SCREENING FOR YOUTH SUICIDE RISK IN EMERGENCY MEDICAL SETTINGS

Cheryl A. King, Ph.D.
University of Michigan

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DISCLOSURE

- **The content of this presentation does relate to some content in an upcoming book that is co-authored by the presenter, *Teen Suicide Risk*, published by Guilford Press.**

- **The presenter has nothing else to disclose with regard to commercial relationships.**

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Co-Investigators and Collaborators

Rebecca Cunningham, MD
Kenneth Resnicow, PhD
Neera Ghaziuddin, MD
Rachel Glick, MD
Sean Joe, PhD
Maureen Walton, PhD
Brenda Gillespie, PhD

Postdoctoral Fellows/ Graduate Students

Nicole Klaus, PhD
Chris Merchant, MS
Khiela Holmes, PhD
Roisin O'Mara, PhD
Polly Gipson, PhD
Adam Horwitz

Clinical and Research Staff:

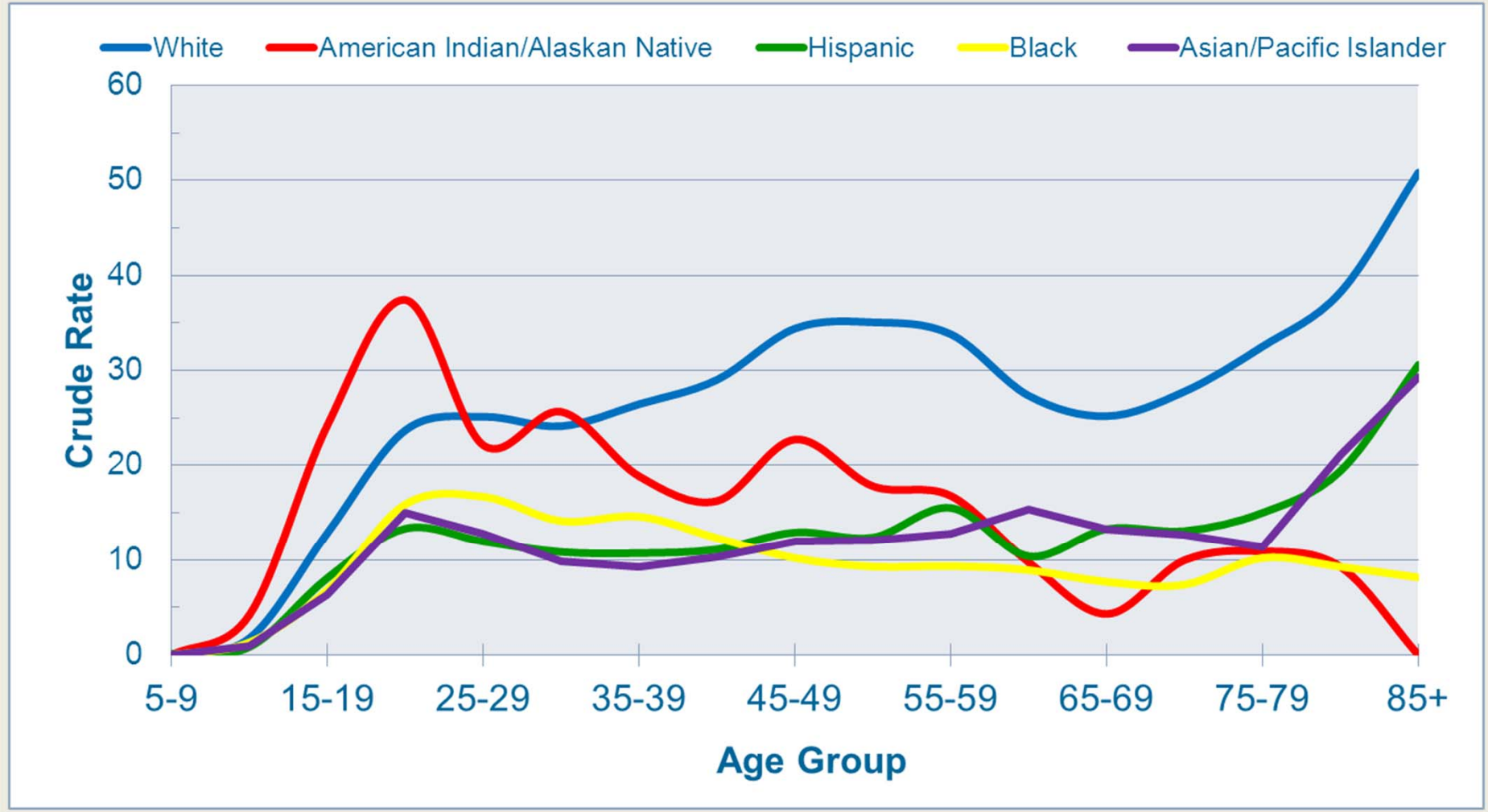
Melissa Webster, LMSW
Bianca Burch, MSW
Tasha Kelley, MSW
Ryan Hill
Kevin Callender
Anne Kramer, LMSW
Sunshine Mills, LMSW
Charles Hayward
John Kettley, LMSW
Kiel Opperman, MA

BACKGROUND
SUICIDE ATTEMPTS AND SUICIDE AMONG ADOLESCENTS

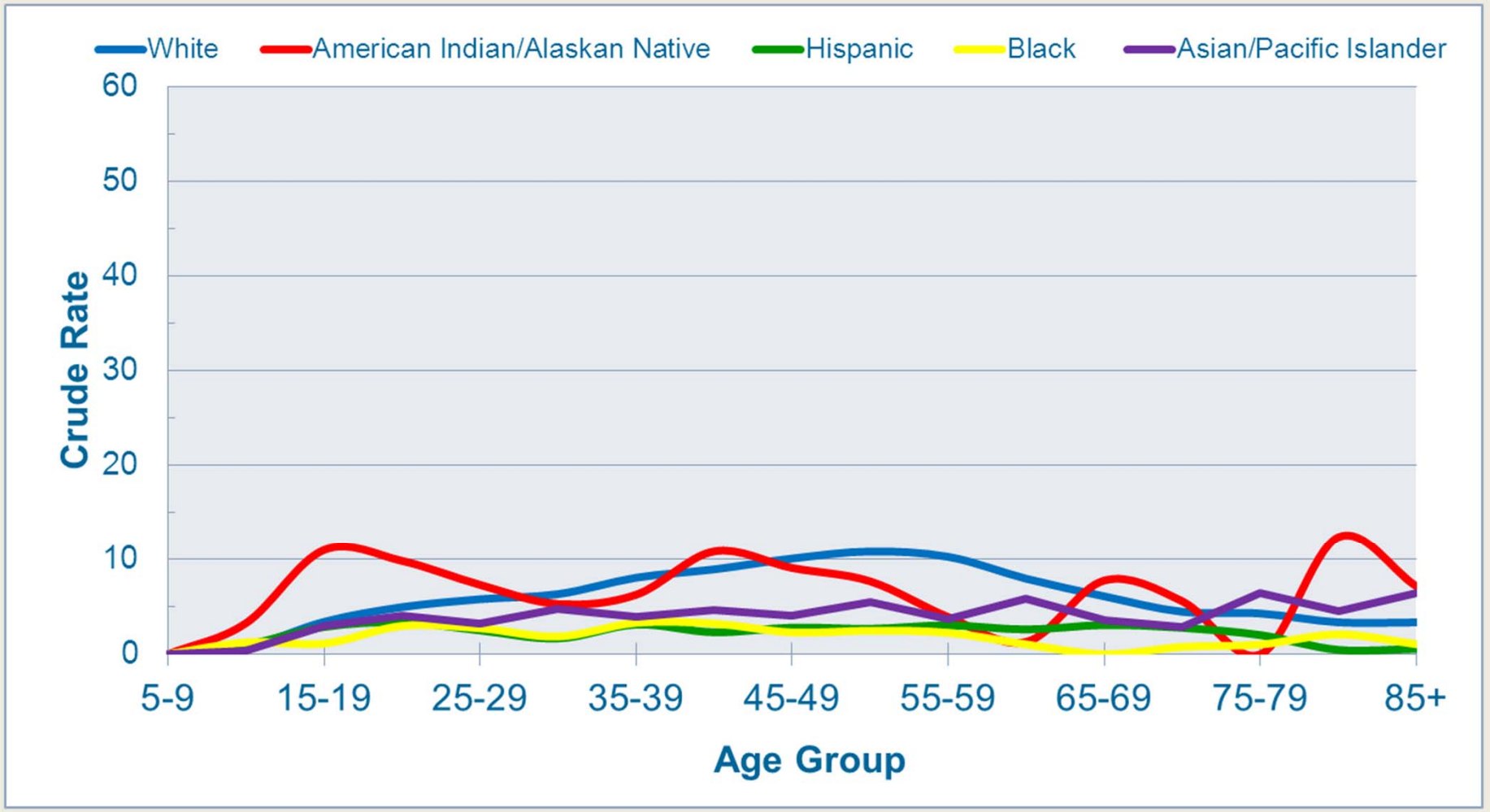
- Suicide is 3rd leading cause of death in 13-19 year age group; Male to Female ratio = 4.3:1
  (www.cdc.gov/ncipc/wisqars; 06/16/09, data from 1999-2006)

- Among adolescents who die by suicide:
  - History of suicide attempts common, 34 – 44%
    (Marttunen et al., 1992; Brent et al., 1988)
  - Many never obtained any mental health services; 54%
    (Shaffer, D., et al., 1996)

MALE SUICIDE RATES BY AGE AND RACE



FEMALE SUICIDE RATES BY AGE AND RACE



DEPRESSIVE DISORDERS IN YOUTH AND SUICIDALITY

- 72% report significant suicidal ideation or acts; 22% had a definite plan or attempted suicide (Myers et al., 1991)
- Past suicide attempt and current depressive disorder strongest predictors of future suicide attempt (Lewinsohn et al., 1996)
- 1/2 adolescent male suicide victims and 2/3 female suicide victims suffered from depressive disorder

ALCOHOL/SUBSTANCE ABUSE IN YOUTH AND SUICIDALITY

- Adolescents with alcohol abuse/dependence nearly 7X more likely to attempt suicide than others (OADP; Andrews & Lewinsohn, 1992)
- Alcohol abuse predicts eventual suicide in 5-yr follow-up of hospitalized attempters (Kotila, 1992)
- Recent alcohol ingestion common in suicide
  - 28% (Hoberman & Garfinkel, 1988)
  - 51% (Marttunen et al., 1991)

THREE CHALLENGES IN YOUTH SUICIDE PREVENTION

- Identifying the youths at risk, especially adolescent males who are most likely to die by suicide
- The co-occurrence and synergistic roles of risk factors such as depression, alcohol misuse, and history of suicide attempt
- The relatively low level of treatment seeking, particularly among older adolescents who are at highest risk for suicide

EMERGENCY DEPARTMENT SUICIDE RISK SCREENING IN ADOLESCENTS

King, C. A., O'Mara, R. M., Hayward, C. N., & Cunningham, R. M. (2009). Adolescent suicide risk screening in the emergency department. *Academic Emergency Medicine*, *16*(11), 1234-1241.

WHY THE EMERGENCY DEPARTMENT?

- 30% adolescents use ED each year (Britto et al., 2001)
- Many use ED as primary source of care; This group has higher incidence of depression and alcohol abuse (Wilson & Klein, 2000)
- ED visits in past year: 39% of those who died by suicide (16-93 years) (Gairin, House, & Owens, 2003)
- At risk boys and girls are well represented

SCREENING IN THE ED

- Adolescent depression screening
  - Adolescents, between the ages of 13-19, completed the BDI-II (Scott et al., 2006)
    - 45% reported mild to severe depressive symptoms
    - 19% reported severe depressive symptoms
  - Adolescents, between the ages of 12-17, completed the CESD (Rutman et al., 2008)
    - 37% screened positive for depression on the CESD
    - Two question screen had a sensitivity of 78% and a specificity of 82% when compared to the CESD
- Adolescent suicide risk screening (Horowitz et al., 2001)
  - Four item measure from Risk of Suicide Questionnaire had a sensitivity of 98% and specificity of 37% when compared to the Suicidal Ideation Questionnaire (SIQ) in adolescents aged 11 to 16 years old.

ADOLESCENT SUICIDE RISK SCREENING

- Examine concurrent validity and utility of suicide risk screen in medical ED
- Examine two sets of screen criteria
  - Severe suicide ideation or recent attempt
  - Depression and alcohol abuse

PARTICIPANTS

- Participants
  - 295 adolescents completed screen
  - Sex: 50% female, 50% male
  - Mean Age: 15.0 years (range 13-17; SD=1.39)
  - Race/Ethnicity: 83% Caucasian, 16% African American, 5.4% Hispanic/Latino
- Exclusion Criteria
  - Life-threatening condition
  - Severe cognitive impairment
  - Language barrier

PROCEDURES
ADOLESCENT SUICIDE RISK SCREENING

- Approached consecutively eligible adolescents
- Obtained written consent/assent
- Adolescent privately completed screen; parent interviewed for demographic information
- Informed ED staff of “high risk” adolescents

SCREEN MEASURES
ADOLESCENT SUICIDE RISK SCREENING

Screen Measures	
• Reynolds Depression Scale – 2 • Suicidal Ideation Questionnaire-JR • Suicide Attempt Question • AUDIT – 3 item	

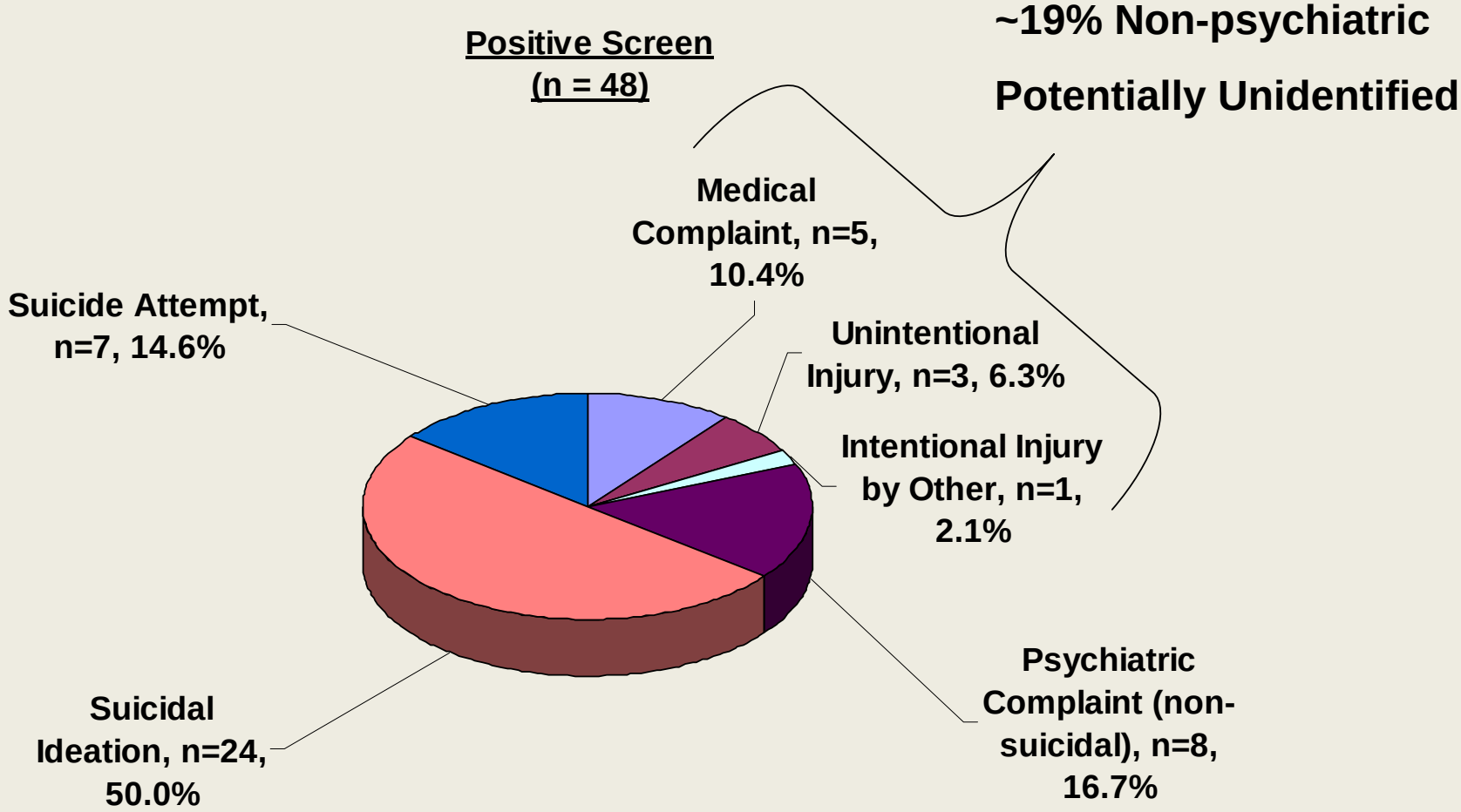
Positive Screen Criteria

SIQ-Jr ≥ 31 AND/OR History of Recent Suicide Attempt
RADS-2 ≥ 76 AND AUDIT-3 ≥ 3

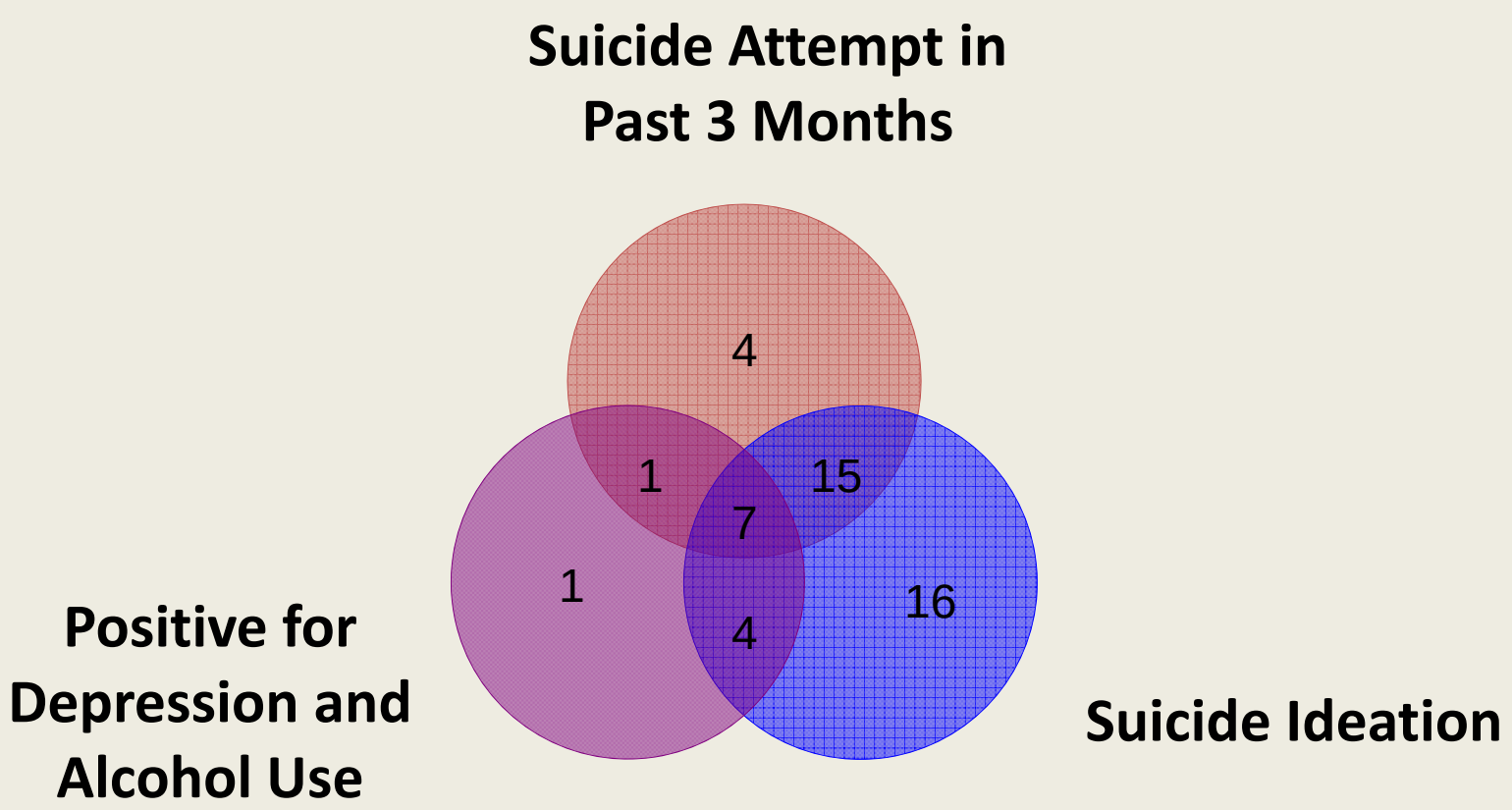
ADOLESCENTS WITH POSITIVE SCREENS
DEMOGRAPHIC INFORMATION

- 16% Screened Positive (n = 48)
  - Sex: 67% female; 33% male
  - Mean Age: 15.1 years (range 13-17; SD = 1.33)
  - Race/Ethnicity: 83% Caucasian, 13% African American, 4.2% Hispanic/Latino

CHIEF COMPLAINTS FOR ADOLESCENTS WITH POSITIVE SUICIDE RISK SCREENS



REASONS FOR POSITIVE SUICIDE RISK SCREENS



VALIDITY
ADOLESCENT SUICIDE RISK SCREENING

- Positive screen due to depression plus alcohol abuse vs. other criterion
  - More negative consequences from alcohol use
    More impulsivity
- Positive screen for severe suicide ideation/ suicide attempt
  - Higher hopelessness than psychiatrically hospitalized adolescents (Steer, Kumar, & Beck, 1993)

UTILITY
ADOLESCENT SUICIDE RISK SCREENING

- 19% of positive screen adolescents had non-psychiatric chief complaints
- 35.4% of positive screen adolescents had chief complaints other than suicide ideation/attempt
- Not receiving treatment:
  - 33% of positive screens with psychiatric chief complaints
  - 50% of positive screens with non-psychiatric chief complaints

FEASIBILITY
ADOLESCENT SUICIDE RISK SCREENING

- Evidence of feasibility in pediatric and psychiatric emergency department settings
  - Computerized patient tracking systems allow for easy identification of eligible youth
  - Waiting times in ED provide screening opportunities
  - Partnership and feedback loop with ED liaisons enabled modifications in procedures
- Yet, we provided the screening staff!

ACCEPTABILITY OF MENTAL HEALTH SCREENING

O'Mara, RM, Hill, RM, Cunningham, RM, King CA: Parent and adolescent attitudes towards screening for suicide risk and mental health problems in the pediatric emergency department. *Pediatric Emergency Care*, 28 (7), 626-632, 2012.

OBJECTIVES
ACCEPTABILITY OF MENTAL HEALTH SCREENING

- Examine adolescent and parent attitudes about importance and acceptability of suicide risk screening and broader mental health screening for adolescents in Emergency Department

- Explore parent/adolescent, gender, and racial differences in attitudes

ACCEPTABILITY OF MENTAL HEALTH SCREENING

- Participants
  - 299 adolescents, 13-17 years (49% female, 72% Caucasian)
  - 305 parents (73% female, 79% Caucasian)
  - Exclusion criteria: Level I Trauma, medical severity, cognitive delay, and non-English speaking
- High consent rate (89% adolescents, 91% parents) with waiver of written consent
- Completed short self-report survey

FINDINGS
ACCEPTABILITY OF MENTAL HEALTH SCREENING

- Most participants (57% adolescents, 70% parents) "strongly" or "very strongly agree" that screening should be part of routine care
- Even more (≥ 87% adolescents, ≥ 96% parents) thought it was "somewhat important" to "extremely important" to screen for mental health concerns

FINDINGS
ACCEPTABILITY OF MENTAL HEALTH SCREENING

- Screening for suicide risk rated as more important or equally important to other mental health concerns

	Parents	p-value	Adolescents	p-value
Suicide risk	**4.1 (*1.1*)**		**3.9 (*1.2*)**	
Depression	3.8 (*1.0*)	<.001	3.3 (*1.1*)	<.001
Anxiety	3.7 (*1.1*)	<.001	3.1 (*1.1*)	<.001
Alcohol misuse	4.0 (*1.0*)	.09	3.6 (*1.2*)	<.001
Drug misuse	4.0 (*1.0*)	.34	3.8 (*1.2*)	.04
Eating problems	4.1 (*1.1*)	<.001	3.9 (*1.2*)	<.001
Behavior problems	3.7 (*1.0*)	<.001	3.4 (*1.2*)	<.001
Dating violence	3.6 (*1.1*)	<.001	3.0 (*1.2*)	<.001

Findings indicate means are significantly different from the mean score for the importance of screening for suicide risk. Parents and adolescents analyzed separately.

FINDINGS
ACCEPTABILITY OF MENTAL HEALTH SCREENING

- Females rated importance of screening higher than males *(*parents for all concerns; adolescents, all except alcohol and drug misuse).
- Parents rated importance of screening higher than adolescents (except suicide risk).
- Parents rated concerns about screening lower than adolescents.
- Black participants more likely than Caucasian to agree to take a screening if adolescents offered (adolescents and parents)

SELF-REPORT VALIDITY/BIAS IN ADOLESCENT SUICIDE RISK SCREENING

King CA, Hill RM, Wynne HA, Cunningham RM: Adolescent Suicide Risk Screening: The effect of communication about type of follow-up on adolescents' screen response*. Journal of Clinical Child and Adolescent Psychology*, 41(4), 508-515, 2012.

SELF-REPORT SUICIDE RISK SCREENING

- Suicide risk screens use self-report measures
- What are possible threats to validity of self-reports? Self-report biases?
- Research suggests adult males are less likely to report depressive symptoms (Sigmon, 2005), especially when expecting follow up contact (Staton et al., 1991)

SELF-REPORT SUICIDE RISK SCREENING

- Aims
  - To understand possible self-report bias in suicide risk screening with adolescents
  - To determine if an anticipated in-person follow-up affects self-reported suicide risk
  - To determine whether gender and socioeconomic status moderate the effect of anticipated in-person follow-up on self-reported suicide risk

SELF-REPORT SUICIDE RISK SCREENING

- Participants
  - 245 adolescents (131 female, 114 male)
  - Ages 13-17 (*M*= 15.32, *SD*= 1.37)
  - 80% Caucasian, 21.6% African American, 9.8% American Indian/Alaskan Native, 5.7% Hispanic/Latino, 2.9% Asian, 4.1% Other.
- Randomization to two groups
  - In-Person Feedback: Informed that screen responses would be discussed with staff member
  - No In-Person Feedback

SELF-REPORT SUICIDE RISK SCREENING

- Feedback condition had no main effect on screen scores (suicide ideation, depression scores, problem behaviors).
- Socioeconomic Status (Public Assistance: Yes/No) interacted with follow-up condition to impact screen scores.
  - Suicidal thoughts
  - Problem behaviors
- Adolescents whose families received public assistance
  - less likely to report aggressive-delinquent behavior if assigned to in-person follow-up
  - reported significantly lower levels of suicidal ideation if assigned to in-person follow-up

SELF-REPORT SUICIDE RISK SCREENING

- Adolescents from poorer families may hesitate to share distress/problems due to social desirability bias and/or fear of intrusion
- Many adolescents do not respond differently to suicide risk screens when they know that in-person discussion with a staff member will take place.

TEEN OPTIONS FOR CHANGE (TOC)

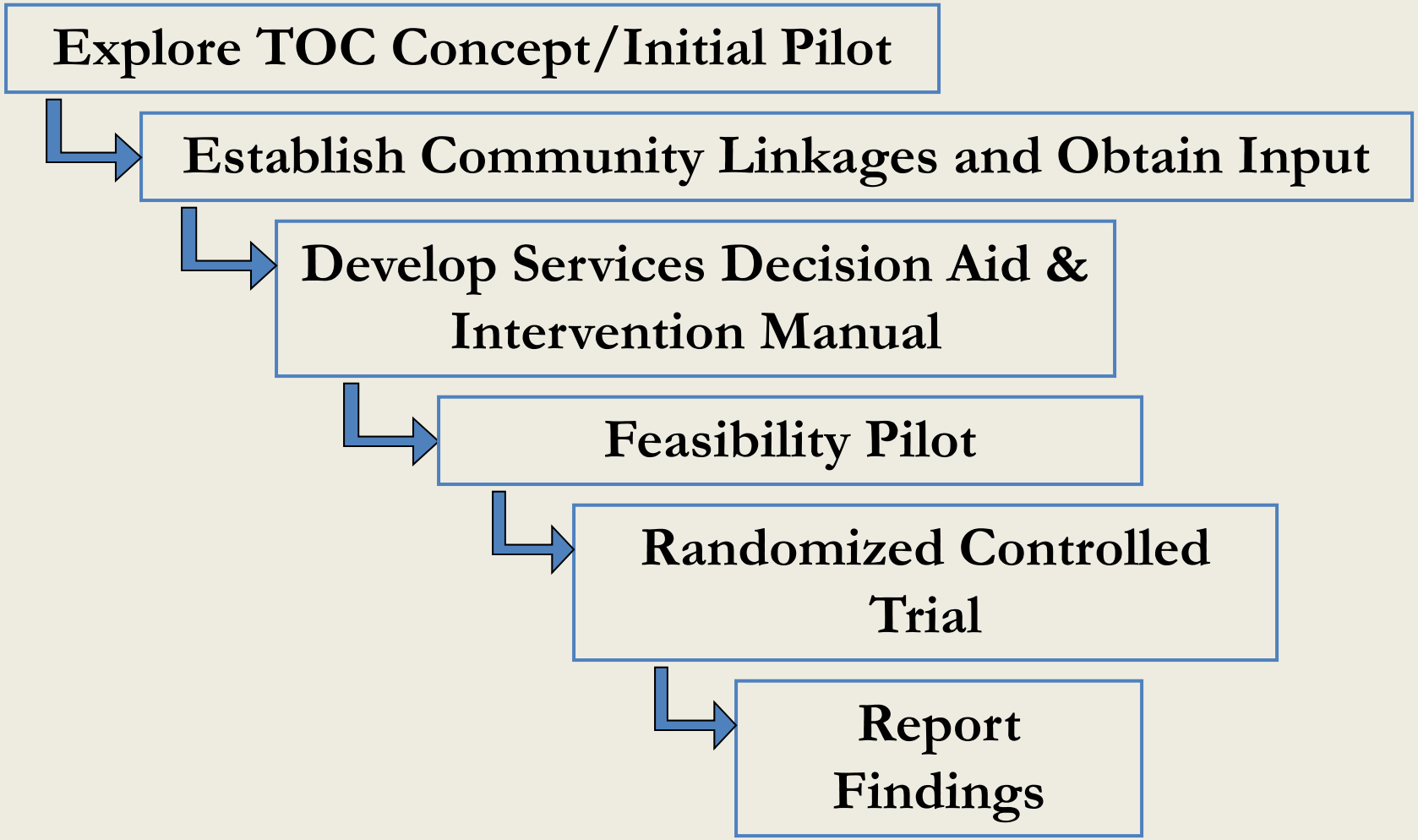
Suicide Risk Detection and Treatment Facilitation

NIMH-R34 Intervention Development Study

GOALS
TEEN OPTIONS FOR CHANGE (TOC)

- Earlier detection of elevated suicide risk and treatment facilitation
- Improve problem recognition, readiness for change, treatment seeking
- Reduce suicide ideation and behavior, depression, alcohol misuse

INTERVENTION DEVELOPMENT PLAN



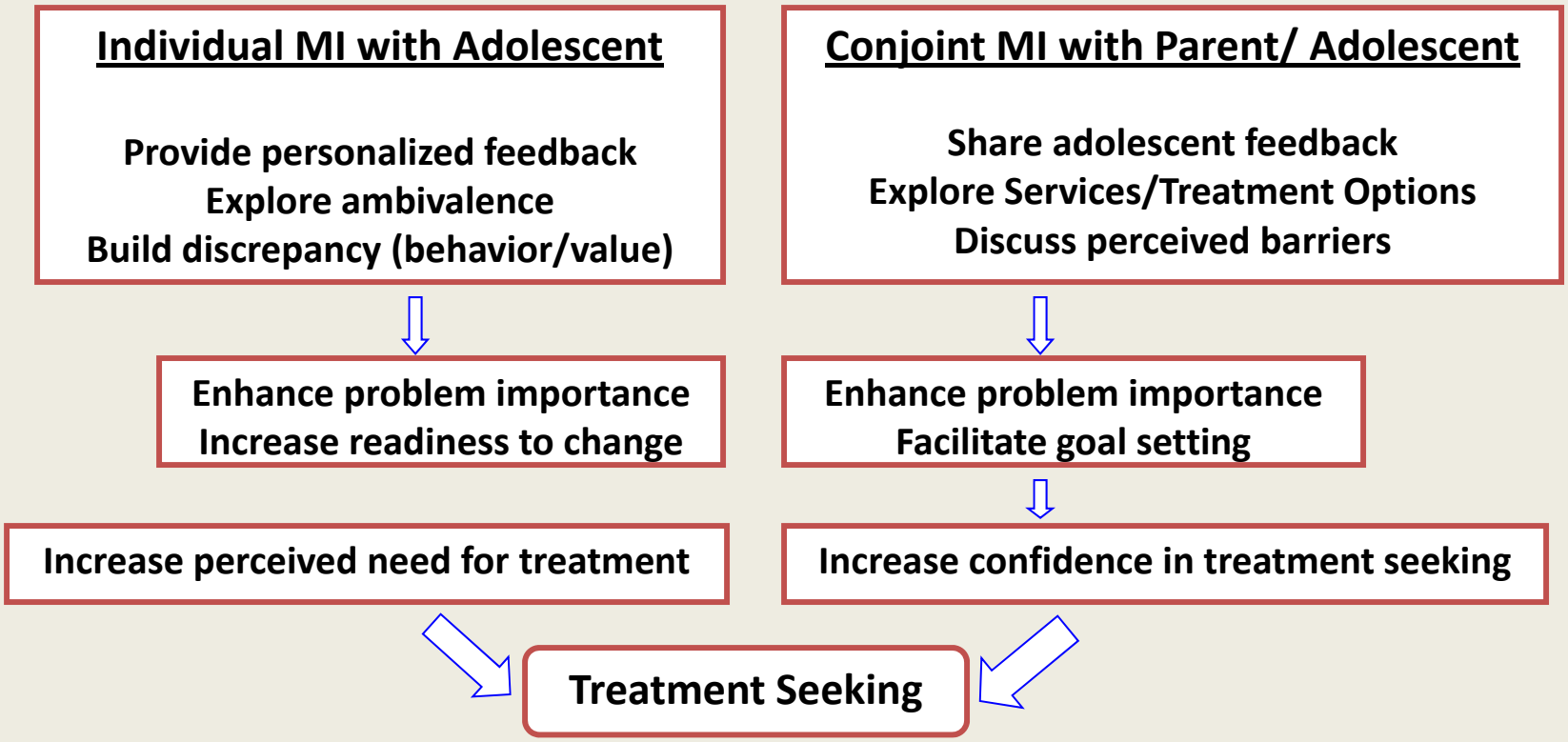
INTERVENTION COMPONENTS

- Screen for elevated suicide risk
- Family Adapted Motivational Interview (AMI)
  - Adolescent AMI with personalized feedback
  - Parent/Adolescent AMI with culturally tailored *Services Decision Aid*
- Follow-up note

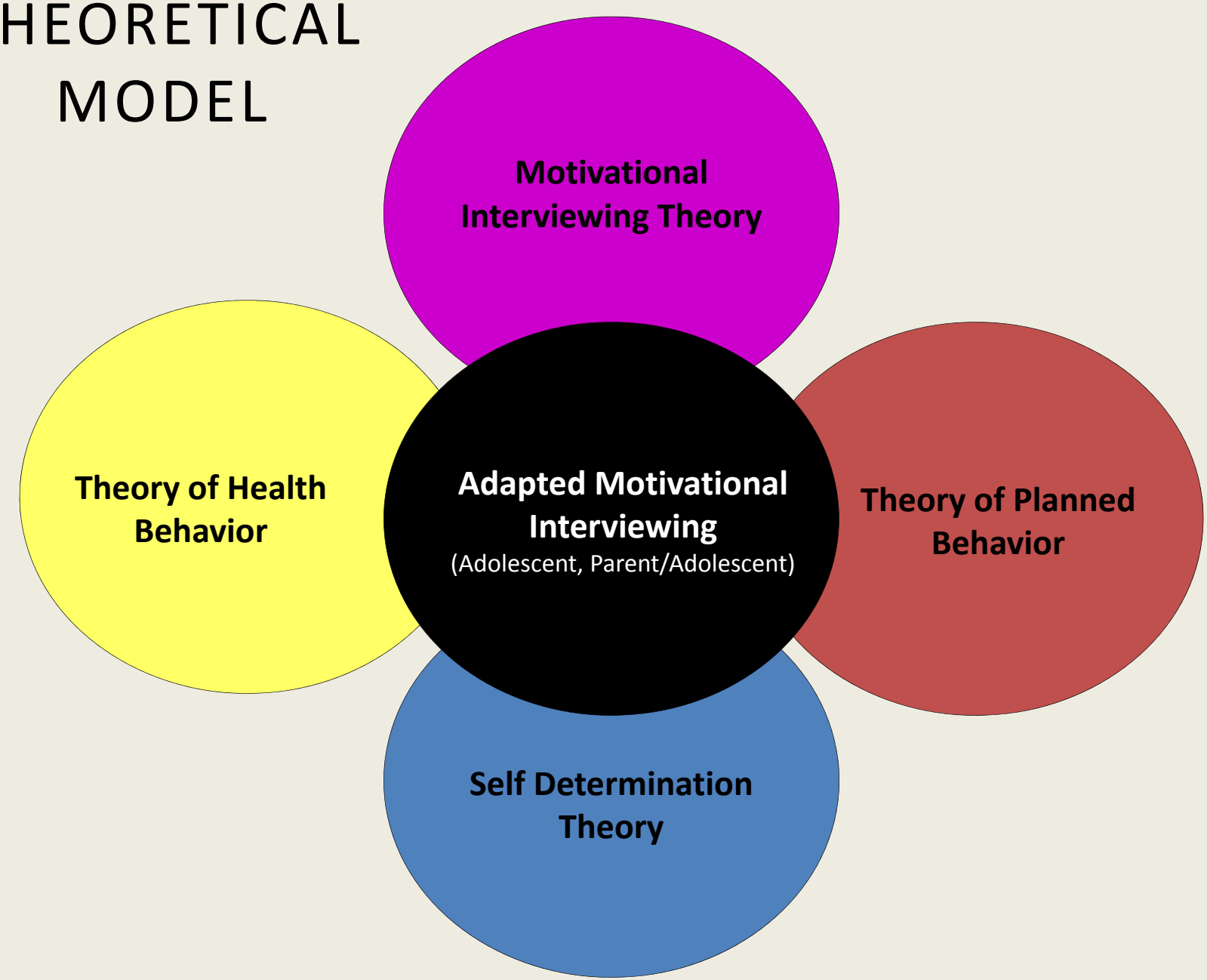
ASSESSMENTS

- Suicide Risk Screen
  - Adolescent self-report
  - Parent demographic form
- Baseline Evaluation
  - Adolescent self-report measures
  - Parent interview: history of treatment/services
- Two-Month Follow-up Evaluation

MODEL OF FAMILY MOTIVATIONAL INTERVIEW

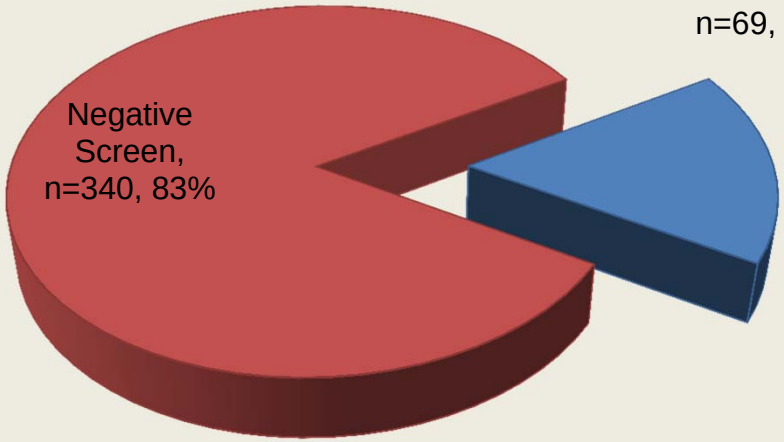


THEORETICAL MODEL

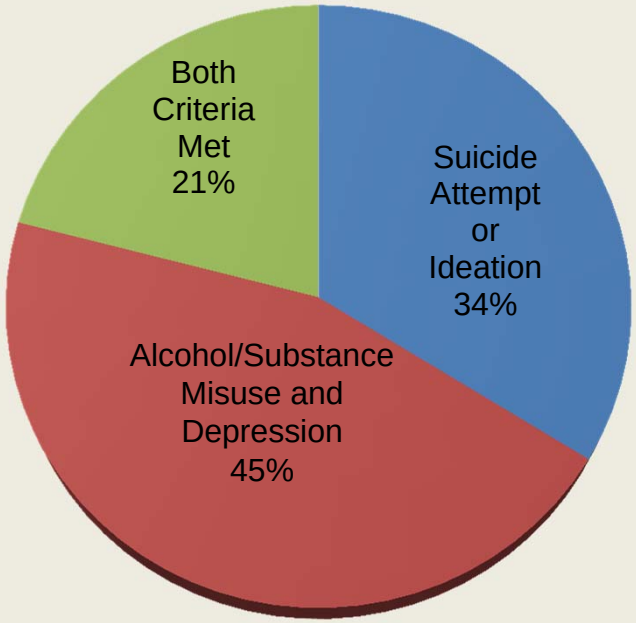


ADOLESCENT EMERGENCY PATIENTS

Positive vs. Negative Screen for suicide risk

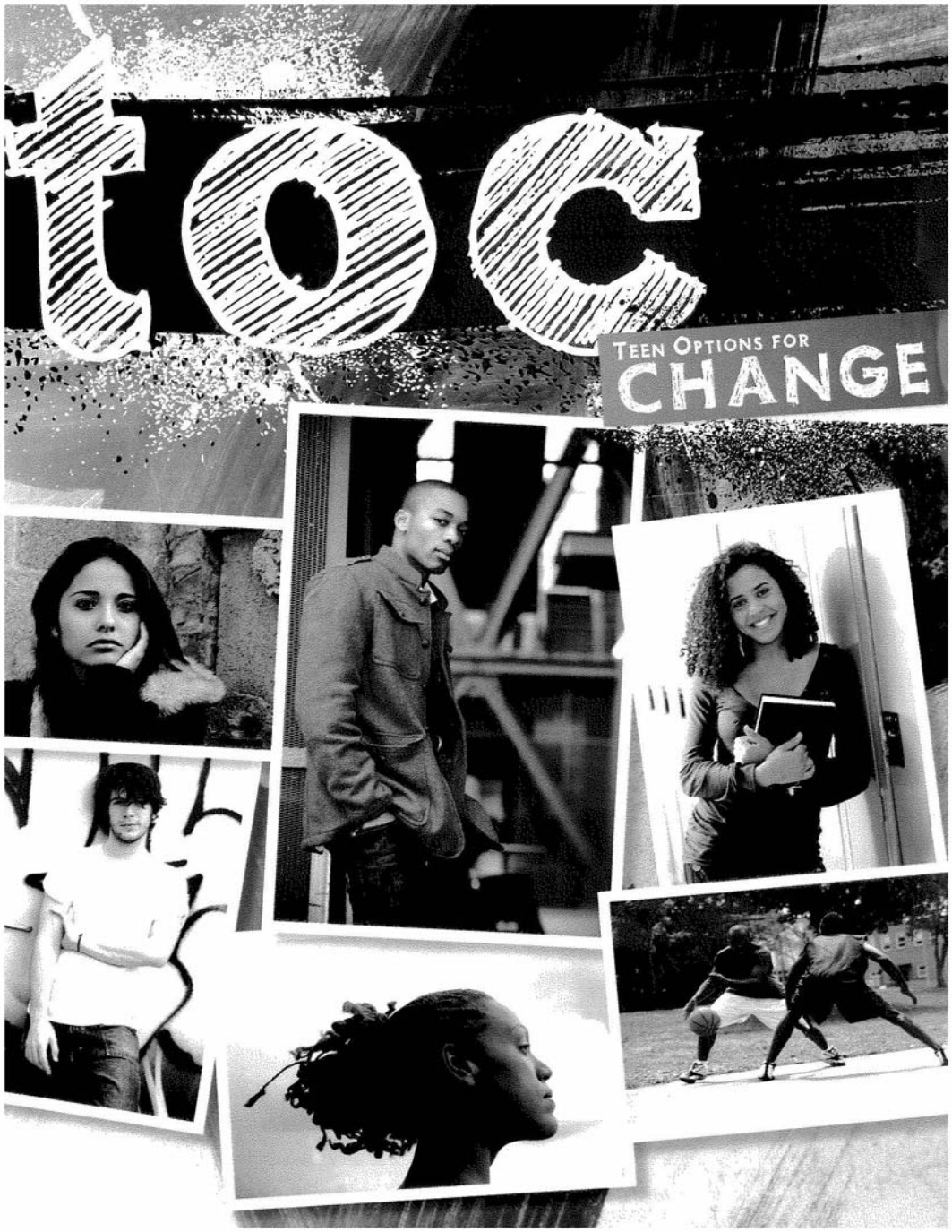


Criteria for Positive Screens



PERSONALIZED FEEDBACK

- Details scores on screening measures
- Provides normative data for comparisons to other adolescents of same gender
- Identifies problem areas (i.e. social withdrawal or binge drinking)


toc
Teen Options for
CHANGE

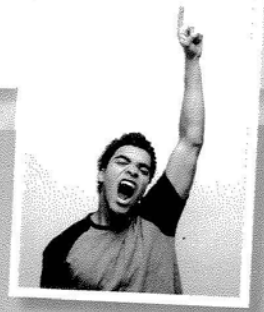
Why do I want to change?

COMMON GOALS FOR TEENS:

- ❍ Friendship
- ❍ Popularity
- ❍ Being strong
- ❍ Being responsible
- ❍ Belonging/Fitting in
- ❍ Being in control
- ❍ Being athletic
- ❍ Graduating high school
- ❍ Going to college
- ❍ Getting a job
- ❍ Getting a car
- ❍ Making family proud
- ❍ Making sure my kids have a better life than me
- ❍ Having a boyfriend/girlfriend

COMMON VALUES FOR TEENS:

- ❍ Success & Happiness
- ❍ Spirituality
- ❍ Honesty
- ❍ Respect
- ❍ Independence
- ❍ Freedom
- ❍ Confidence
- ❍ Being healthy and fit
- ❍ Fame
- ❍ Being a good student
- ❍ Getting along with others
- ❍ Maturity
- ❍ Money
- ❍ Loyalty
- ❍ Pride



Am I ready to change?

READINESS RULER

1	2	3	4	5	6	7	8	9	10
Not Ready				Unsure					Ready

ID ____ ____ Date: __/__/__

OUR ACTION STEPS

Objective:

_____

_____

Steps to Take:

Step 1)

What? _____

Who? _____ When? _____

Step 2)

What? _____

Who? _____ When? _____

Step 3)

What? _____

Who? _____ When? _____

Readiness for change

1	2	3	4	5	6	7	8	9	10
Not Ready				Unsure					Ready

_____ will call me between: _____

TOC RECRUITMENT

Study Consent Information	Total
Total in Age Range:	828
Total Eligible (Meet inclusion/exclusion criteria):	660
Total Consented and Screened:	527
Total Refused:	107
Total Missed:	26

DEMOGRAPHIC CHARACTERISTICS OF SCREENED ADOLESCENTS (N = 527)

Demographic Characteristic	
Sex	65% Female; 35% Male
Age	*M*: 17.3 years (SD = 1.7)
Race/Ethnicity	
White/Caucasian	33%
Black/African American	51%
Multi-racial	13%
Hispanic	1%
Other	2%

BASELINE CLINICAL CHARACTERISTICS OF SCREENED ADOLESCENTS

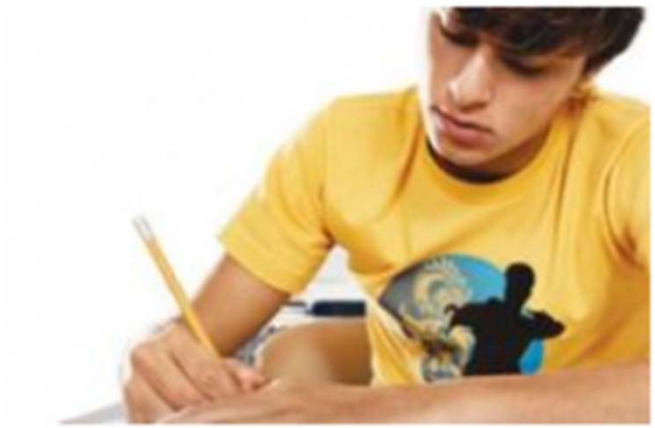
	Percent
Clinical Variables	
Suicidal Ideation in past 2 weeks	7.6%
Suicide Attempt in past month	2.3%
Above AUDIT (Alcohol Use) Cutoff	14%
Above CRAFFT (Drug Use) Cutoff	28%
Above RADS-2:SF (Depression) Cutoff	21%
Psychosocial Variables	
Unwed Pregnancy (Both M &F)	23%
Death of Parent	11%
Jail Sentence of Parent	22%
Death of Close Friend	52%

TOC PILOT RCT FINDINGS

	Control n= 22		TOC n = 24	
	Baseline M (SD)	2M Follow-up M (SD)	Baseline M (SD)	2M Follow-up M (SD)
Depression (RADS-2:SF)	**28.32 (3.4)**	**30.87 (4.0)**	**27.25 (4.2)**	**25.38 (4.7)**
Hopelessness (BHS)	8.79 (5.7)	8.64 (5.7)	7.94 (4.6)	5.66 (5.2)
Suicidal Ideation (SIQ-JR)	29.40 (24.6)	24.28 (17.3)	31.02 (19.6)	21.46 (17.4)
Alcohol Use (AUDIT)	5.05 (7.5)	5.95 (7.7)	5.17 (6.3)	4.71 (3.9)

Repeated measures analyses of variance (intent to treat) were used. For the RADS-2:SF, there was a significant main effect for treatment, $F(1,44) = 10.84$, $p < .01$], and a significant time X treatment interaction, $F(1,44) = 9.89$, $p < .01$. Adolescents randomly assigned to TOC showed greater improvements in self-reported depression severity.

SELF REPORT INSTRUMENTS AS PREDICTORS OF SUICIDAL THOUGHTS AND BEHAVIOR



Huth-Bocks, A. C., Kerr, D. R., Ivey, A. Z., Kramer, A. C., & King, C. A. (2007). Assessment of psychiatrically hospitalized suicidal adolescents: Self-report instruments as predictors of suicidal thoughts and behavior. ***Journal Of The American Academy Of Child & Adolescent Psychiatry*****,** ***46*****(3), 387-395.**

SUICIDAL IDEATION AND IMPULSES CLINICALLY USEFUL INSTRUMENTS (SOMEWHAT)

- Suicidal Ideation Questionnaire - Junior
  - Self-report; 15-item, 7-point frequency scale (SIQ-JR; Reynolds, 1988)
  - Excellent psychometric properties
  - Evidence of predictive validity
    - suicide attempts in American Indian adolescents (Keane et al., 1996)
    - post-hospitalization suicide attempts in adolescents (King et al., 1995)

SUICIDAL IDEATION AND IMPULSES CLINICALLY USEFUL INSTRUMENTS

- Beck Hopelessness Scale (BHS)
  - Self-report, 20-item true/false scale (Beck et al., 1974; Beck & Steer, 1988)
  - Evidence of predictive validity
    - Higher scores associated with treatment drop-out in adolescents (Brent et al., 1997)
    - Higher scores predict suicide attempts (among adolescents with prior history of attempt; Goldston et al., 2000)

ADOLESCENT SELF-REPORT MEASURES AS PREDICTORS OF SUICIDAL THOUGHTS AND BEHAVIORS

- Study Aim: Examine convergent and predictive validity of commonly used measures:
  - Beck Hopelessness Scale (BHS)
  - Suicidal Ideation Questionnaire- JR (SIQ-JR)
  - Reynolds Adolescent Depression Scale (RADS)
  - Suicide Probability Scale (SPS)
- Participants: 289 psychiatrically hospitalized suicidal adolescents, ages 12-17 years (54% suicide attempts)
- Design: Short-term longitudinal – 6 months

ADOLESCENT SELF-REPORT MEASURES AS PREDICTORS OF SUICIDAL THOUGHTS AND BEHAVIORS

- Results
  - All measures positively correlated at baseline (r = 0.56–0.83)
  - 14% (*n* = 32) suicide attempt during follow-up
  - Higher scores on all measures increased probability suicide attempt (controlled for gender)
  - Neither BHS nor RADS improved prediction beyond SIQ-JR or SPS
  - Sensitivity/Specificity of Published Cut points

	Score	Sensitivity %	Specificity %
SIQ- JR	31	77	41
SPS	78	80	57

12-MONTH PREDICTIVE VALIDITY OF SUICIDAL IDEATION FOR SUICIDE ATTEMPTS

King, C. A., Jiang, Q., Czyz, E. K., & Kerr, D. R. (2012). Twelve-month predictive validity of suicidal ideation for psychiatrically hospitalized adolescent boys and girls. Manuscript under review.

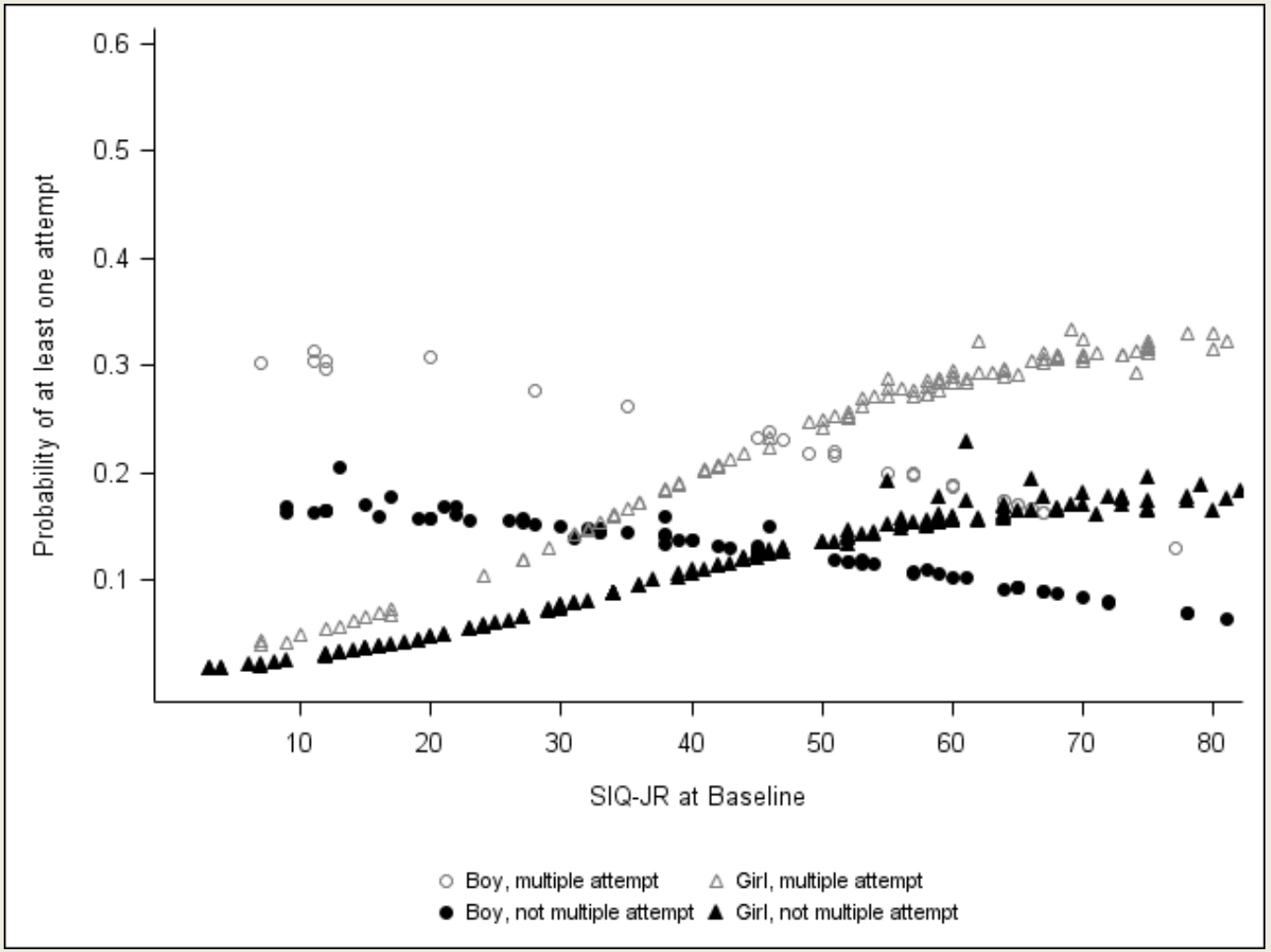
SUICIDAL IDEATION QUESTIONNAIRE-JR RECENT FINDINGS

- Sample: 354 psychiatrically hospitalized, suicidal adolescents, 13-17 years

- Method:
  - Examine predictive validity of total score for boys and girls across 12 months
  - Zero-inflated negative binomial model

King, C. A., Jiang, Q., Czyz, E. K., & Kerr, D. R. (2012). Twelve-month predictive validity of suicidal ideation for psychiatrically hospitalized adolescent boys and girls. Manuscript submitted for Publication.

PROBABILITY > 1 SUICIDE ATTEMPT AS FUNCTION OF SIQ-JR SCORE, GENDER, MULTIPLE ATTEMPT HISTORY



SUICIDAL IDEATION QUESTIONNAIRE-JR RECENT FINDINGS FROM PSYCHOMETRIC STUDY

- Total scores ONLY had predictive validity for girls
- Consistent with findings from large-scale community-based prospective study (Lewinsohn et al., 2001)
- Not idiosyncratic to instrument – these clinical sample and community sample studies used different instruments
- Challenge as male adolescents much higher suicide rate

C-SSRS PREDICTIVE VALIDITY

King, C. A., Gipson, P., Agarwala, P., & Opperman, K. J. (November, 2011). Columbia - Suicide Severity Rating Scale: Predictive Validity with Adolescent Psychiatric Emergency Patients. Presented at the National Network of Depression Centers Conference. Baltimore, MD.

SUICIDAL IDEATION AND ATTEMPT SEVERITY CLINICALLY USEFUL INSTRUMENTS

- Columbia Suicide Severity Rating Scale (C-SSRS)
  - Interview format (Posner et al., 2005, 2011)
    - Assesses suicidal ideation along a spectrum: “wish to be dead” to “suicide intent with a specific plan”
    - Details actual, interrupted, aborted attempts, preparatory acts, and self-injurious behavior
  - Assesses for previous week and lifetime (or since last interview)

PREDICTIVE VALIDITY OF COLUMBIA SUICIDE SEVERITY RATING SCALE (C-SSRS) WITH ADOLESCENTS

- C-SSRS: Interview format (Posner et al., 2005, 2011)
- Assesses suicidal ideation along a spectrum: “wish to be dead” to “suicide intent with a specific plan”
- Details actual, interrupted, aborted attempts, preparatory acts, and self-injurious behavior
- Assesses for previous week and lifetime (or since last interview)
- Increasingly being used!

STUDY AIMS

- Examine C-SSRS past week Suicidal Ideation variables as predictors of suicide attempts (with/without aborted and interrupted attempts)
  - Severity of Ideation (5-point ordinal scale from “wish to be dead” to “suicidal intent with plan”)
  - Intensity of Ideation (frequency, duration, controllability, deterrents, reason for ideation)
- Examine C-SSRS Suicidal Behavior and Non-Suicidal Self Injurious Behavior as predictors of suicide attempts.

PARTICIPANT DEMOGRAPHICS (*N* = 186)

- Ages: 13-17 years (*M* = 15.24, *SD* = 1.35)
- Gender: 44.6% Male, 54.8% Female
- Race/Ethnicity*
  - Caucasian: 131
  - African American: 40
  - Asian: 4
  - Hispanic: 6
  - Other: 9
- Insurance
  - Medicaid/None: 34.9%
  - Private: 64.5%
  - Missing: 0.5%

*** 5 participants endorsed two Race/Ethnicities**

BASELINE CLINICAL CHARACTERISTICS

- Reason for visit*
  - Suicidal Ideation/Attempt: 93
  - Aggression: 39
  - Other: 65
- Past psychiatric history (yes/no): 78.0%
- Number of past psychiatric emergency visits
  - 0 = 59.1%
  - 1 = 24.7%
  - ≥ 2 = 15.2%
- Current psychotropic medications
  - None = 76
  - Anti-depressants = 62
  - Mood Stabilizers = 26
  - Anti-psychotics = 53
  - Stimulants = 42
  - Benzodiazepines = 15

*** 11 adolescents with two recorded reasons for visit and 1 adolescent with three.**

BASELINE CLINICAL CHARACTERISTICS

- Diagnosis in ED
  - Mood/anxiety: 155
  - ADHD: 39
  - Psychosis: 16
  - Autism Spectrum: 6
  - Eating Disorder: 5
  - Other: 52

- Disposition
  - Hospitalization: 37.1%
  - Return to Outpatient Provider: 30.6%
  - New Provider: 26.9%
  - Partial Program: 3.2%
  - Missing/Other: 3.7%

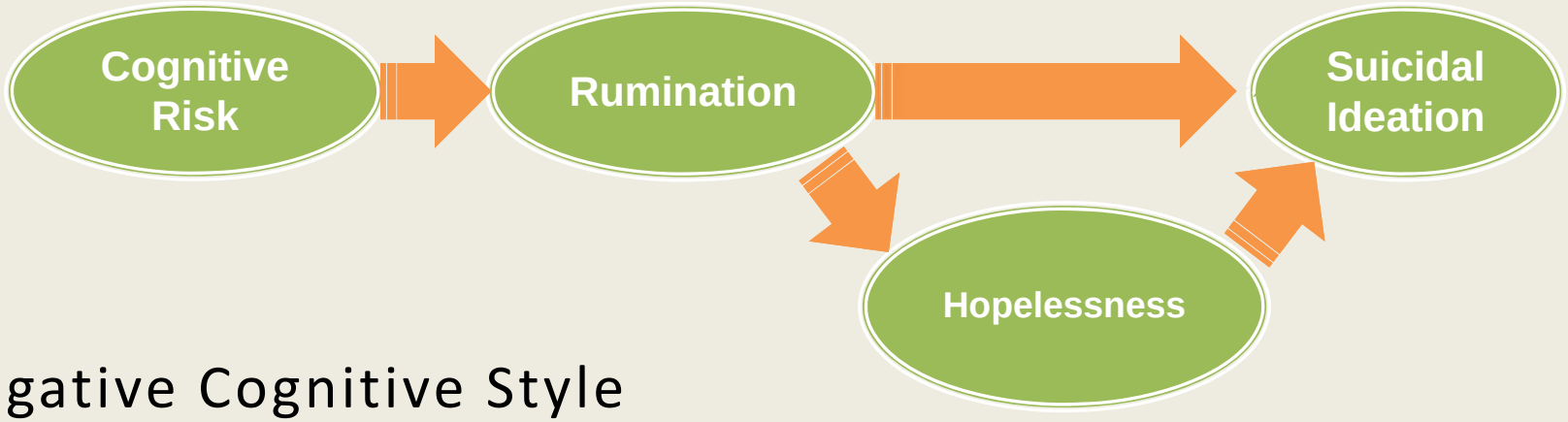
BASELINE CLINICAL CHARACTERISTICS

- History of Suicidal Behavior
  - Actual Attempt
    - Lifetime- 30.6%
    - Past Week- 12.9%
  - Aborted Attempt
    - Lifetime- 8.6%
    - Past Week- 5.9%
  - Interrupted Attempt
    - Lifetime- 7.0%
    - Past Week- 7.0%

RESULTS FOR PREDICTIVE VALIDITY

- Results
  - Predictors of return PE visits (OR; 95% CI)
    - # of past PE visits- (1.66; 1.21-2.28)
    - C-SSRS Intensity Scale item: Duration- (1.92; 1.12-3.28)
  - Predictors of suicide attempts at follow-up
    - # of past PE visits- (1.73; 1.06-2.84)
    - C-SSRS Intensity Scale- (1.09; 1.01-1.17)
    - C-SSRS Intensity Scale item: Duration- (3.26; 1.20-8.85)

ATTENTION MEDIATED HOPELESSNESS MODEL OF SUICIDAL IDEATION SMITH, ALLEY, & ABRAMSON (2006)



- Negative Cognitive Style
  - Dysfunctional attitudes, depressogenic thinking, negative inferences
- Rumination
  - "repetitive contemplation of one's negative affect" – MULLING OVER THE CAUSES, CONSEQUENCES, AND SYMPTOMS OF DEPRESSED MOOD
- Leads to hopelessness, which predicts suicidal thinking

ADOLESCENT AND YOUNG ADULT PSYCHIATRIC EMERGENCY PATIENTS: The C-SSRS as a Predictor of Suicide Attempts for Males and Females

Horwitz, A., Czyz, E. K., & King, C. A. (2012). A longitudinal investigation of suicide attempts among adolescents and young adults seeking psychiatric emergency services. Manuscript in preparation.

GENDER DIFFERENCES

- "Gender Paradox" - Canetto & Sakinofsky, 1998
  - Females more likely to think about and attempt suicide, males more likely to die by suicide.
- Females are appx. 2-3x more likely to endorse suicidal thoughts and past attempts of suicide.
- Males in USA (ages 15-24) were nearly 6x more likely to die by suicide from 1999-2007 (CDC).
- Internalizing vs. Externalizing
- Males more likely than females to be intoxicated at time of attempt, use more lethal means of attempting suicide (Marttunen et al., 1991)

REMAINING PROBLEMS

- Suicide screens are very good at capturing individuals at high risk, but also have many false positives.
  - Need to improve ways to identify and intervene
- Certain aspects within known risk factors (e.g., severity/intensity of suicidal thoughts) not yet fully examined
- Still unclear how certain risk factors might vary in predictive ability based on gender
  - Recent study (King et al., manuscript under review) indicates gender moderates relationship between suicidal ideation future suicide attempts.
    - Females: Suicidal ideation scores predict future attempts
    - Males: Suicidal ideation scores do NOT predict future attempts

METHOD

- Participants
  - 473 patients, ages 15-24, Washtenaw county residents, presenting from Oct ‘09 – Jun ’10
    - Followed for 18 months
- Measures
  - C-SSRS administered by PES staff (clinical protocol)
  - Chart review coded from doctor and nurse/SW notes
- Coding/Reliability
  - Double coded portion of doctors notes, alpha = .XX

RESULTS
SAMPLE DEMOGRAPHICS

Demographic Characteristics	
N	473
Sex	53% Female; 47% Male
Age	*M*: 19.4 years (SD = 2.9)
Race/Ethnicity	
White/Caucasian	69%
Black/African American	17%
Multi-racial	5%
Hispanic	2%
Multiracial	7%
Insurance	
Private	63%
Medicaid	27%
None	11%

RESULTS
BASELINE CLINICAL CHARACTERISTICS

	Males (n = 222)	Females (n = 251)	χ^2 p-value
Lifetime NSSI	33.6%	57.2%	<.001
Past week attempt	7.6%	7.8%	.924
Lifetime attempt	25.2%	33.9%	.040
Multiple past attempts	11.7%	18.7%	.035
Current suicidal ideation	42.4%	52.8%	.028
Current suicide intent	21.4%	26.0%	.263

RESULTS SUMMARY

- Lifetime attempt and suicidal ideation severity/intensity predict future suicide attempts for both males and females.
- Non-suicidal self-injury was a significant predictor of a future attempt, but not when past attempt and current ideation were also controlled for.
- Among those with some suicidal ideation, the duration of thoughts was predictive for male future suicide attempts (3x per point), but not females.

SUICIDE RISK ASSESSMENT AND FORMULATION IN CHILDREN AND ADOLESCENTS AN EVIDENCE-BASED APPROACH

- Thank you
- For further information:
  - kingca@umich.edu