

## The High School Transition Study

University of Washington  
&  
Seattle Children's Hospital  
&  
Seattle Public Schools

## High School Transition Study: Team

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## Background and Overview

What is **HSTS** all about????


Test an evidenced based Preventive Intervention to see if we can reduce risk of

- ✓ Depression
- ✓ School Problems
- ✓ Drug Use

as "at-risk" 8<sup>th</sup> graders transition into high school



## Background and Overview



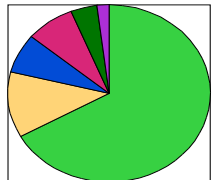
Why the focus on Depression?

## Scope of the Problem

- World Health Organization
  - Unipolar depression leading cause of disability worldwide in 15-44 year age range
- Depressive Disorders
  - Population studies:
    - Children--1 yr prevalence 2%
    - Adolescents--1 yr prevalence 4% to 7%
    - National Cormorbidity Survey-6.1%, 15-24 yrs.
  - Lifetime prevalence (up to age 18) of 15% to 20% among adolescents
  - 65% of adolescents report some depressive symptoms

## Scope of the Problem

- ! WA State--Mental Illness reason for 1 in 5 hospitalizations among adolescents 15-19 yrs. of age (1999)
- ! 19% of adolescents w MH admits + for substance use



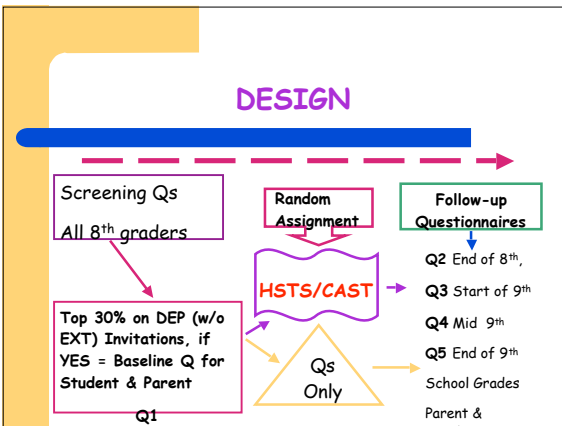
FR: The State of Washington's Children, Fall-2001

### Background and Overview


- Stress-Diathesis Model of Depression
  - Vulnerability of Early Adolescents = Diathesis
    - Biological, Social and Cognitive changes
  - Transition to high school = stressor
- Transition to high school is associated with declines in school performance and increased depression and behavioral problems.
- Early intervention designed to support and strengthen the skills of vulnerable students may increase chances of a successful start in high school

### Background and Overview

- The High School Transition Study uses a randomized controlled design to evaluate a skills-based program for at-risk 8<sup>th</sup> grade students → Coping and Support Training (CAST)
- Students are followed from middle of 8<sup>th</sup> grade through the end of their 9<sup>th</sup> grade year.
- Currently, finishing intervention for first cohort and recruiting new cohort of 8<sup>th</sup> grade students. Two additional cohorts will follow.



### CAST Model



- Coping and Support Training (CAST) was developed at the UW School of Nursing for use with at-risk high school students (Eggert & Nicholas)
- CAST is a brief, preventive intervention with three main goals: Improving School Performance, Mood Management (depression/aggression/suicide risk) & Drug Use Control
- CAST uses a peer group approach to building personal competencies and social resources for vulnerable youth

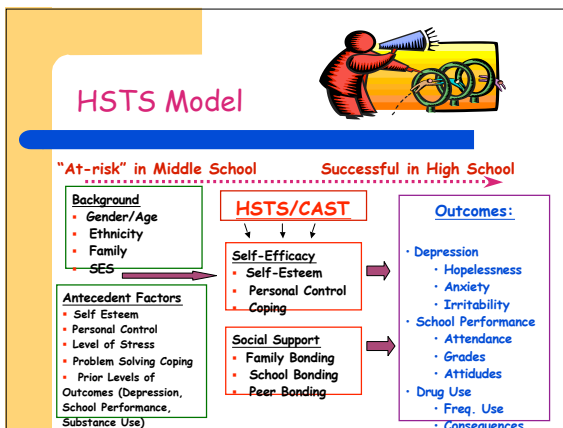
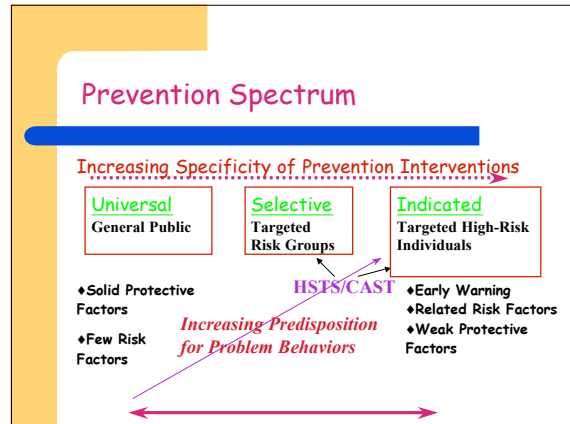
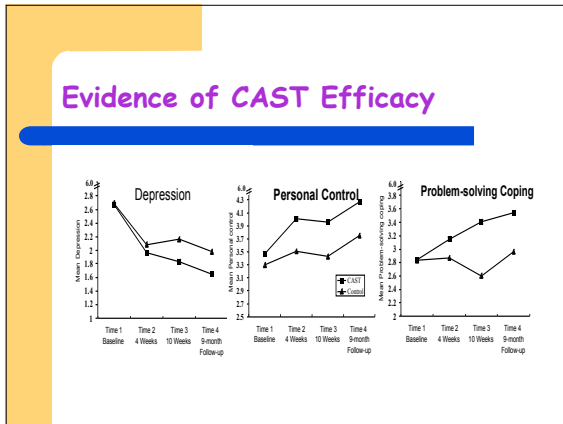
### Why CAST?

- 416 at risk high school students
- Risk determined by school records (attendance, credits grades, referrals from school personnel)
- Students randomly assigned to CAST or "usual care".
- Findings:
  - Significant decreasing linear trends in depression and suicide risk for both
  - Group x time interaction-- significantly greater reductions in depression for youth participating in the CAST preventive intervention over all times whereas the effects of usual care leveled off
  - 62% reduction in hard drug use, 16% reduction in alcohol use

### Why CAST?

- CAST intervention was also superior in enhancing:
  - self-esteem ( $F_{1,281} = 8.59, p < .01$ ),
  - personal control ( $F_{1,281} = 4.88, p < .05$ ),
  - problem-solving coping ( $F_{1,281} = 13.18, p < .001$ ),
  - family support ( $F_{1,281} = 5.17, p < .001$ )

These are posited mediating factors of depression and are targeted directly in the CAST skills training



- ### CAST Group Structure and Content
- Goals—Increasing school performance, mood management, drug use control
  - Skills based curriculum
    - 12, 1-hour sessions over six week period.
    - Welcome Session; A Graduation Celebration
    - 10 skills training sessions
  - Increasing social support--teacher, family, peer
  - 6-7 students per group
  - Conducted twice weekly by specially selected and trained group leaders

- ### CAST Content
- Skills
    - Self-esteem enhancement
    - Decision-making
    - Personal control (anger, depression, stress management)
    - Interpersonal communication
  - Applied to:
    - School Smarts
    - Mood Management #1 and #2
    - Drug Use Control

- ### High School Transition Study: (HSTS/CAST)
- Target 8<sup>th</sup> grade students at risk for depression as they transition to high school
  - Goals: Increased Mood Management, School Smarts and Drug Use Control
  - Components:
    - Evidenced based CAST in 8<sup>th</sup> grade
    - Enhanced by:
      - Booster Sessions and Case Management for Students in 9<sup>th</sup> grade
      - Parent Sessions—8<sup>th</sup> and 9<sup>th</sup> grades

### HSTS 9<sup>th</sup> Grade Intervention

- Following skills group in 8<sup>th</sup> grade, group leaders met individually with each member from group 4 times during fall and winter of 9<sup>th</sup> grade
- Boosters designed to reinforce skills from 8<sup>th</sup> grade, and tailor them to student's current challenges as well as provide ongoing support

### CAST-T Boosters

- Boosters:
  1. Getting Started in High School
  2. Staying Positive Under Pressure  
Monitoring school performance, Taking control of your moods
  3. Staying on Track  
Getting through end of semester, starting out strong 2<sup>nd</sup> semester
  4. Relapse Prevention

### CAST-T Parent Intervention

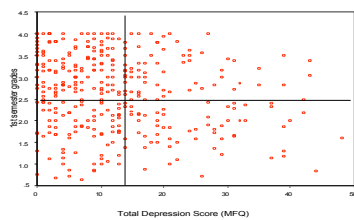
Parents met one-on-one with a parent leader: twice in spring of 8<sup>th</sup> grade, twice in fall of 9<sup>th</sup> grade.

1. Getting Acquainted and Monitoring Support  
Overview of CAST program, ways to support teen
2. Communicating with Support  
Active listening, "I" statements
3. Taking the Pulse of teen's transition to HS  
Student's progress in HS, developing support menu/contract
4. Staying on Track—School success
  - Understanding teen's moods, Supporting drug use control

### How to identify kids at-risk for depression??

- Parental History
  - Life Stress
  - School Performance
  - Signs and Symptoms of Depression
- BUT **HSTS/CAST** is a...
- School based, prevention study
    - School performance
    - Signs of distress

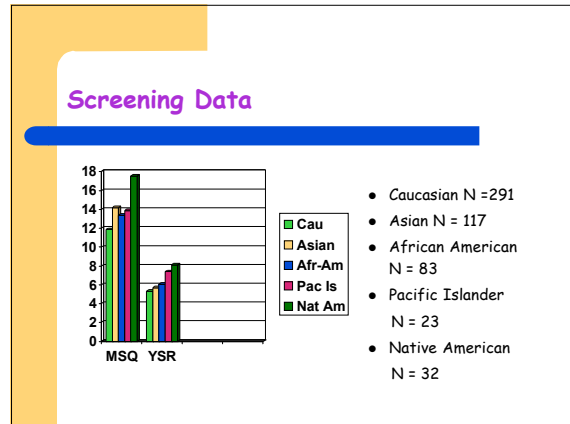
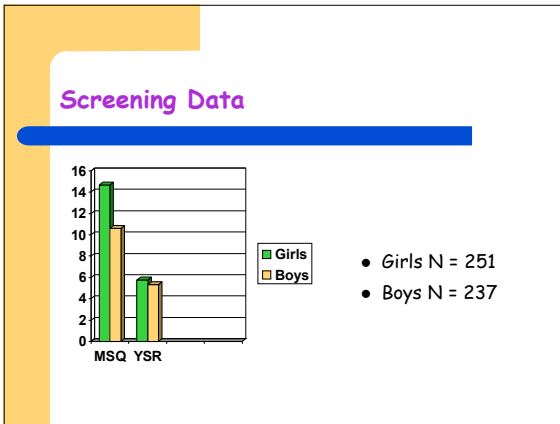
### School GPA and Depression



### Procedures: Identifying kids at-risk for depression

- **HSTS/CAST** screening tools:
  - Moods and Feelings Questionnaire (MFQ: Angold et al., 1995)
  - Youth Self Report (Achenbach, 1991)

Only students with high MFQ scores (>15) and low YSR scores (< 18) were invited to Part 2 (randomization to **HSTS/CAST** or school as usual).



- ### Procedures: Clinical Evaluations
- Before invitation to Part 2, one-on-one follow-up interviews were conducted with every student who scored in the top 30-40% on screen (indicating more distress)
  - Clinical evaluators utilized a standardized interview that addressed impairment: mood and disruptive behavior and protective factors: social support and personal control
  - Clinical evaluators work with parents and school counselors to provide any needed referrals or additional resources (e.g., tutoring, mental health referrals, after school activities).

- ### Procedures: Assessment
- Students complete 5 questionnaires: Baseline, end of 8<sup>th</sup>, beg, middle and end of 9<sup>th</sup> grade
  - Parents complete three questionnaires: Baseline, end of 8<sup>th</sup>, middle of 9<sup>th</sup> (at completion of intervention)
  - Teachers also are asked to complete a TRF for students. Each student nominates the teacher who knows them best in 8<sup>th</sup> and in 9<sup>th</sup>

- ### Cohort 1:
- 493 8<sup>th</sup> grade students were screened last spring in 3 Seattle middle schools
  - 174 received a follow-up clinical evaluation.
  - 51 of the 174 students were connected to other services (e.g., tutor, after school program, mental health referrals).
  - 88 students and their parents participated in the second part of the study: 44 in the skills group, 44 in the school as usual condition

### Cohort 1: Description

	Screened	Part 2
Male	48.3%	31.8%
Female	51.7%	68.2%
White	55.6%	56.8%
Black	18.5%	20.5%
Asian	20.1%	17.0%
Native Am.	5.3%	4.5%
Hispanic	8.1%	8.0%
Other	0.6%	1.1%

### Preliminary Results

Mood based on Moods and Feelings Questionnaire (higher scores indicate more distress):

MFQ Means (SD)	Control	Intervention
Baseline**	9.04 (5.74)	8.53 (5.23)
End of 8 <sup>th</sup>	7.07 (4.83)	7.68 (4.92)
Beg. of 9 <sup>th</sup>	6.09 (5.52)	6.89 (6.51)

\*\* Baseline scores based on brief MFQ with 13 items and 11 as clinical cutoff, versus longer MFQ used in screen with 15 as our cutoff for "distress"

### Preliminary Results

Percentage of students who had tried following:


	Intervention	Control
<u>Smoking % tried</u>		
Baseline	19.0	23.3
End of 8 <sup>th</sup>	23.3 N = 44	20.9 N = 44
Beg. 9 <sup>th</sup>	30.2	31.0
<u>Drink % tried</u>		
Baseline	35.7	57.1
End of 8 <sup>th</sup>	42.9	46.5
Beg. of 9 <sup>th</sup>	44.2	46.5
<u>Marijuana % tried</u>		
Baseline	27.9	31.0
End of 8 <sup>th</sup>	30.2	30.2

### Preliminary Results

- All intervention students completed the Personal and Social Skills Inventory (PSSI: Eggert, Thompson, Herting & Nicholas, 1995) assessing skill acquisition.

Means (SD) from PSSI	Baseline	Beg. Of 9 <sup>th</sup>
Apprec. Others	3.55 (.72)	3.70 (.59)
Decision Making	3.37 (.76)	3.43 (.66)
Managing Moods	3.42 (.93)	3.41 (.68)
Managing School	3.76 (.86)	3.70 (.58)
Controlling Drug Use	4.00 (1.06)	4.12 (.98)
Total Skills	3.60 (.71)	3.64 (.52)

### Summary: Preliminary Thoughts

- Feasible
- Acceptable to 8<sup>th</sup>/9<sup>th</sup> graders and their parents
- Things people like:
  - Schools: Screening, rotation of pull outs, FU in 9<sup>th</sup>
  - Students: Being "asked", "stuff", individual FU
  - Parents: Home visits, chance to talk about their teen, focus on school performance
  - HSTS folks: Clinical evals, chance to follow up indiv, parent and child feedback, curriculum! 
- Efficacy -Too soon to tell.....