



Focus on the Whole Child...Preventing Youth Violence and Gangs  
Safe & Supportive Schools and Communities Consortium  
Hofstra University  
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## Using Prevention Science to Improve Children's Academic and Behavioral Outcomes in Primary and Secondary School

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# Leading Predictors of School Dropout

- Poverty
- Delinquency and Drug Abuse
- Academic Competence

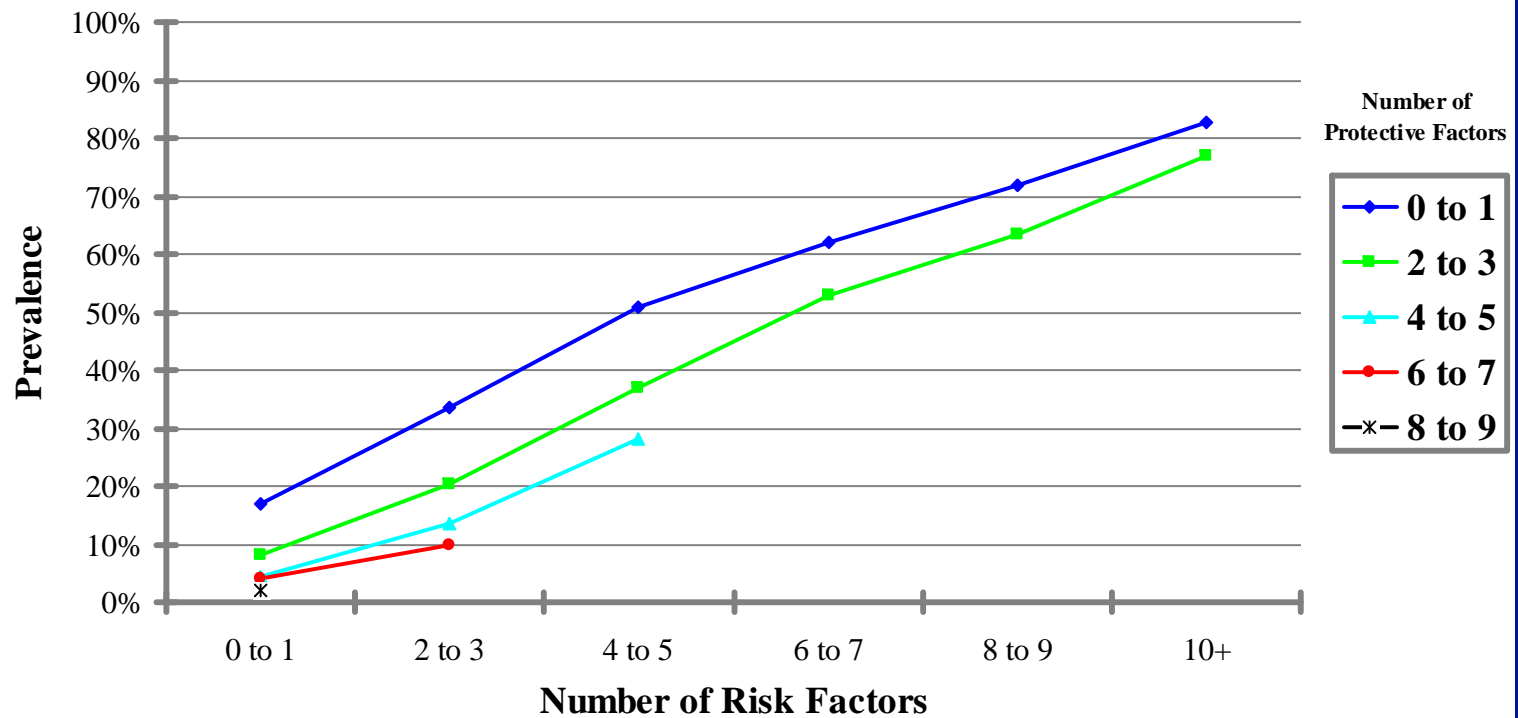
S	D
R	G

# Academic Competence, Delinquency, and Drug Abuse

- Are the strongest predictors of dropout
- Are modifiable
- Share common predictors

# Risk increases and Protection Decreases Prevalence of 30 Day Alcohol Use

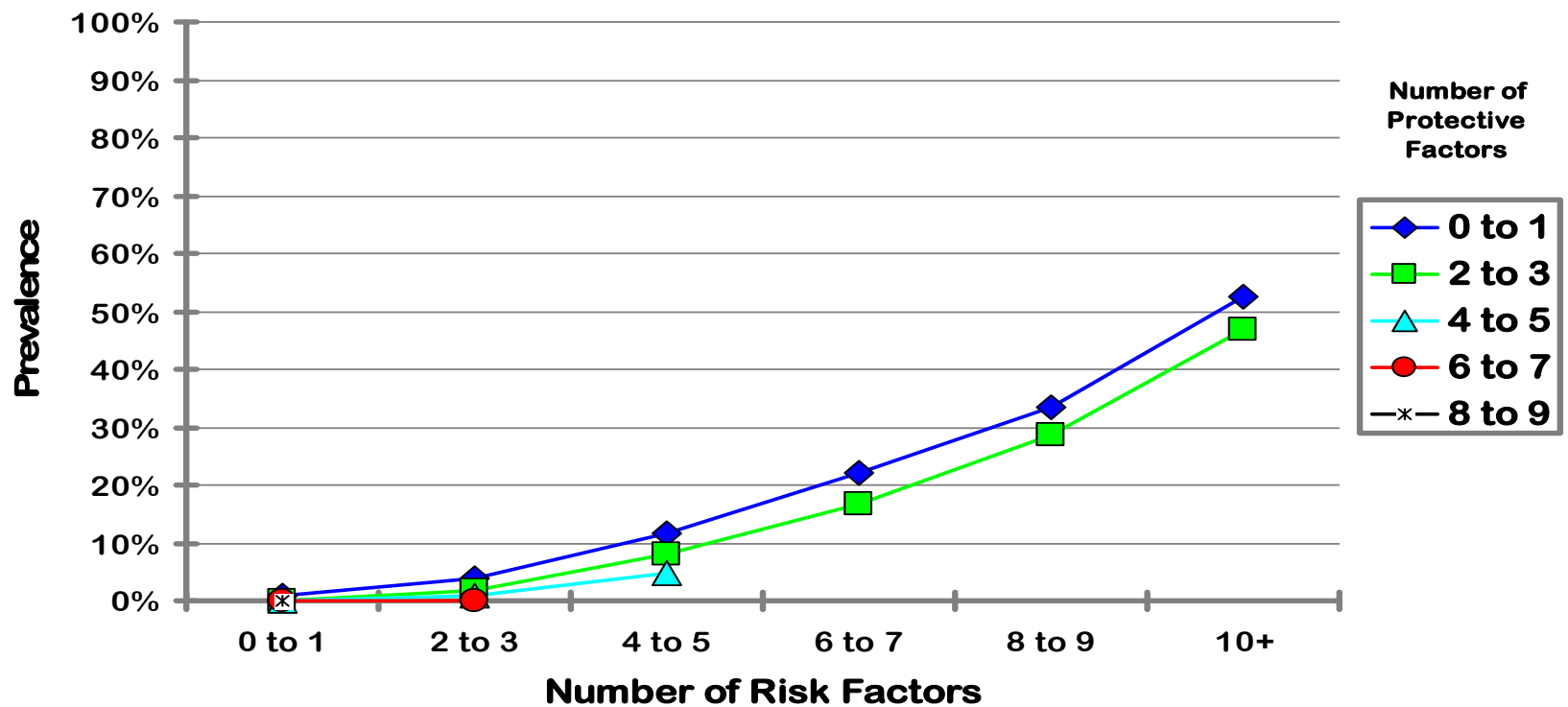
Six State Student Survey of 6th-12th Graders, Public School Students





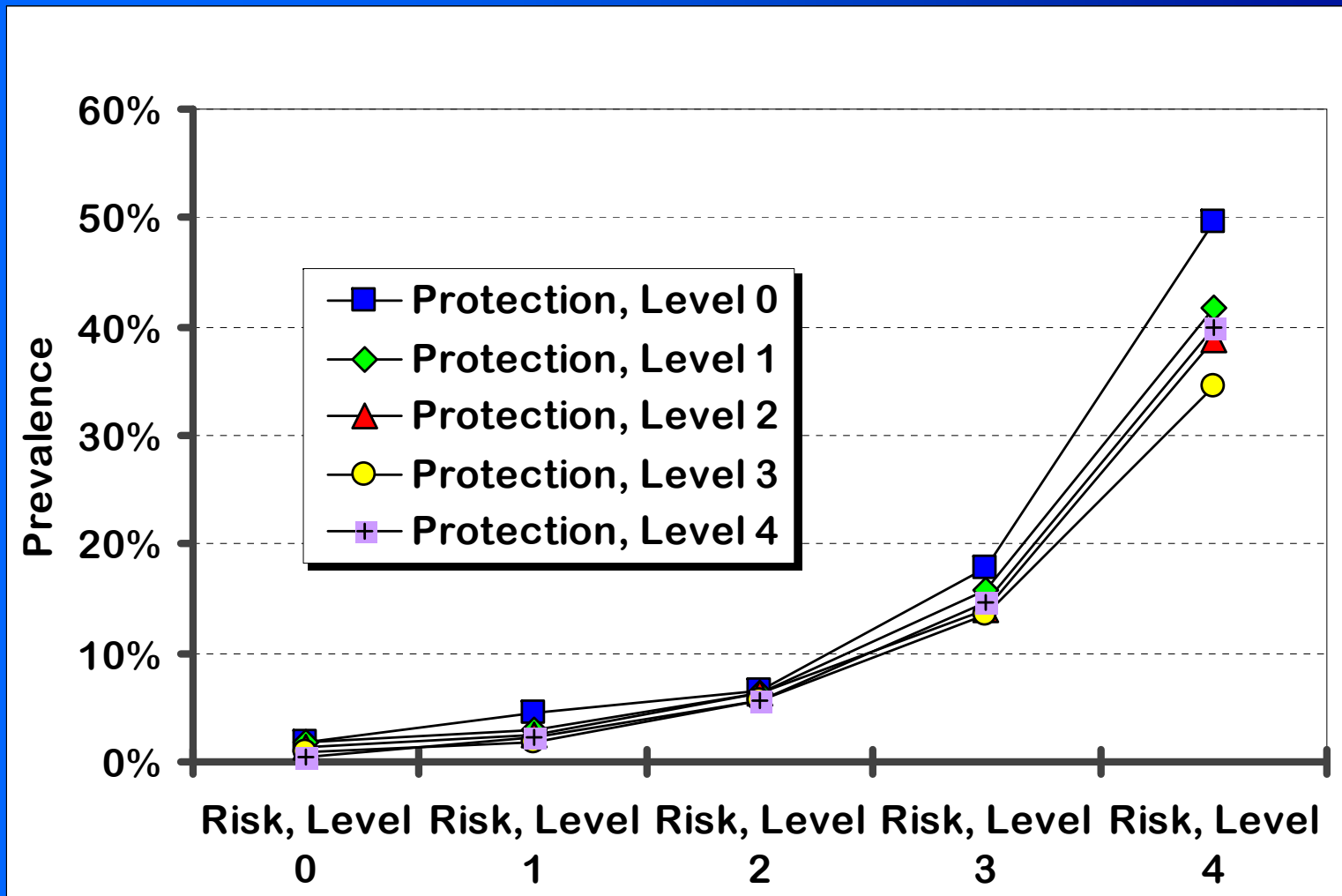
# Risk Increases and Protection Decreases Prevalence of 30 Day Marijuana Use

Six State Student Survey of 6th-12th Graders, Public School Students



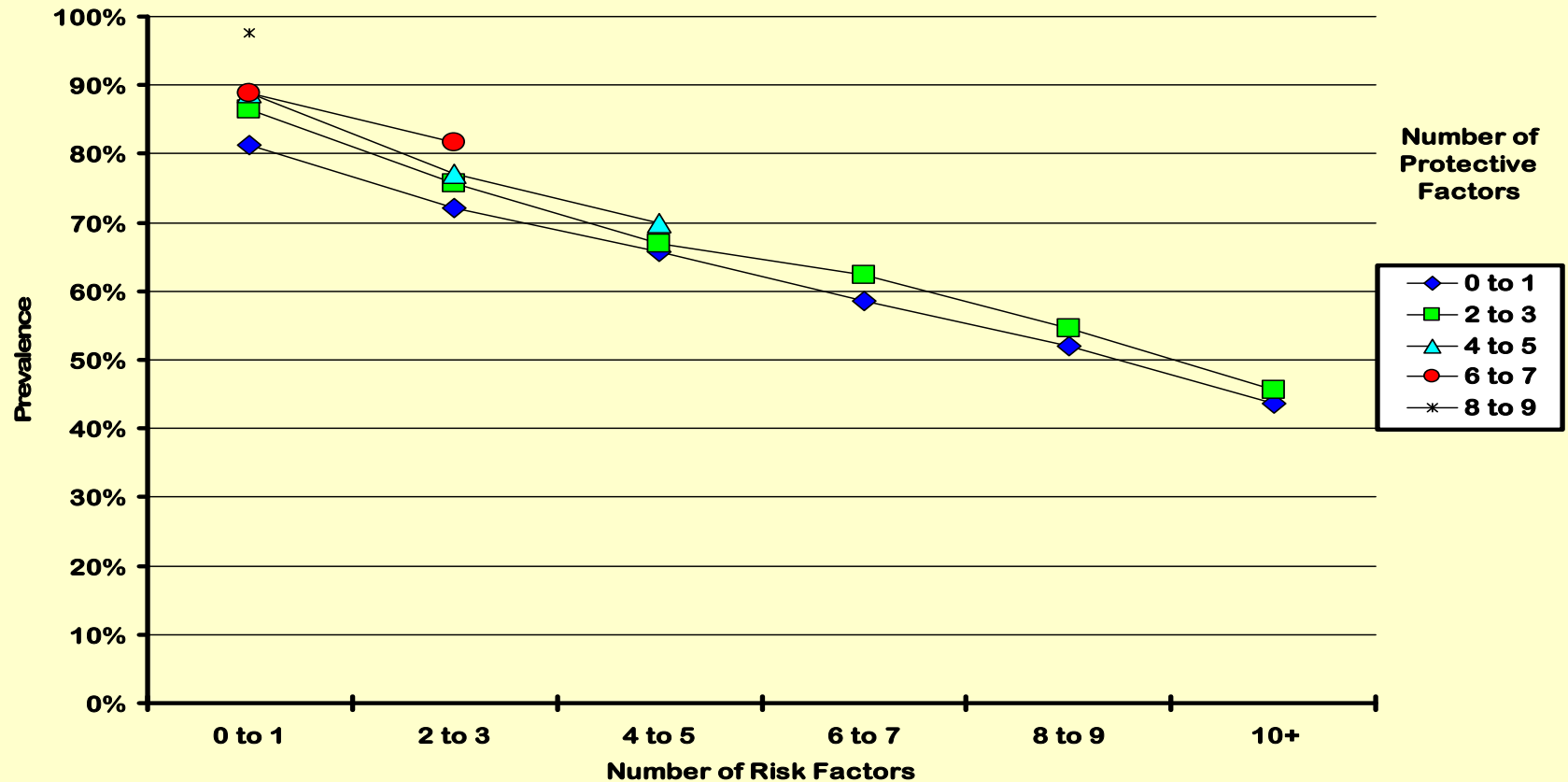


# Risk Increases and Protection Decreases Prevalence of "Attacked to Hurt"

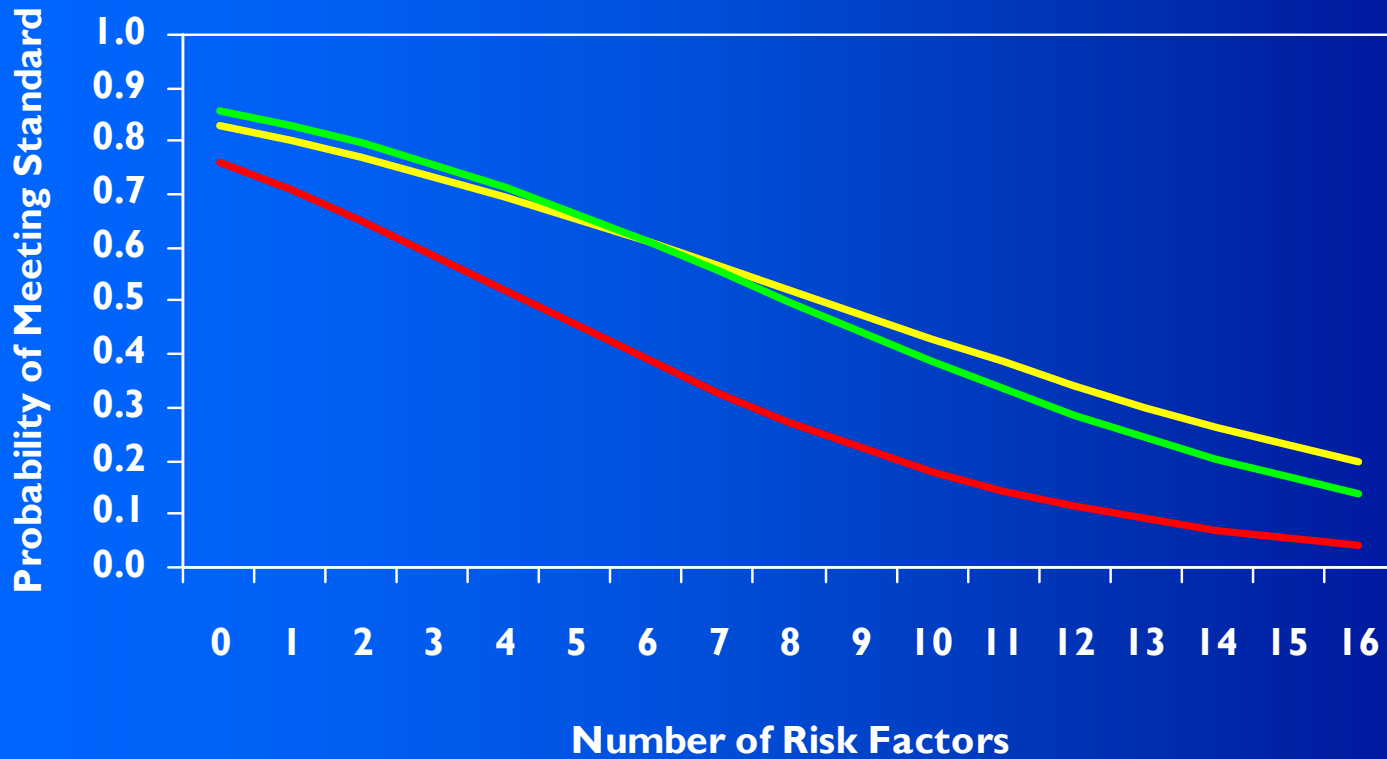


# Risk Decreases and Protection Increases Prevalence of Academic Success (B or better average)

Six State Student Survey of 6th-12th Graders, Public School Students



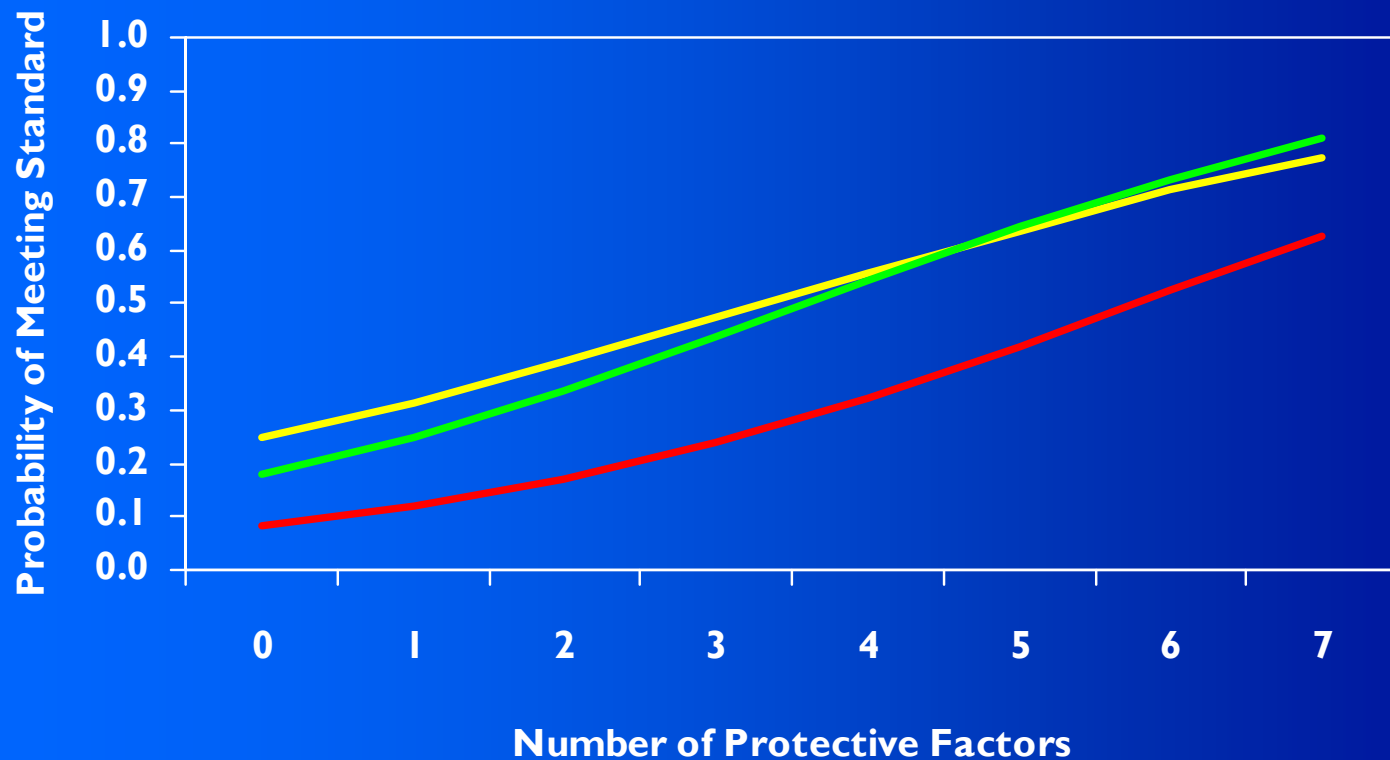
# Number of School Building Risk Factors and Probability of Meeting WASL Standard (10<sup>th</sup> Grade Students)



— **Math** — **Reading** — **Writing**

S D  
R G

# Number of School Building Protective Factors and Probability of Meeting WASL Standard (10<sup>th</sup> grade students)



— Math — Reading — Writing

S	D
R	G

# Prevention Partnerships with Schools are Necessary

If students are to achieve their best, schools must address risk and protection to remove barriers to learning as well as enhance achievement and school commitment

# Premise of Prevention Science

Academic success can be promoted and, adolescent problems can be prevented if we identify and address the factors that predict these behaviors

# Advances in Prediction

- Longitudinal studies have identified predictors of positive outcomes like success in school
- As well as the predictors of substance abuse, violence and other problem behaviors

S D

R G

# Variations in Predictors across Development and Place

- Predictors become salient at different points in development
- The expression of predictors changes with development
- Communities and schools may experience different levels of predictors

S	D
R	G

# Adolescent Problem Behaviors

Age

Prenatal +  
4+  
8+

Risk Factors

	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence	Depression & Anxiety
<b>Family</b>						
Family History of the Problem Behavior	✓	✓	✓	✓	✓	✓
Family Management Problems	✓	✓	✓	✓	✓	✓
Family Conflict	✓	✓	✓	✓	✓	✓
Favorable Parental Attitudes and Involvement in the Problem Behavior	✓	✓			✓	

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# Adolescent Problem Behaviors

Age

Risk Factors

School

8+

Academic Failure Beginning in Late Elementary School

10+

Lack of Commitment to School

Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence	Depression & Anxiety
✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	

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# Adolescent Problem Behaviors

Age

4+

10+

12+

birth

Risk Factors

Individual/Peer

Early and Persistent Antisocial Behavior

Rebelliousness

Friends Who Engage in the Problem Behavior

Favorable Attitudes Toward the Problem Behavior

Early Initiation of the Problem Behavior

Constitutional Factors

	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence	Depression & Anxiety
Early and Persistent Antisocial Behavior	✓	✓	✓	✓	✓	✓
Rebelliousness	✓	✓		✓		
Friends Who Engage in the Problem Behavior	✓	✓	✓	✓	✓	
Favorable Attitudes Toward the Problem Behavior	✓	✓	✓	✓		
Early Initiation of the Problem Behavior	✓	✓	✓	✓	✓	
Constitutional Factors	✓	✓			✓	✓

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# Adolescent Problem Behaviors

Age

9+

4+

6+

prenatal

## Risk Factors

	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence	Depression & Anxiety
Community						
Availability of Drugs	✓				✓	
Availability of Firearms		✓			✓	
Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime	✓	✓			✓	
Media Portrayals of Violence					✓	
Transitions and Mobility	✓	✓		✓		✓
Low Neighborhood Attachment and Community Disorganization	✓	✓			✓	
Extreme Economic Deprivation	✓	✓	✓	✓	✓	

# Protective Factors

## Individual Characteristics

Birth+

- High Intelligence
- Resilient Temperament

3+

- Competencies and Skills

## In each social domain (family, school, peer group and neighborhood)

3+

- Prosocial Opportunities
- Reinforcement for Prosocial Involvement

Birth

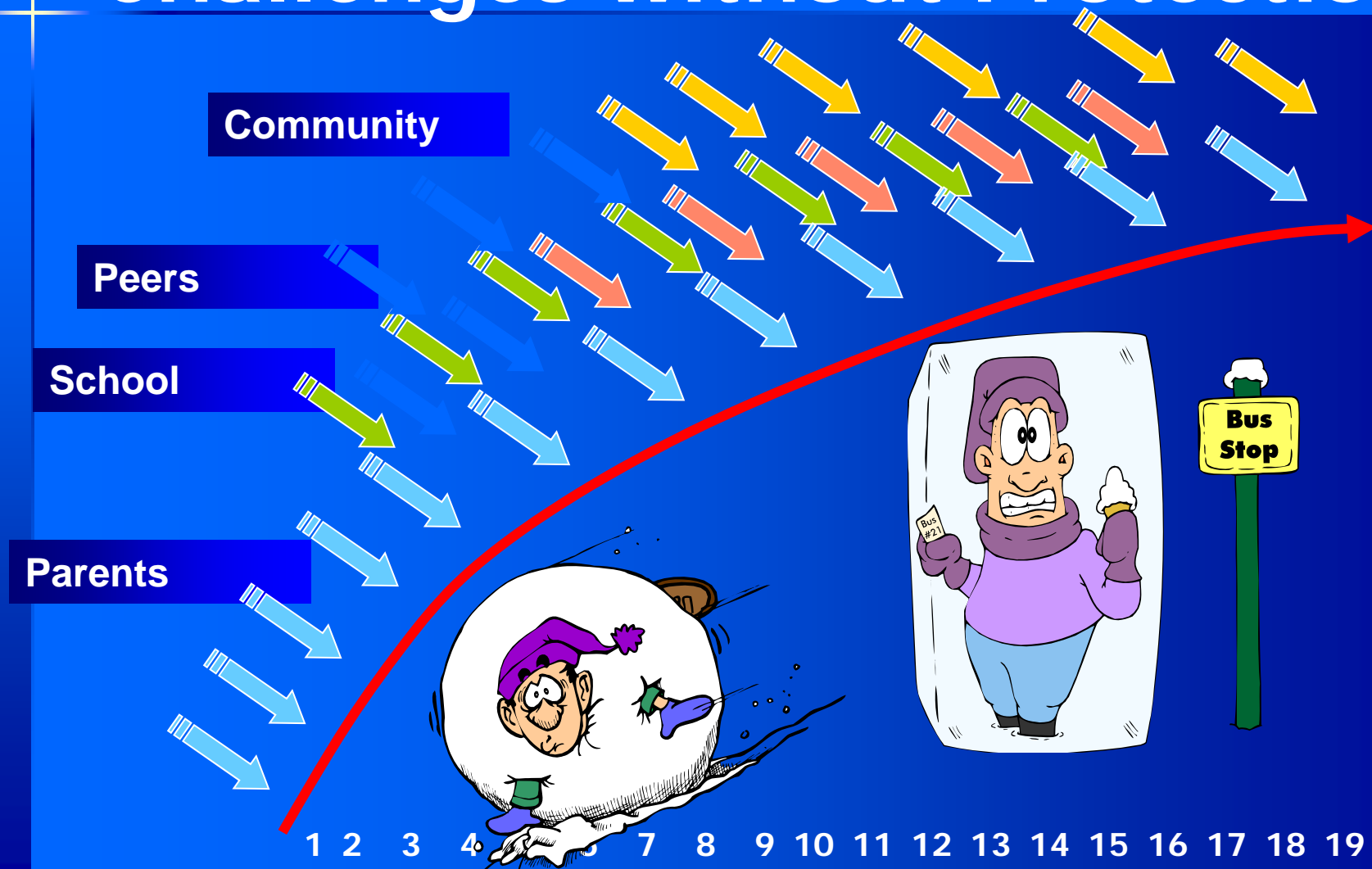
- Bonding

9+

- Healthy Beliefs and Clear Standards

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# Snowball: Risk Accumulates Developmental Exposure of Positive Norms Early Develop Prohibit Predictors Behavior without Protection Challenges without Protection



# Implications for Intervention

- Interventions aimed at specific developmental periods should address salient risk and protective factors
- Both early prevention and prevention during adolescence are needed to address Snowball and Snowstorm patterns of risk and protection

# Variations in population level predictors

- Predictors become salient at different points in development
- The expression of predictors changes with development
- Communities and schools may experience different levels of predictors



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**Robert Abbott, *Investigator***

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# Family Management Targets across Development

## Family Management Components

Developmental Period	Guidelines	Monitoring	Consequences
Primary School	Television Homework Bedtime	e.g. Direct supervision; family meetings	Praise, Rewards Time out,
Middle School	Homework TV Internet Knives/Guns Clothes	e.g. Family meetings, Talk to other parents; Homework checks, Calling after school	Privileges Restrictions Contracts
High School	Friends Driving Substance Use	e.g. Kissing child good night, Teen checks in, Talking to friends parents	Driving, Privileges, Contracts for behavior



# Family Education Programs Primary School

## Grades Topic

- 1-3** Proactive Family Management
- 1-3** Helping Your Child Succeed in School
- 4-6** Preparing for adolescence



# Family Education Topics in Secondary School

<b>Grade</b>	<b>Topic</b>
<b>6-7</b>	<b>Moving into Middle School</b>
<b>8-9</b>	<b>Moving into High School</b>
<b>10</b>	<b>Safe Driving</b>
<b>11-12</b>	<b>Navigating Independence</b>

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# Advances in Program Testing

Controlled trials have identified both effective prevention and youth development policies, programs and actions.

# Effective Parent Training Programs

Pre-natal-2

- Nurse Family Partnership (Olds et al., 1986; Olds & Kitzman, 1993)

3-14

- Focus on Families (Catalano et al., 1999; 1997; Haggerty et al., 2008)

10-14

- Guiding Good Choices<sup>®</sup> (Spoth et al., 1998, Mason et al., 2003)

- Iowa Strengthening Families Program 10-14 (Spoth et al, 1998)

12-16

- Staying Connected with Your Teen<sup>®</sup> (Haggerty et al., 2007)
- Family Matters (Bauman et al., 2001)

# Wide Ranging Approaches Have Been Found To Be Effective

1. Prenatal & Infancy Programs
2. Early Childhood Education
3. Parent Training
4. After-school Recreation
5. Mentoring with Contingent Reinforcement
6. Youth Employment with Education
7. Organizational Change in Schools
8. Classroom Organization, Management, and Instructional Strategies
9. School Behavior Management Strategies
10. Classroom Curricula for Social Competence Promotion
11. Community & School Policies
12. Community Mobilization

# Classroom Curricula for Social and Emotional Competence Promotion Elementary School

- Promoting Alternative Thinking Strategies (PATHS) (Greenberg and Kusche, 1993; Greenberg et al., 1995)
- Metropolitan Area Child Study (Huesmann et al., 1996)
- Second Step: A Violence Prevention Curriculum (Grossman et al. 1997)

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## Classroom Curricula for Social and Emotional Competence Promotion Secondary School

The Life Skills Training Program (Botvin et al., 1995)

Project Alert Drug Prevention Curriculum (Ellickson et al., 1993; Ellickson and Bell, 1990)

Alcohol Misuse Prevention (Maggs et al., 1998)

Towards No Drug Use (Sussman et al. 2003; 2003)

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# Classroom Organization, Management, and Instructional Strategies

Elementary  
School

- The Good Behavior Game (Kellam and Rebok, 1992)
- Seattle Social Development Project (SSDP) (Hawkins et al., 1999; 2005; Lonczak et al., 2002)
- Success for All (Slavin et al., 1990)

Middle  
School

- Tutoring Programs (Coie et al., 1984; Greenwood et al., 1993)
- Behavioral Intervention for Middle School Students (Bry, 1982)

# Variations in population level predictors

- Predictors become salient at different points in development
- The developmental expression of predictors may change with development
- Communities and schools may experience different levels of predictors

# The CTC Youth Survey

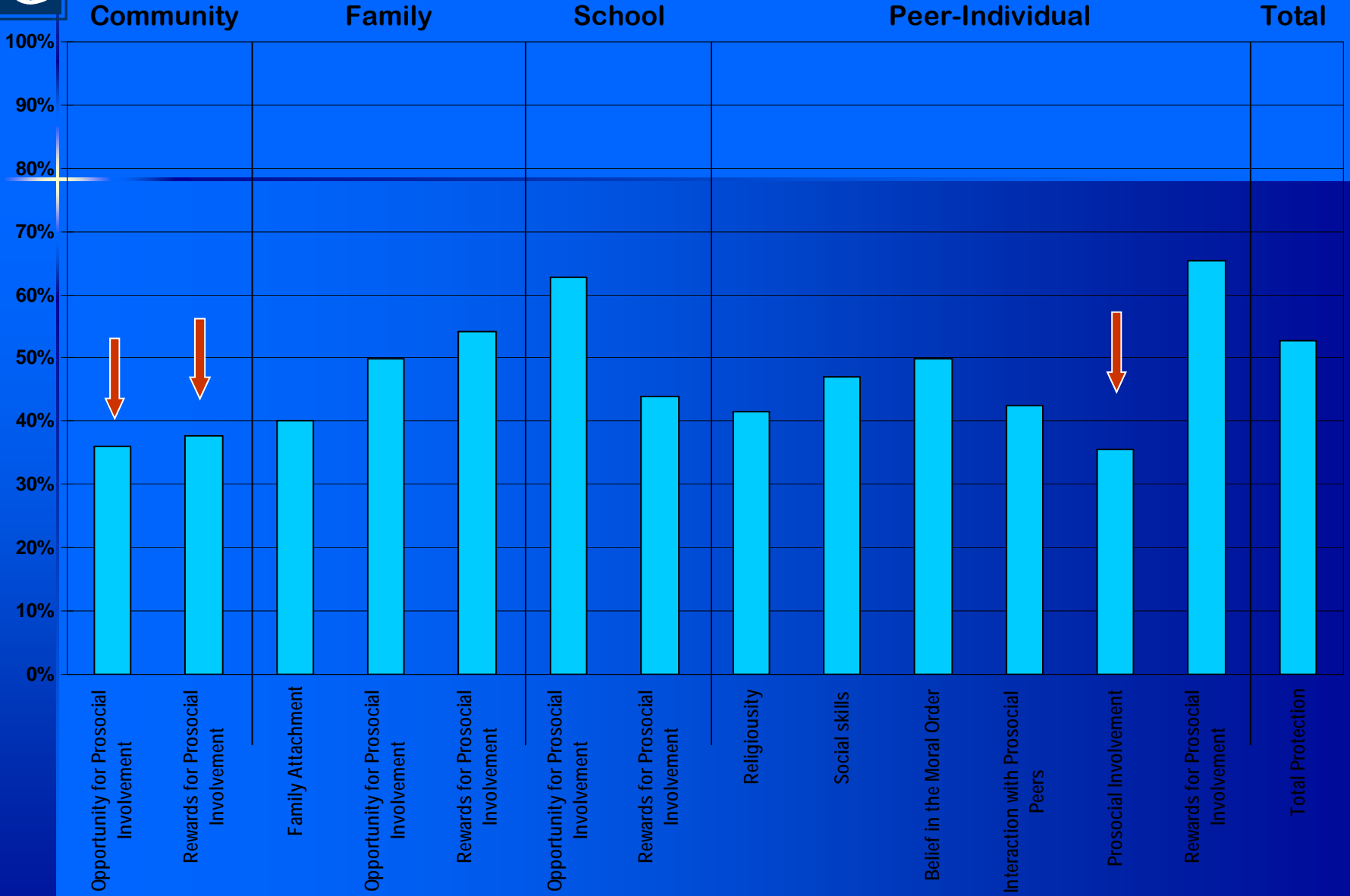
- Identifies levels of 21 risk and 9 protective factors and academic and behavioral outcomes
- Guides planners to select tested, effective actions
- Monitors the effects of chosen actions

# PROTECTIVE PROFILE

## Grade 9, 2005

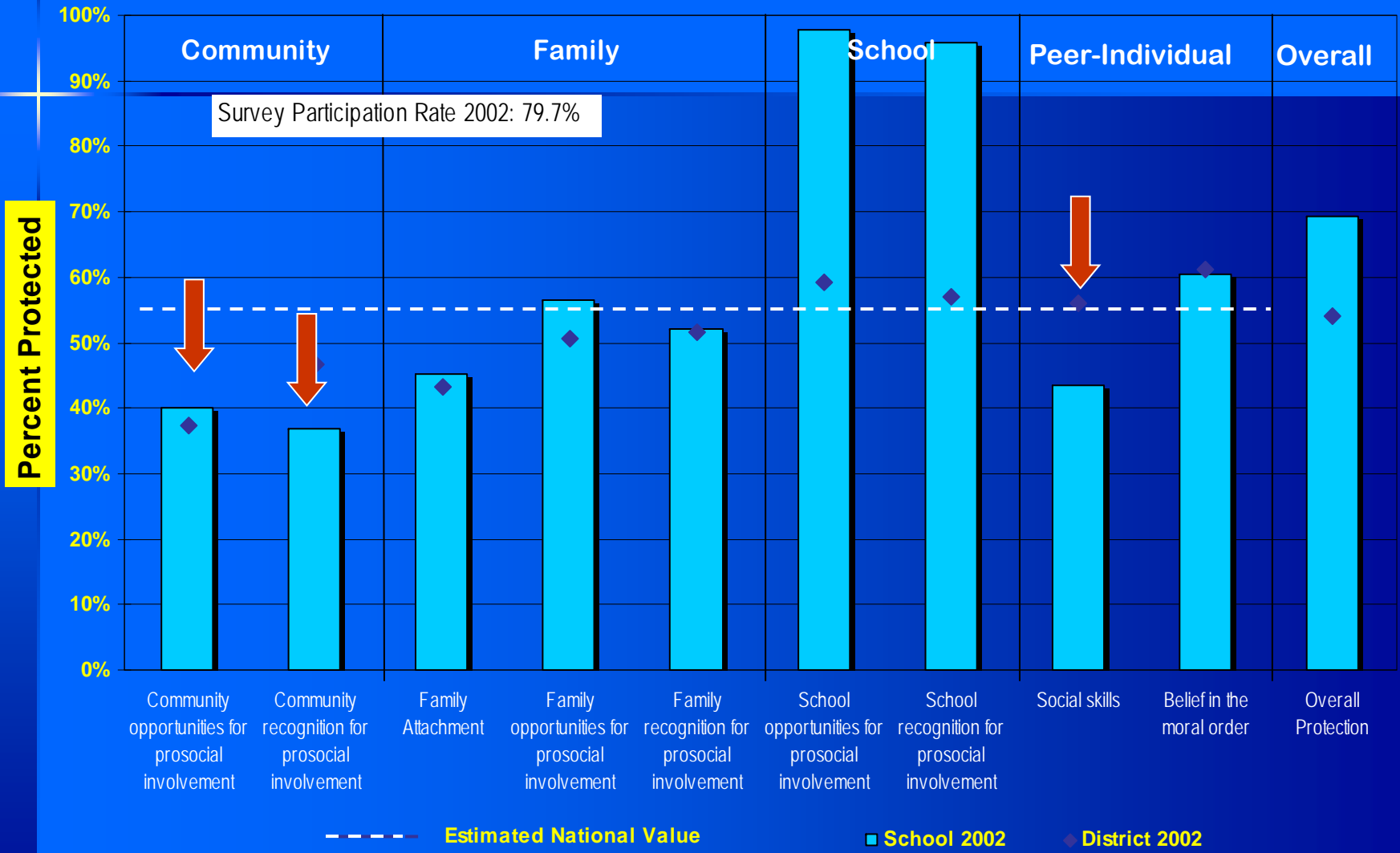
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**Percentage of Youth with Protective Factor**



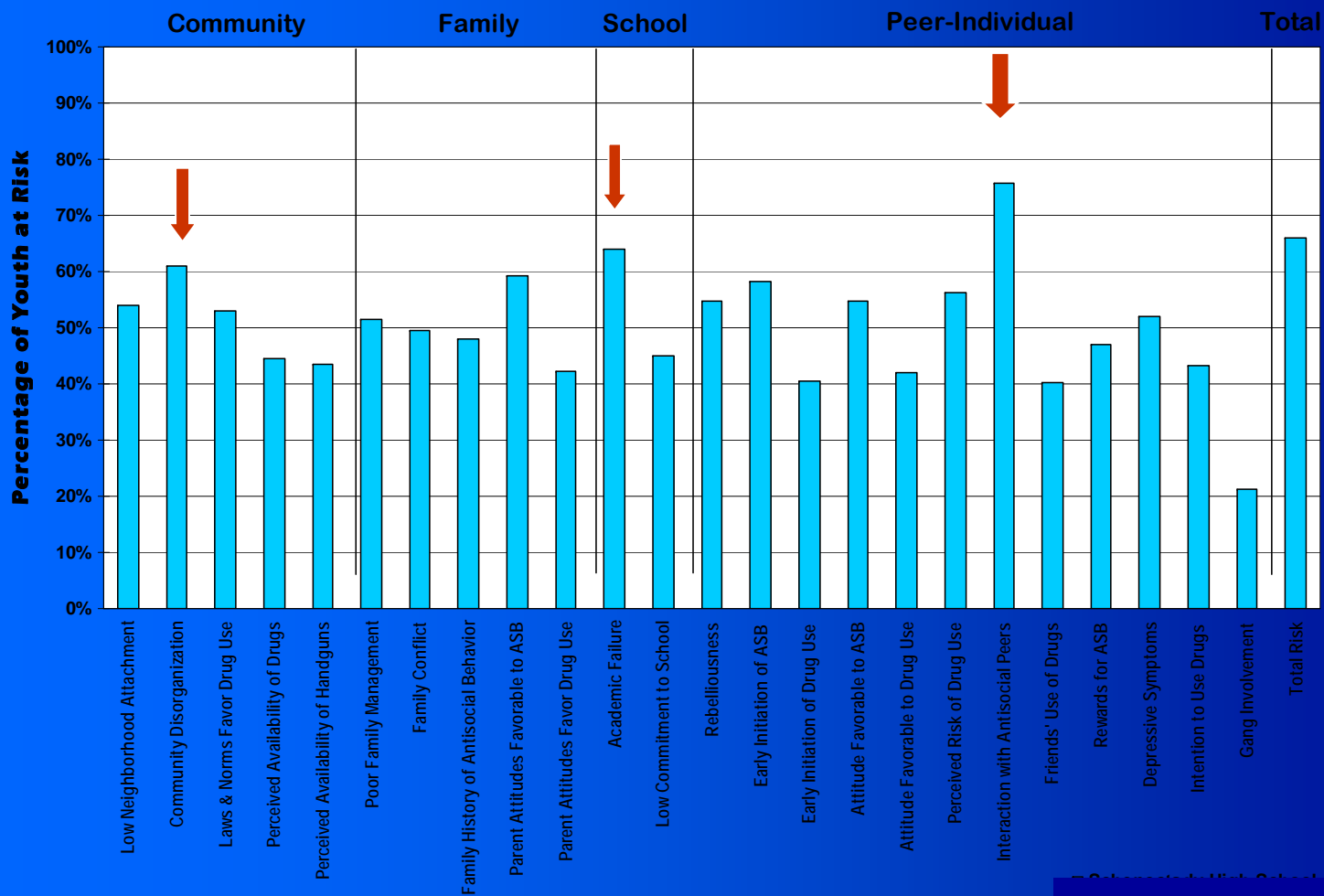
■ Schenectady High School

**Nova High School Protective Profile 10th Grade**  
**2002**



## School A

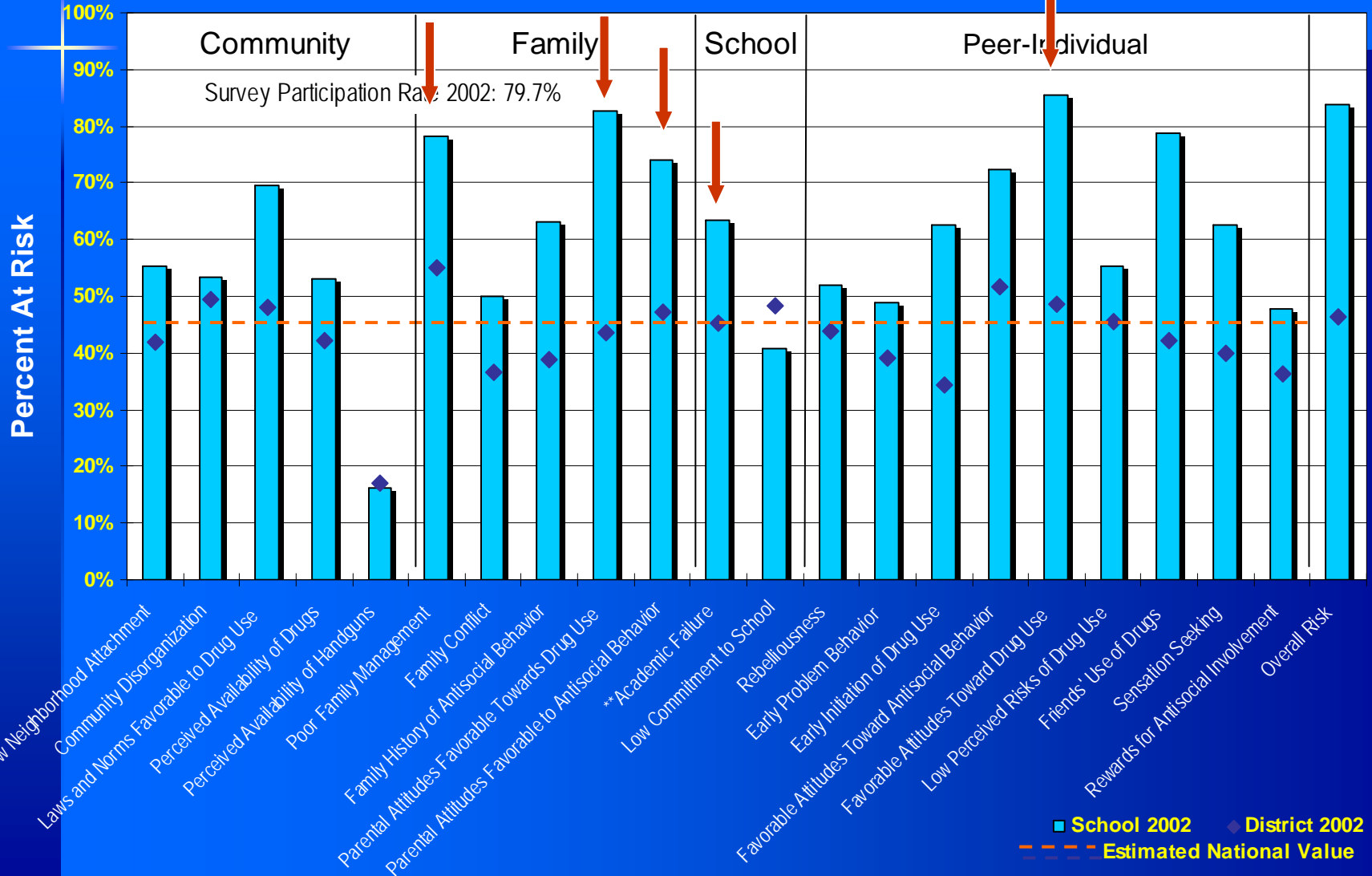
### 2005 Risk Profile



Percentage of Youth at Risk

## Nova High School Risk Profile 10th Grade

2002



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# Schools Can Promote Academic Competence and Prevent Problems

- Academic competence, drug use and delinquency share common predictors
- Predictors are salient at different points in development, and typical patterns (snowball, snowstorm) occur
- Expression of predictors across development, requires intervention adjustment
- Communities and schools may experience different levels of predictors, requiring different interventions to address local need



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