x a) + (B x b) + (C x c)



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Predictors of Behavioral Intention: Perceived Control

- Self-Efficacy Beliefs
 - Do we have confidence in our ability to do it?
 - Do we expect barriers to prevent us?

Measuring Perceived Control

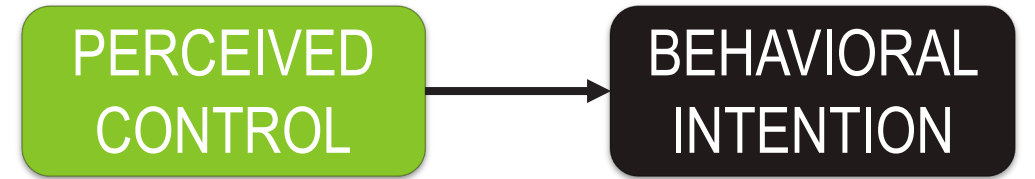
Direct Questions of Efficacy and Controllability

How capable would you be of complying with the Tx?

1	2	3	4	5	6	7
Extremely Uncapable			Neutral			Extremely Capable

How much control do you have over your ability to receive the Tx?

1	2	3	4	5	6	7
No Control						Complete Control



I am confident I am able to receive the new treatment

I plan to receive the new treatment

[Perceived Control Score]

The Reasoned Action Approach

Predictors of Behavioral Intention: Perceived Control

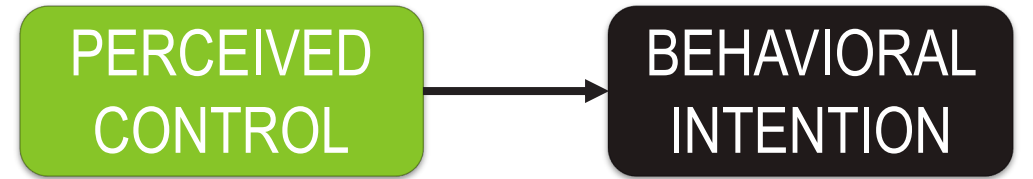
Measuring Perceived Control

Barrier Evaluations

Barrier Likelihood	Unlikely						Likely	
A. Tx will be costly	1	2	3	4	5	6	7	
B. Tx compliance will be difficult	1	2	3	4	5	6	7	
a. If the Tx is costly, I will be								
less	-3	-2	-1	0	1	2	3	more
	likely to receive the treatment							
b. If the Tx is difficult to comply with, I will be								
less	-3	-2	-1	0	1	2	3	more
	likely to receive the treatment							

Scoring:

$$\text{Perceived Control Score} = (A \times a) + (B \times b)$$



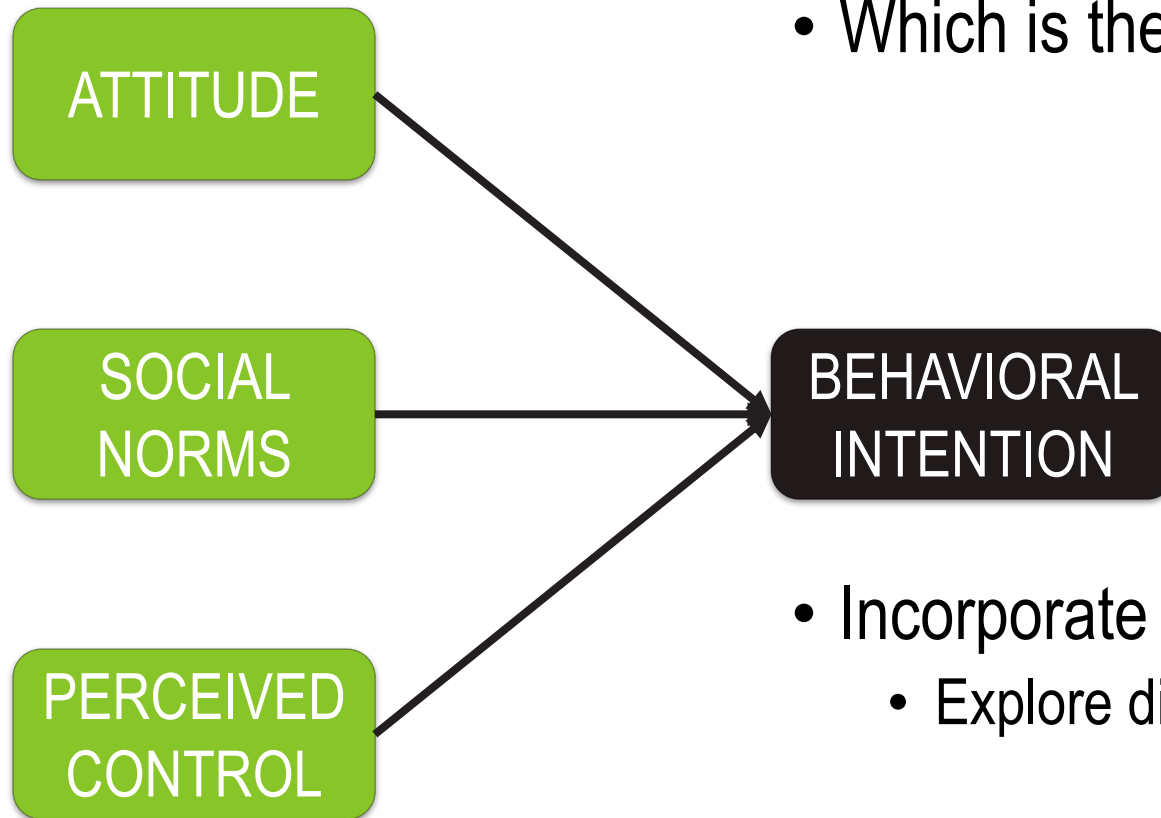
I am confident I am able to receive the new treatment

I plan to receive the new treatment

[Perceived Control Score]

The Reasoned Action Approach - Applied

The Theory of Reasoned Action and Planned Behavior



- Which is the biggest driver for intention?
DEPENDS

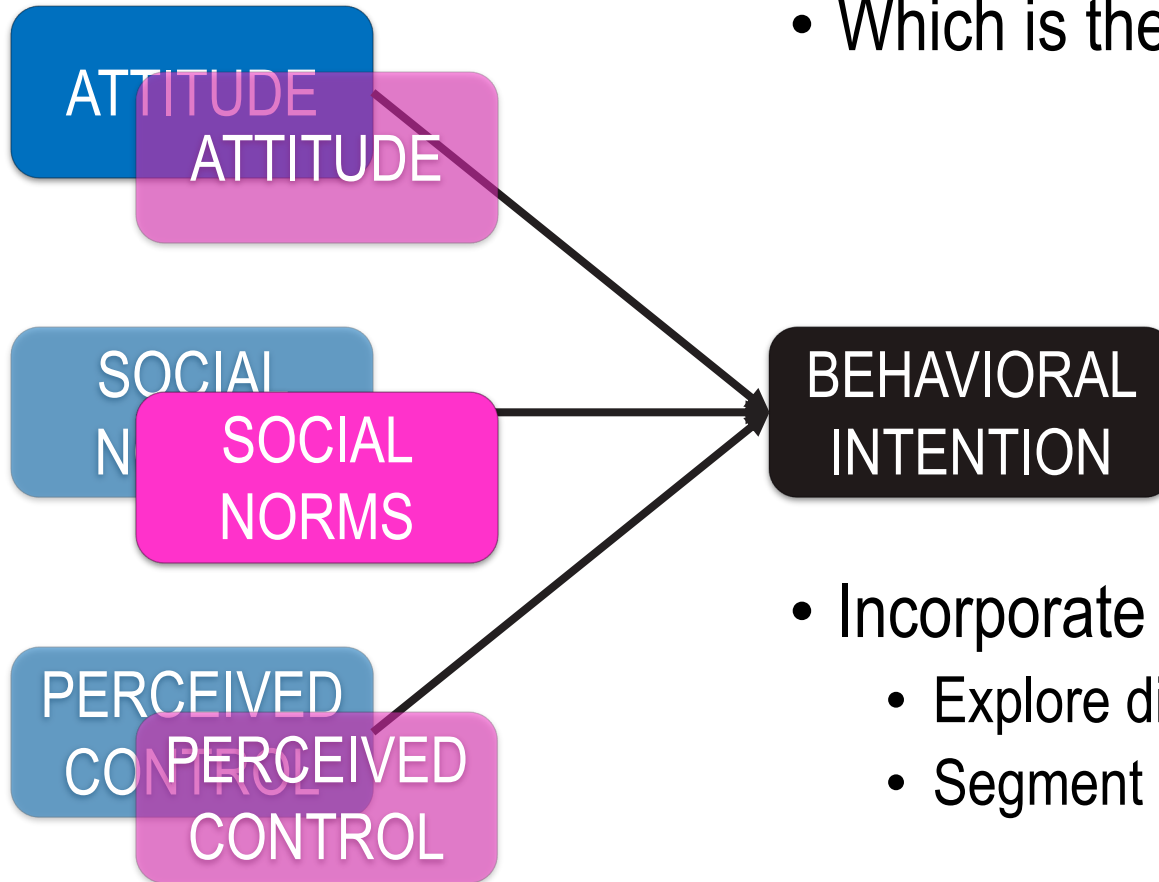
- Incorporate RAA to expand current analyses
 - Explore differences among demographics

The Reasoned Action Approach - Applied

The Theory of Reasoned Action and Planned Behavior

Males

Females



- Which is the biggest driver for intention?
DEPENDS

- Incorporate RAA to expand current analyses
 - Explore differences among demographics
 - Segment into new groups for more differentiation

The Reasoned Action Approach - Applied

The Theory of Reasoned Action and Planned Behavior

Segment 1

ATTITUDE

Segment 2

ATTITUDE

ATTITUDE

Segment 3

SOCIAL

N

SOCIAL

NO

SOCIAL

NORMS

PERCEIVED

CO

PERCEIVED

CONTROL

PERCEIVED

CONTROL

- Which is the biggest driver for intention?

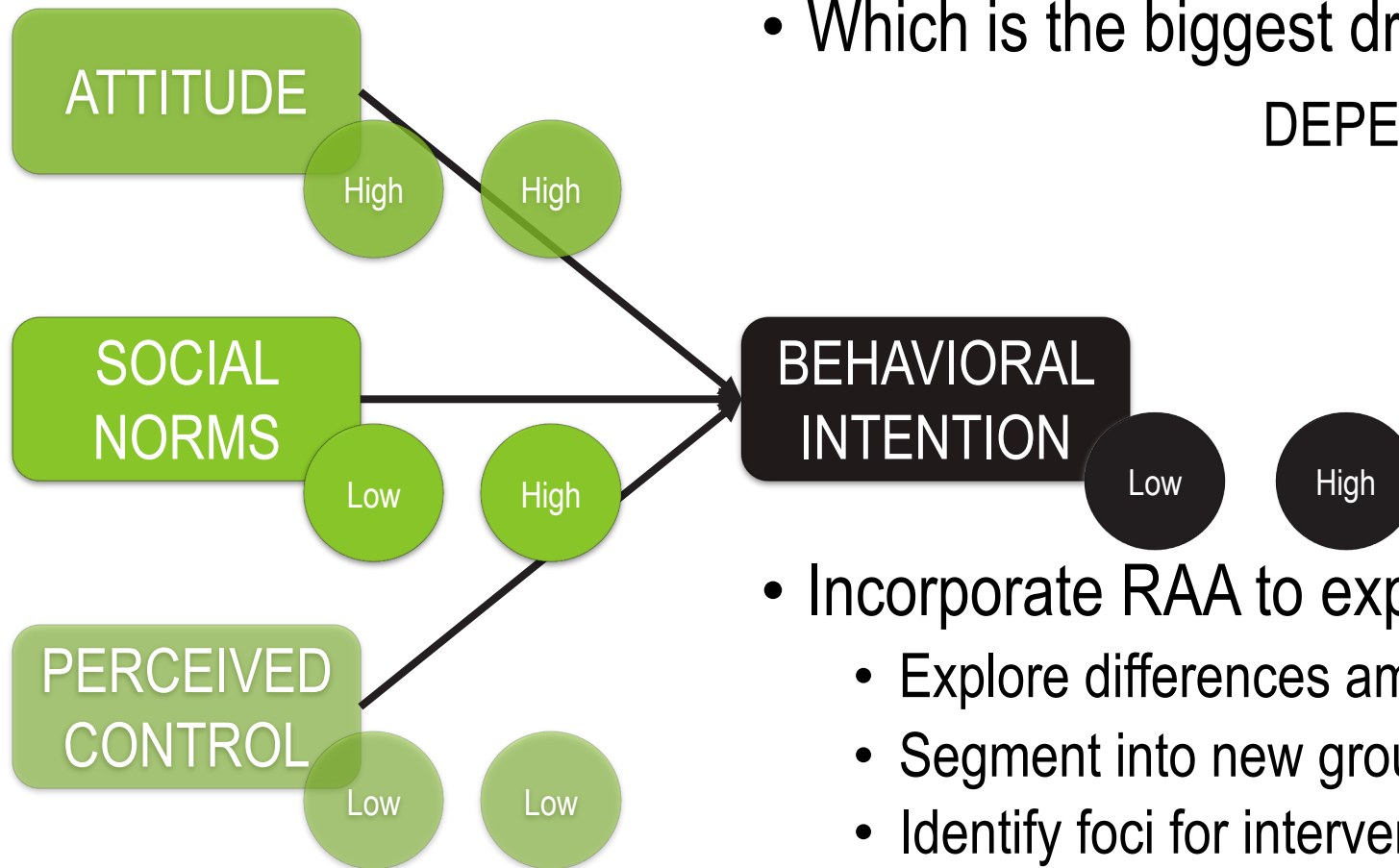
DEPENDS

BEHAVIORAL
INTENTION

- Incorporate RAA to expand current analyses
 - Explore differences among demographics
 - Segment into new groups for more differentiation
 - Identify foci for intervention & track for trending

The Reasoned Action Approach - Applied

The Theory of Reasoned Action and Planned Behavior



- Which is the biggest driver for intention?
DEPENDS

- Incorporate RAA to expand current analyses
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