

# **Engaging High School Teachers in Connecting Students to Mental Health Care Using an Online Professional Development Simulation**

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# Today's Presenters

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## Disclosure

Glenn Albright and Jennifer Spiegler report that they have an employment agreement with Kognito, the company that developed the *At-Risk for High School Educators* simulation.

Shashank Joshi, Mina Fazel, Nancy Lever and Nadia Jassim report no disclosures or conflicts related to this study.

# Agenda

- Problem
- The Simulation
- Learning Model
- Demo
- Study Outcomes
- Implementation Example: Maryland
- Q & A

## The Statistics

- Suicide rate among US adolescents has tripled over the past 60 years
- Suicide is the 2nd leading cause of death in this age group
- There are significant comorbidities among US adolescents:
  - Anxiety disorders which is the most prevalent condition (31.9%)
  - Behavior disorders (19.1%)
  - Mood disorders (14.3%)
  - Substance use disorders (11.4%)

# The Statistics

- Untreated mental illness can significantly impact:
  - Academic attendance and success
  - Concentration
  - Test anxiety
  - Peer and family relationships
  - Self-esteem
- Barriers to Help Seeking:
  - Lack of awareness and understanding of how psychological disorders might present in students by teachers, peers, and support staff
  - Cultural factors that involve stigma or perceived stigma of help seeking behaviors

# Need for School Gatekeepers

Classroom teachers and school staff can serve a critical gatekeeping function in the early identification and referral of adolescents experiencing psychological distress<sup>1</sup>

While effective at identifying externalizing disorders, teachers have difficulty identifying students with internalizing disorders<sup>2</sup>

Gatekeepers:

1. Identify when a student is in psychological distress
2. Approach and talk with a student about your concerns
3. Make a referral to Mental Health Support Services

<sup>1</sup>Powers J. Fam Soc. 2013;95(1):43-50.

<sup>2</sup>Cunningham JM and Suldo SM. School Ment Health 2014;6(4)237-250

# Gatekeeper Training Modalities

1. Handouts
2. Lecture/Didactic/Powerpoint
3. Story-based Approaches
4. Modeling
5. Role-play



# Kognito's At-Risk for High School Educators

- 3 virtual role-play scenarios
- Online and self-paced
- Est 60 min to complete
- Developed with input from school mental health experts and hundreds of teachers
- Blended learning options – discussion guide
- Customization options
- Over 100,000 trained to date

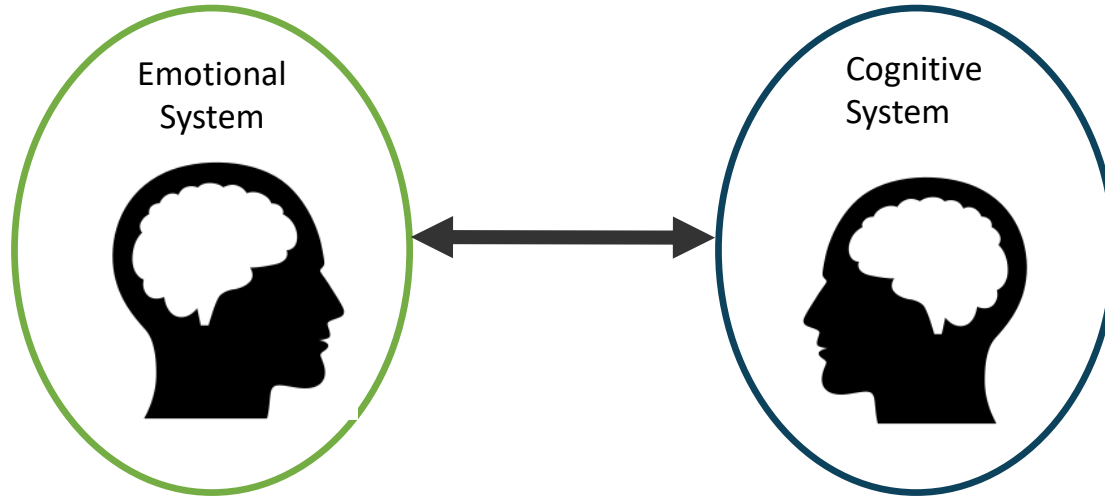


 **NREPP** SAMHSA's National Registry of  
Evidence-based Programs and Practices

These simulations are listed in SAMHSA's National Registry of Evidence-Based Programs and Practices (NREPP).

# **Underlying Learning Methodologies for Teaching Effective Gatekeeper Skills**

# Gatekeeper Conversations Can Be Hard



Rapid judgements, large amounts of information synthesized at once or faced with imminent threat

Slower, rule-governed deliberation

To manage challenging conversations the cognitive system needs to monitor & regulate the emotional system.

# Learning Model

Evidenced-Based Communication Tactics Drawn From Components of Neuroscience, Social Cognition, Adult Learning Theory and Applied Game Mechanics

- Motivational Interviewing
  - Providing affirmation
  - Asking open-ended questions
  - Reflective listening
  - Summarizing client statements
- Emotional Regulation
- Mentalizing or Theory of the Mind
- Empathy
- Empathic Accuracy or Cognitive Empathy

# Why Virtual Humans?

## Instructional Benefits:

- Safe to self-disclose, experiment
- Increase in engagement, openness
- Decrease in transference reactions
- Decrease social evaluative threat

## Other benefits:

- Personalization of experience
- Reach geographically dispersed areas
- Support multiple languages
- Reduce costs of updates

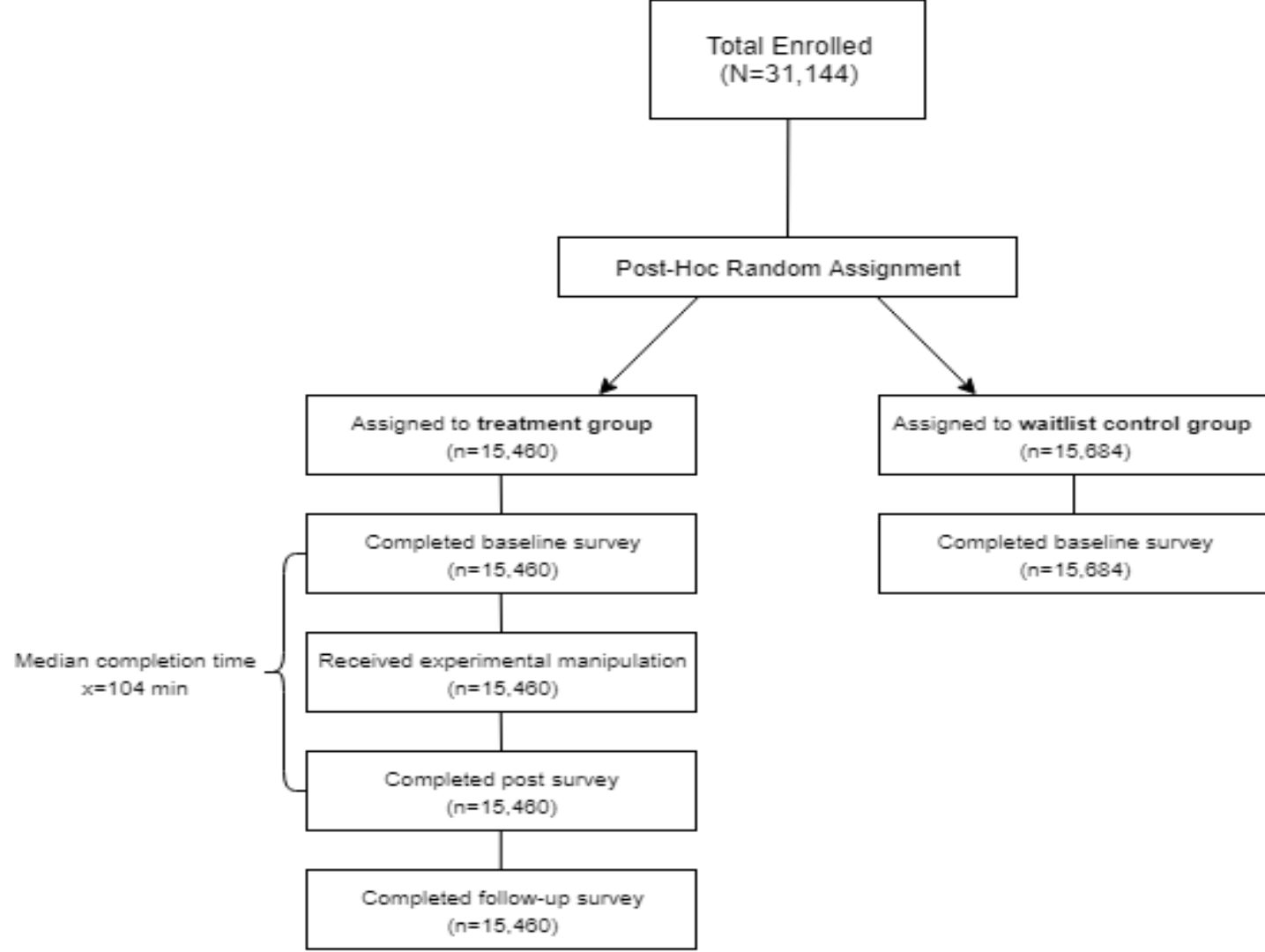


# Simulation Demo



## Between Group Design:

- All participants completed a pre-survey ( baseline) assessment
- Treatment group completed the simulation then post and 3 month follow up surveys
- Compared intervention group's post-training Gatekeeper Behavior Scale responses to baseline responses in the wait-list control
  - Hotelling's  $T^2$  for overall scale comparison
  - Independent sample  $t$ -tests to compare intervention and control on subscales and each item





# Measures

The Gatekeeper Behavior Scale (GBS) assessed educator attitudes<sup>1</sup>

- **Preparedness (5 items)** (e.g. How would you rate your preparedness to recognize when a student's behavior is a sign of psychological distress?)
- **Likelihood (2 items)** (e.g. How likely are you to have a discussion with a student about the signs of psychological distress they are exhibiting?)
- **Self-efficacy (4 items)** (e.g. I feel confident in my ability to have a discussion with a student exhibiting signs of psychological distress.)

<sup>1</sup>Albright GL et al. Crisis. 2016;37:271-280

# Measures

Means efficacy was used to measure individuals' belief in the utility of the tools available for performing a job<sup>2</sup>

- **Means Efficacy (7 items)** (e.g. To what extent do you think the simulation is a useful tool?)
- **Changes in behavior from pre- to follow-up (3 items)** (In the past two academic months, approximately how many students have you: been concerned about; approached; referred to support services?)

<sup>2</sup>Eden D, Ganzach Y, Flumin-Granat R & Zigman T. Journal of Management. 2010;36(3):687-713

# At-Risk High School Educators: Demographics (N=31,144)

	N	%
Gender		
Female	19862	65.3
Male	10391	34.2
Transgender	40	0.1
Other	116	0.4
Race/Ethnicity		
White, non-Hispanic	19655	66.3
Black, non-Hispanic	2392	8.1
Hispanic	6263	21.1
American Indian/Alaska Native	201	0.7
Asian	546	1.8
Native Hawaiian/ <u>Other</u> Pacific Islander	64	0.2
Multiple ethnicities	505	1.7
Primary Role		
Teacher	21132	71.6
School Administrator	1669	5.7
Mental Health Professional/ Social Worker	1598	5.4
Administrative Assistant/Clerical	1175	4.0
Other (e.g., student teacher, teacher's aide, healthcare provider, support staff)	3927	13.3
Age	M= 42.28, SD= 12.11	
Years working in education	M= 11.07, SD= 9.55	

# Satisfaction

- 95% rated simulation as “excellent”, “very good” or “good”
- 98% of participants agreed or strongly agreed that all educators in their school should take the simulation
- 95% indicated that they would recommend the simulation to a colleague

# Means Efficacy

Means Efficacy Measure	% of Participants who Endorsed Each Option as "Great" or "Very Great"
A useful tool?	80.1%
Well constructed?	84.3%
Easy to use?	83.2%
Likely to help you with troubled students?	79.7%
Based on scenarios relevant to you and your students?	79.9%
Able to aid you in getting timely help to your students?	79.1%

# Attitudinal Measures Preparedness, Likelihood & Self-Efficacy Gatekeeper Behavior Scale (N=31,144, $p < .001$ )

## Preparedness Composite

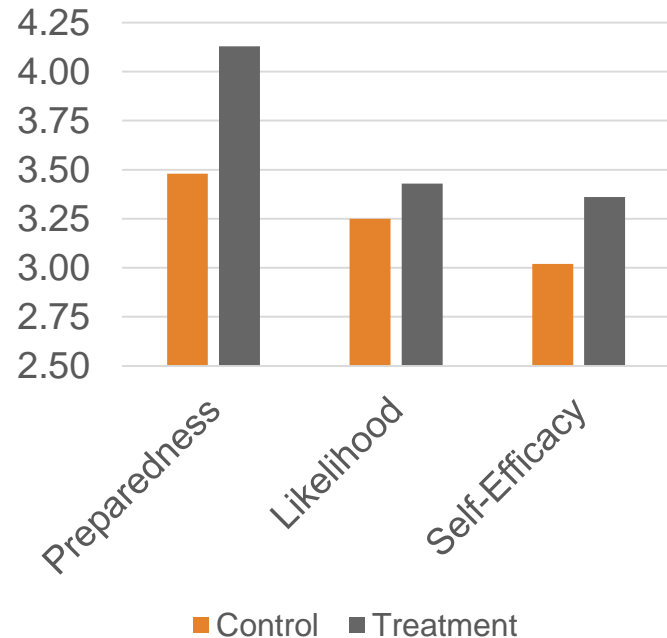
Preparedness to identify, approach, and talk to and refer to mental health support services

## Likelihood Composite

Likelihood to discuss concerns and recommend support services

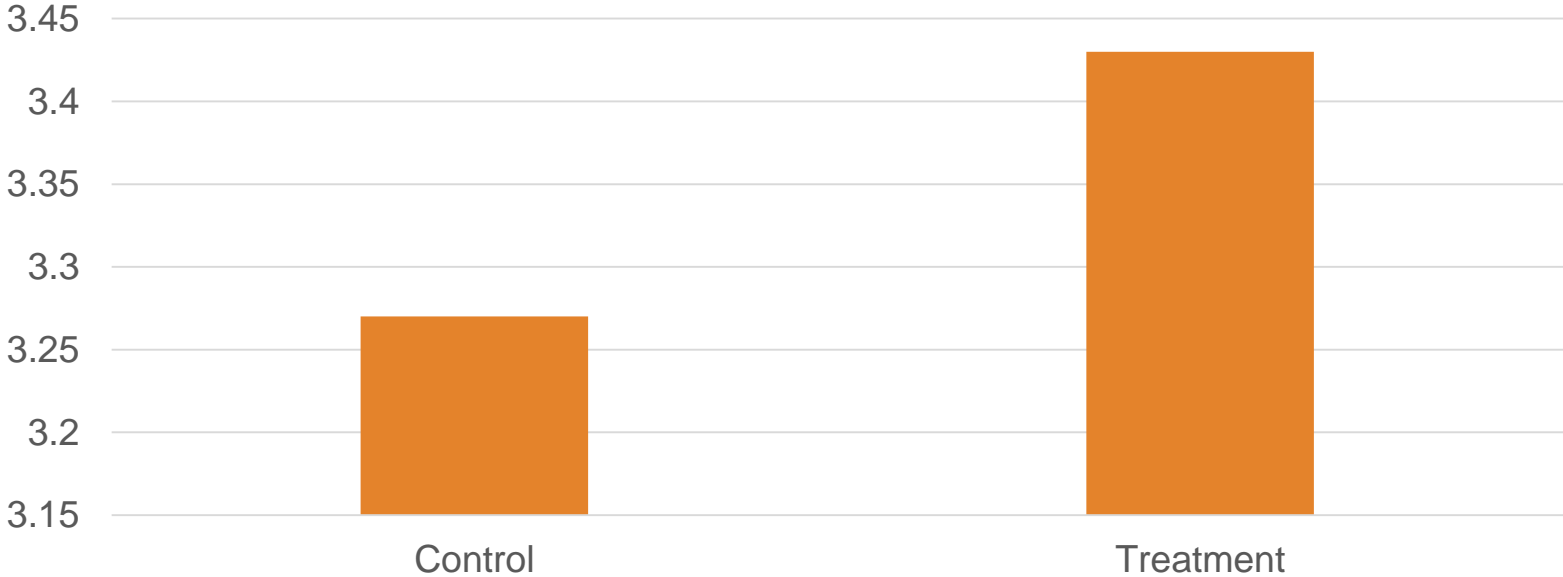
## Self-Efficacy Composite

Confidence in their ability to discuss concerns, recommend support services, and help a suicidal student seek help

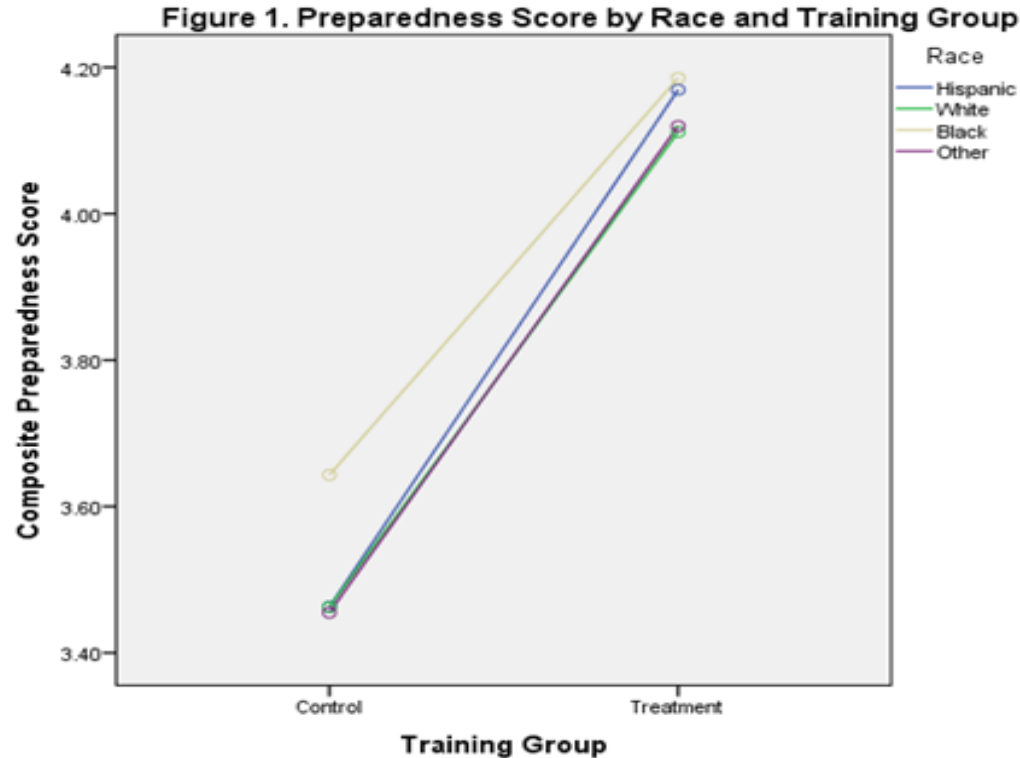


# Level 2: Attitudinal Measures Additional Item (N=31,144, p<.001)

Part of the role of educators is to connect students experiencing psychological distress with mental health support services

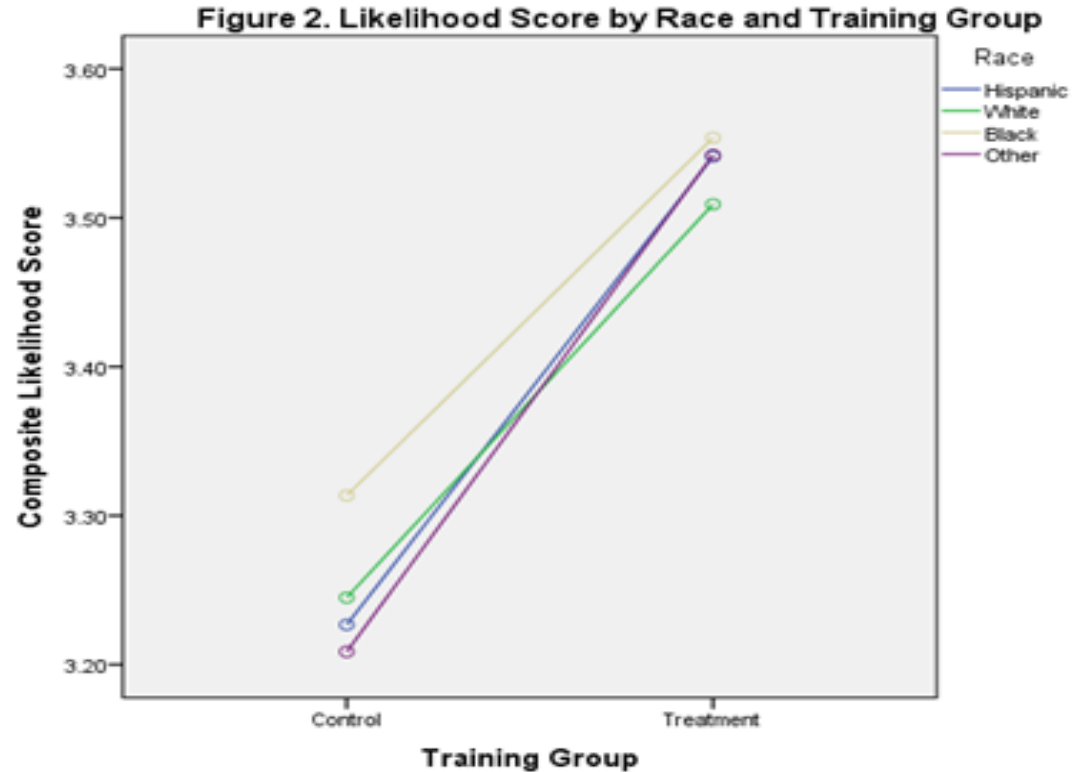


# Attitudinal Measure: Preparedness by Race/Ethnicity ( $p < .001$ )





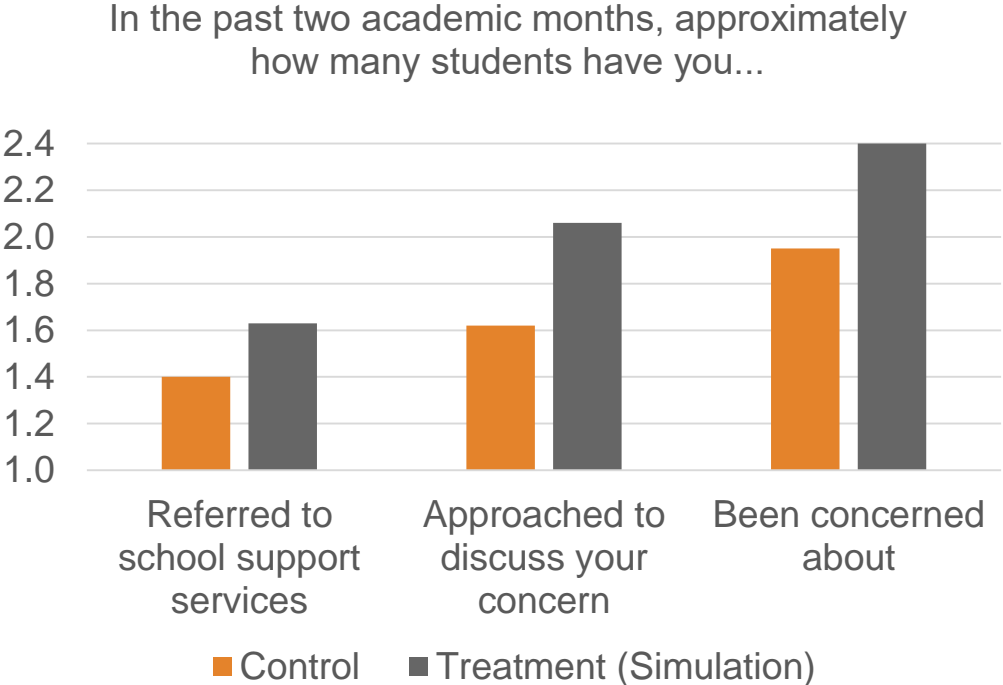
# Attitudinal Measure: Likelihood by Race/Ethnicity ( $p < .001$ )



# Attitudinal Measure: Self-Efficacy by Race/Ethnicity ( $p < .001$ )

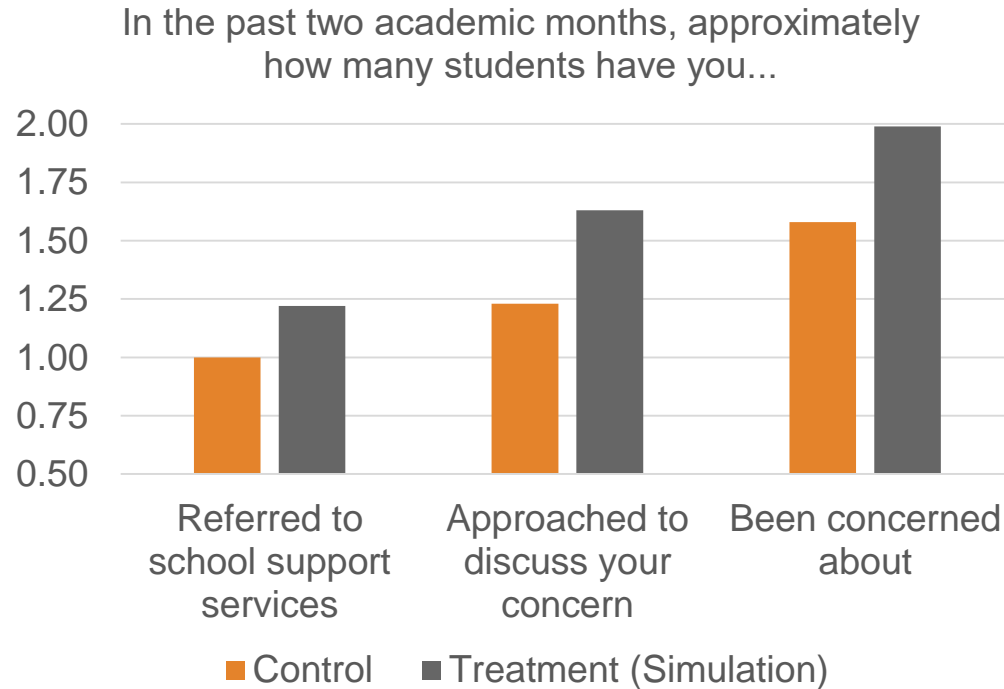


# Gatekeeper Behavioral Change (n=1724, p<.05)



\*n=1724 due to high level of attrition between those who took the post survey and the follow up survey

# Gatekeeper Behavioral Change: Teacher Subsample (n=1120, p<.001)



## Limitations

- Those who dropped out have higher Preparedness, Likelihood, and Self-Efficacy scores than those who remained to complete the post-test
- Self-reported data
- Gaining access to the schools' support services (counseling) referral records would have allowed us to further measure the impact of the intervention

## Implementation: Howard County, Maryland

- Statewide access to Kognito At-Risk Modules for K-12 educators through SAMHSA 5-year Garrett Lee Smith (GLS) Grant
- State policy (HB-0920 – Lauryn’s Law Expansion) requiring all certificated staff to complete suicide prevention training
  - Lauryn’s Law first passed in 2015

# Implementation Strategies: Howard County Public Schools

- Stakeholder Buy-In
  - Recommended by Board of Education for all HCPSS staff and supported by Executive Leadership
- Develop implementation plan for roll out
- Advertising/Marketing to teachers
- Addressing questions and concerns through FAQ fact sheets
- Providing time for educators to take training and setting deadlines
- Offering continuing education credits as an incentive

"At-Risk for Educators: Recognize Students in Distress and Connect Them With Help"  
 UPDATED HCPSS Implementation Plan 2015 and 2016

The HCPSS Mental Health Task Force identified a need for classroom teachers to receive training in how to recognize warning signs of students experiencing mental health concerns. The September 17, 2015 BOE Report recommended and supported implementation of the "At-Risk for Educators: Recognize Students in Distress and Connect Them With Help" developed by *Kognito* and included in the *SAMHSA National Registry of Evidence-Based Programs and Practices*. Key program features are:

- One-hour avitar-based online training simulation that prepares educators to **identify, approach and refer** students exhibiting signs of suicidal ideation, substance use/abuse, and psychological distress, including depression and anxiety.
- Practice and role-play real-life situations with fully animated and emotionally responsive virtual humans (avatars) to help educators learn effective communication tactics for managing these challenging conversations.
- The training is funded by the University of Maryland Center for School Mental Health and is endorsed by the Maryland State Department of Education. The link for the training program is <https://md.kognito.com>



**2015 Building the Foundation**

School Psychologists	January 13 <sup>th</sup>	Elementary School Counselors	December 17 <sup>th</sup>
Pupil Personnel Workers	February 4 <sup>th</sup>	Middle School Counselors	November 18 <sup>th</sup>
Cluster Nurses	February 24 <sup>th</sup>	High School Counselors	January 14 <sup>th</sup> & 15 <sup>th</sup>
Alternative Education	March 18 <sup>th</sup>	Overview for School Administrators	November 2015
Special Education Full Staff	April 27 <sup>th</sup>	Curriculum & Instruction	TBD



**2016 School Implementation**

Who: All Certified Staff  
 When: January - June 2016

Who: Additional School Staff  
 When: August - December 2016

Options for Completion:  
 Two 30-minute PIP or Other Planning Time  
 Before/After School Faculty Meeting  
 School-based Professional Learning Day

Earn one CPD/CEU from *Kognito* for training.



*At-Risk Training for Educators:  
Recognize Students in Distress and Connect Them With Help*

**FREQUENTLY ASKED QUESTIONS**

The Howard County Public School System (HCPSS) has adopted the “At-Risk for Educators” training developed by *Kognito* for completion by all certified staff. This one-hour, avatar-based, interactive, online program is designed to provide training in how to recognize warning signs of students experiencing mental health concerns such as suicidal ideation, substance use/abuse and psychological distress, including depression and anxiety. Below are responses to frequently asked questions about this training:

**1. What is *Kognito*?**

Founded in 2003, *Kognito* works with learning experts, psychologists, instructional designers, software engineers and others to transform health and mental health through challenging conversations. *Kognito* is the only company with digital simulations listed in the SAMHSA National Registry of Evidence-Based Programs and Practices (NREPP).

**2. Is there a cost for this training?**

No. The University of Maryland Center for School Mental Health (CSMH) is supporting this training for all Maryland educators. The Maryland State Department of Education (MSDE) has endorsed this training for the entire school workforce.

**3. How long does it take to complete the training?**

The training takes an average of 45-60 minutes to complete. Typically the elementary module can be completed in 45 minutes while the high school module requires 60 minutes.

**4. Am I required to complete the training in one session?**

No. Conversations regarding mental health can be difficult and/or challenging. It is important that you take breaks during the training as needed.

# Results: Howard County Public School System Utilization Rates

	Before Jan 2015	Jan 2015 to Jan 2016  <b>Building the Foundation</b>	May 2016 to July 2016  <b>Begin School Roll-Out</b>	Aug 2016 to Dec 2016  <b>Focused School Roll- Out</b>	Jan 2017 to June 2017	Aug 2017  <b>New Staff</b>	TOTA L
Elem	NA	140	259	2282	31	63	2775
Middle	1	191	184	945	12	4	1337
High	5	231	162	1815	37	28	2278
Total	6	562	605	5042	80	95	6390*

\*78.5% of ALL HCPSS Staff (Total = 8,136)

# Implementation: Baltimore County Public Schools

- National Institute for Justice grant – Violence prevention in schools
- Strategy – incentivize teachers to take Kognito (approximately \$29)
- Teachers and school staff in 20 schools in a Maryland school district (N= 1573)
- Part of a larger initiative:
  - A randomized controlled trial of the impact of the Comprehensive Emotional and Behavioral Health Crisis Response and Prevention Intervention (EBH-CRP) on school safety, funded by the Department of Justice, National Institute of Justice.
- Kognito At-Risk training was identified as a universal prevention intervention in the multi-tiered EBH-CRP.

## Baltimore County Public Schools Participants

- 20 schools in the Intervention condition in the EBH-CRP randomized controlled trial participated in the Kognito *At-Risk* pilot training and incentive program (N=1573).
  - 2 high schools, 5 middle schools and 13 elementary schools.
- School staff in the 20 schools in the EBH-CRP Comparison group served as the comparison group for the pilot training and incentive program (N=1459).
  - 2 high schools, 4 middle schools, and 14 elementary schools.

## Results: Baltimore County Public Schools

Intervention Group	Completed Courses	Total School Staff Eligible	Percentage Of Eligible School Staff
Elementary	500	847	59%
Middle School	175	387	45%
High School	157	339	46%
Total Intervention Group	832	1573	53%

Comparison Group	Completed Courses	Total School Staff Eligible	Percentage Of Eligible School Staff
Elementary	2	780	0.26%
Middle School	1	376	0.26%
High School	0	303	0%
Total Comparison Group	3	1459	0.21%

# Implementation Strategies for Future Users: Lessons Learned

- Buy-in and communication from school leadership with clear deadlines
- FAQ fact sheet available
- Accompanying the “At-Risk for Educators” with an in-person presentation on school suicide prevention policy
- Point of Contact at each school to support the roll-out
- Allocated time to complete training
- Monetary incentive (even minor)

## Q&A

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**Table 2** Gatekeeper Behavior Scale

Subscale	Number	Item	Response scale
<b>Preparedness</b>	<b>How would you rate your preparedness to:</b>		
	1	Recognize when a student's behavior is a sign of psychological distress;	
	2	Recognize when a student's physical appearance is a sign of psychological distress;	1- Very low
	3	Discuss with a student your concern about the signs of psychological distress they are exhibiting;	2- Low 3- Medium
	4	Motivate students exhibiting signs of psychological stress to seek help;	4- High 5- Very high
5	Recommend mental health support services (such as the counseling center) to a student exhibiting signs of psychological distress.		
<b>Likelihood</b>	6	How likely are you to discuss your concerns with a student exhibiting signs of psychological distress?	1-Very unlikely 2-Unlikely
	7	How likely are you to recommend mental health/support services (such as the counseling center) to a student exhibiting signs of psychological distress?	3-Likely 4-Very likely
<b>Self-Efficacy</b>	<b>Please rate how much you agree/disagree with the following statements:</b>		
	8	I feel confident in my ability to discuss my concern with a student exhibiting signs of psychological distress.	
	9	I feel confident in my ability to recommend mental health support services to a student exhibiting signs of psychological distress.	1- Strongly disagree 2- Disagree
	10	I feel confident that I know where to refer a student for mental health support.	3-Agree 4-Strongly agree
	11	I feel confident in my ability to help a suicidal student seek help.	