

Multipronged, schoolwide approaches for prevention and intervention: Child/adolescent aggression as a case in point

1

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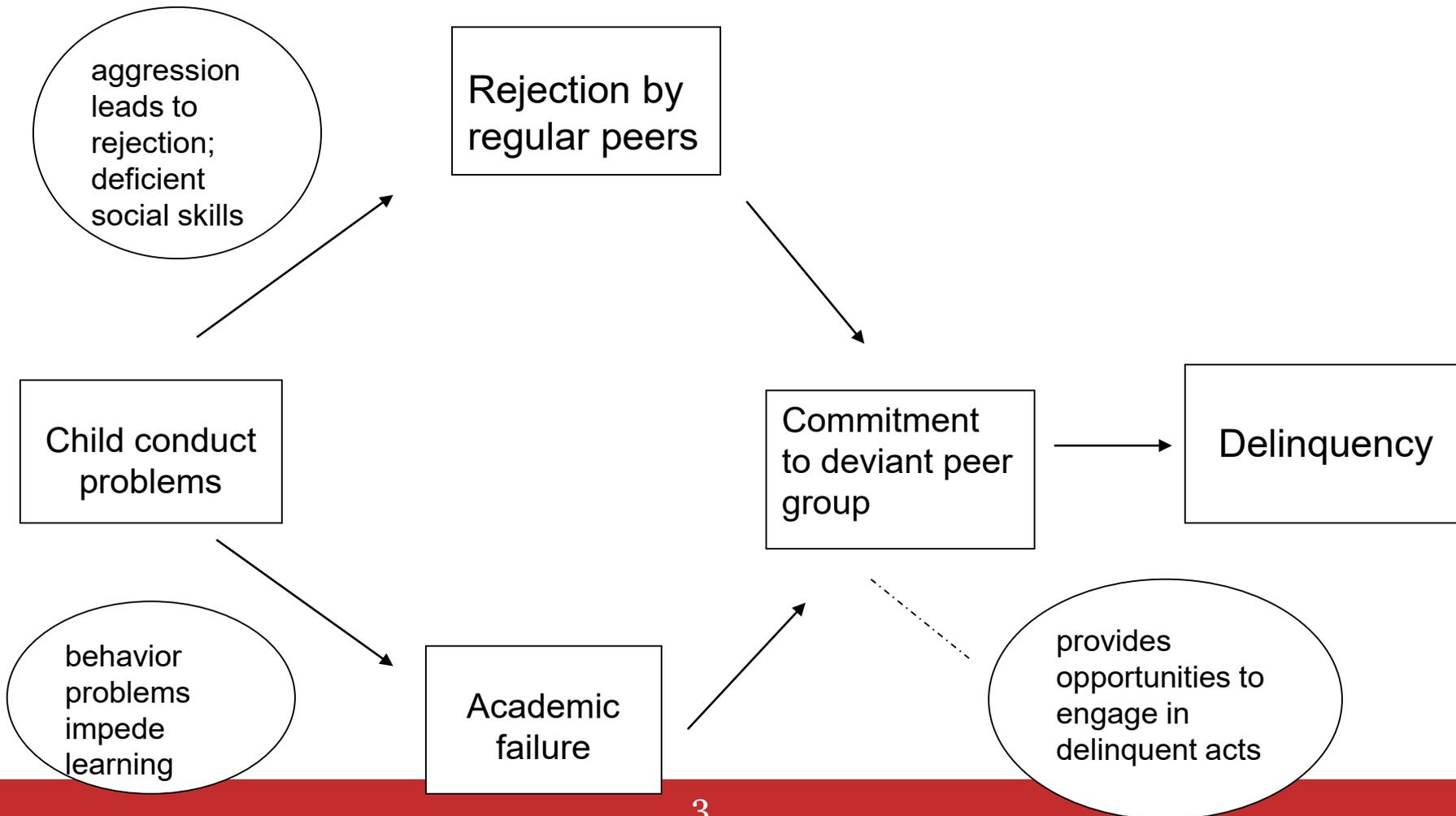
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Anger & Aggression: Thoughts, Behavior

- Faulty thinking & behavioral patterns (Dodge, 2006):
 - Problems with **encoding**
 - ✦ Focus on hostile cues, respond impulsively and inaccurately
 - Problems with **interpretation**
 - ✦ Infer hostile intent (hostile attributional style), failure to develop a benign attributional style
 - Problems with **goal selection**
 - ✦ Adopt retribution goals in response to provocations
 - Problems with **response generation & decision**
 - ✦ Generate less effective, more aggressive solutions
 - ✦ Believe in the legitimacy of aggression
 - ✦ View aggression as favorable, place high value on short-term, selfish gains

Developmental Progression of Aggression



Risk & Protective Factors

4

- Aggressive behavior, if left unchecked, is likely to spiral into severe antisocial behavior
- Children and adolescents are embedded in multiple environments such as the home, school, neighborhood, and community (Swearer & Espelage, 2011).
- Risk and resilience factors do not exist in isolation; interactions occur across multiple contexts

Joy of Learning for All Students

5

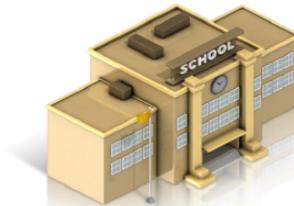
Overview of SEN Landscape

MOE's Goals on Support for SEN

Goal: To build an inclusive education system with opportunities for all

Each Child Can Learn

Children with needs receive timely and appropriate support to achieve their full potential



Each School has an Inclusive Culture

Each school has its own systemic whole-school approach to support diverse learners, including students with SEN

Each Teacher is Skilful to support and manage diverse learners, including students with SEN



Source: *Ministry of Education, Singapore, 2018*

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6

- Our children with behavioral/emotional issues struggle with challenges in our classrooms/schools.

Child Psychiatry Hum Dev (2012) 43:70–86
DOI 10.1007/s10578-011-0253-2

ORIGINAL ARTICLE

Examining the Criterion Validity of CBCL and TRF Problem Scales and Items in a Large Singapore Sample

Rebecca P. Ang · Leslie A. Rescorla · Thomas M. Achenbach ·
Yoon Phaik Ooi · Daniel S. S. Fung · Bernardine Woo

...scales and small for 6 scales. For the 21 TRF scales, the referral status effect size was large for 5 scales, medium for 12 scales and small for 4 scales. Five of the six largest effects were observed on the TRF: TRF Attention Problems (37%), TRF Inattention (38.6%), TRF Total Problems (33.1%), TRF DSM-oriented ADHD Problems (33.9%), TRF DSM-oriented Inattention (39%), and CBCL Attention Problems (28.6%). Because the regres-

Matched samples of
referred and non-referred
children
(840 x 2 for CBCL;
447 x 2 for TRF)

ANCOVA analyses are presented in Table 3. Several individual items had large referral status effect sizes and strongly discriminated between referred and non-referred children: *Item 8. Can't concentrate* (CBCL—17.9%; TRF—27.4%), *Item 61. Poor school work* (CBCL—16.3%; TRF—16.7%), *Item 78. Inattentive* (TRF only—26.4%), *Item 92. Underachieving* (TRF only—20.6%), and *Item 4. Fails to finish* (TRF only—19.6%). Effect sizes for age and gender were considerably smaller than effect sizes for referral

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An important conclusion from our findings is that teachers in Singapore make especially strong discriminations between the majority of students who do not display many problems and the minority who display sufficient problems to be referred for mental health services. An implication we draw from this conclusion is that, given the important role education plays in Singapore and in the broader Asian context, teachers can serve as effective partners to help identify those who need mental health services and those who do not.

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8

Overview of SEN Landscape

GUIDING PRINCIPLES



Develop the
full potential
of all children



Differentiated
Approach
to meet wide
spectrum of needs



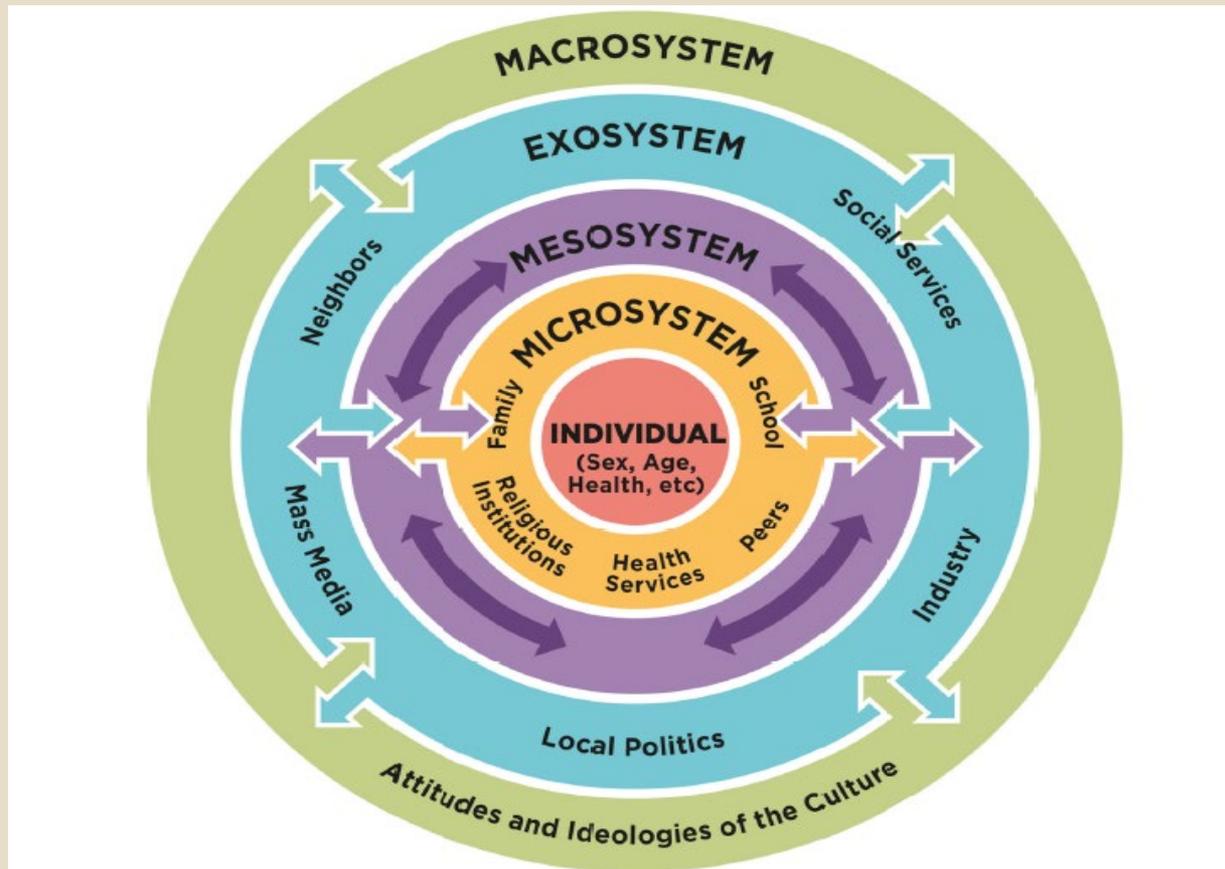
Partner the
Wider
Community

Source: *Ministry of Education, Singapore, 2018*

The Child and His/Her Ecology

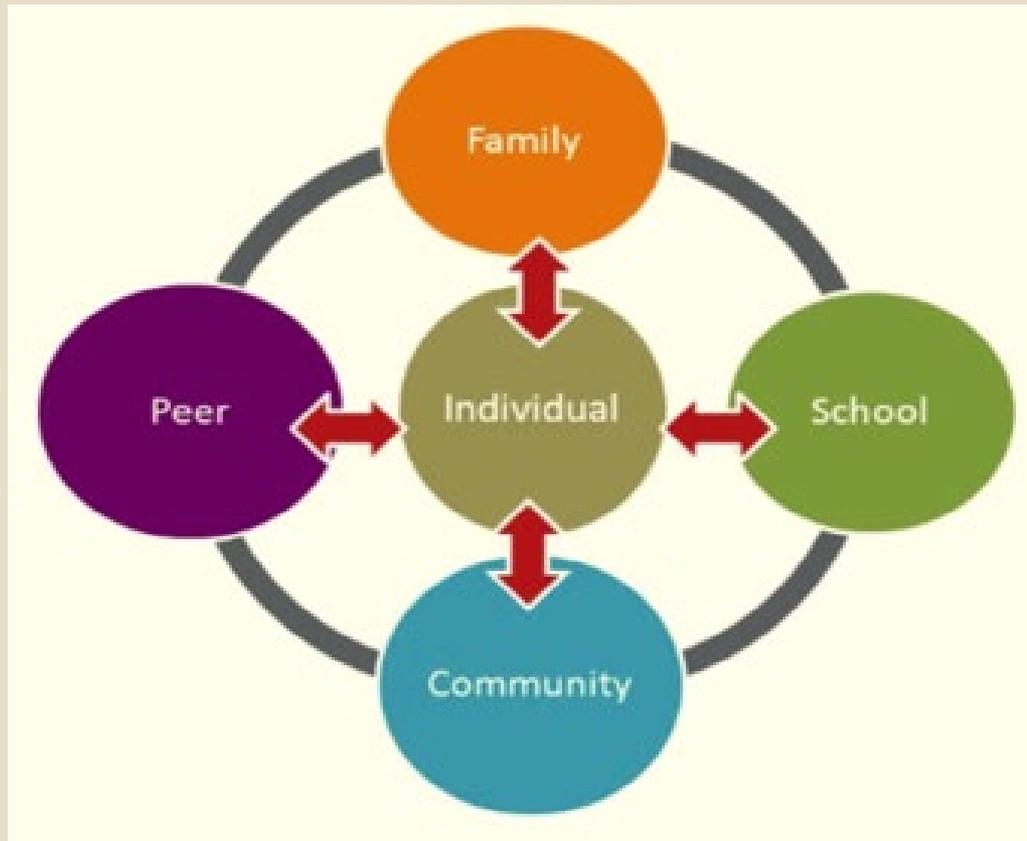
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- Bronfenbrenner's Ecological Theory of Development



The Child and His/Her Ecology

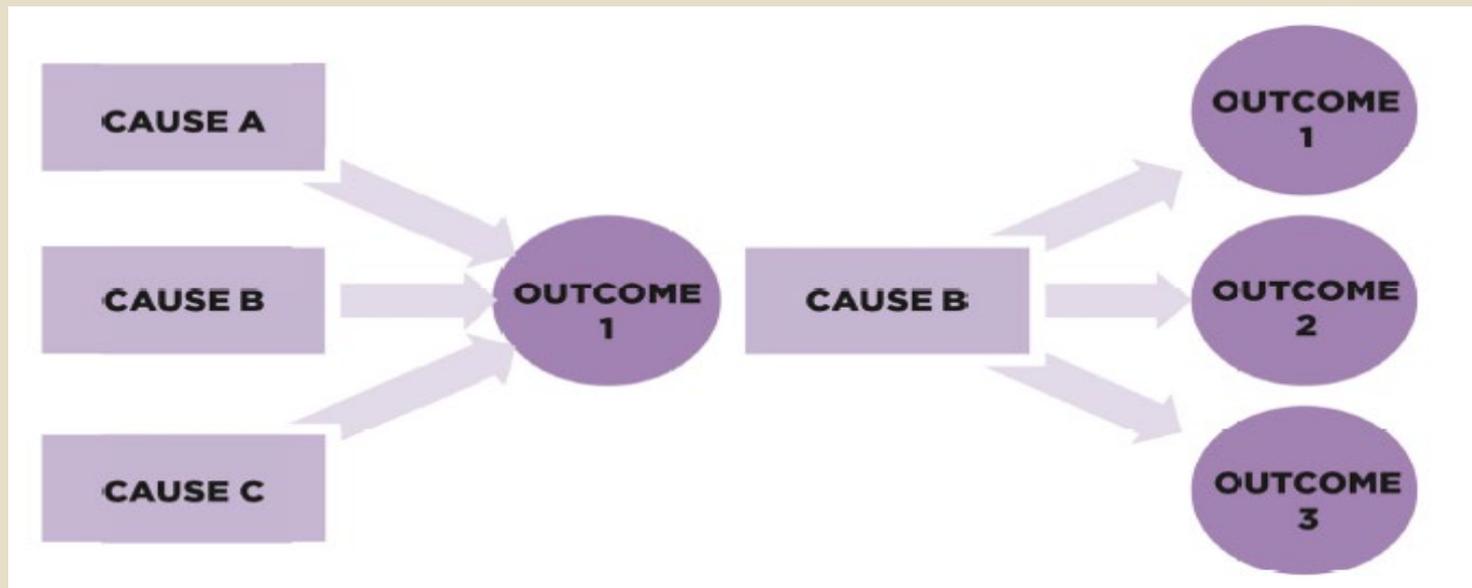
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Outcomes of Psychopathology

11

- There is variation in the adjustment and outcomes of developmental psychopathology. Cicchetti and Rogosch (2011) – concept of equifinality and multifinality.



M. Seligman on “What’s Next?” – APA Monitor, July/Aug 2018, Vol 49, p. 40

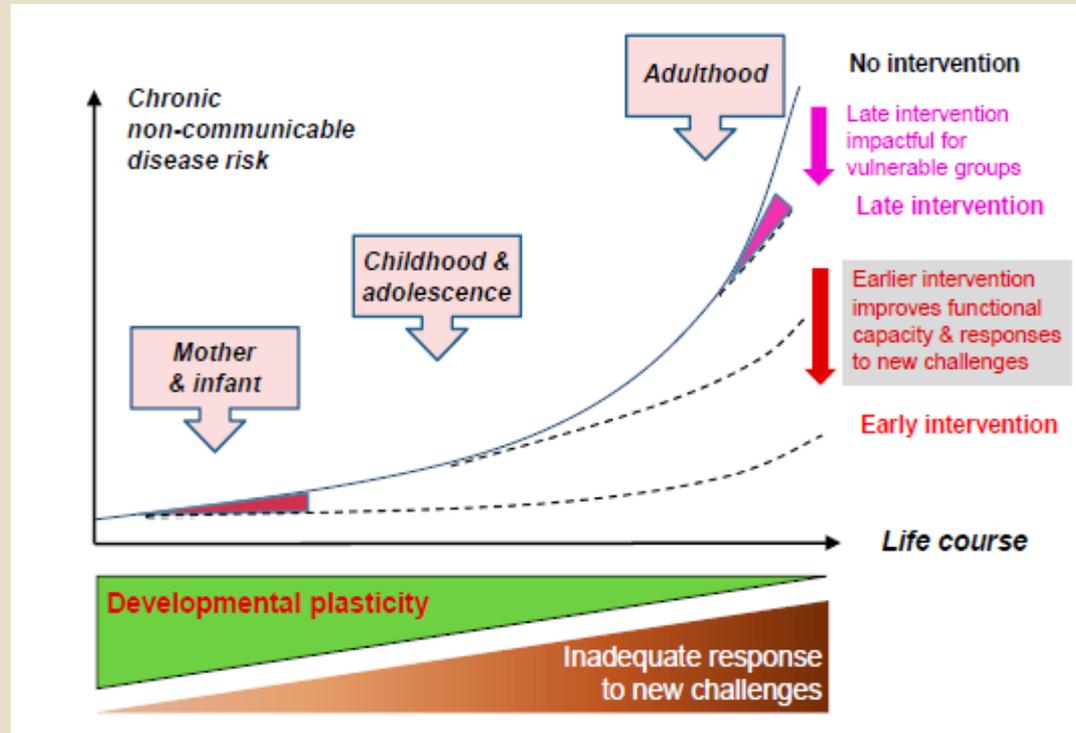
Critical questions that Psychology must answer....

“You are what you eat? Wrong. We are not determined by what we eat. We metabolize our food. **We extract what is good for us and we excrete what is toxic or unnecessary.** Similarly, **the past and the present do not determine our future.** We metabolize our memories and perceptions, extracting the gist and excreting most of the rest. How we do this and do it better is a great question for psychology's future.”



Childhood/Adolescence: Window of Change

13



Hansen, M.A., & Gluckman, P.D. (2014). Early developmental conditioning and later health and disease: Physiology or pathophysiology? *Physiological Reviews*, 94, 1027-1076.

THE ADOLESCENT BRAIN

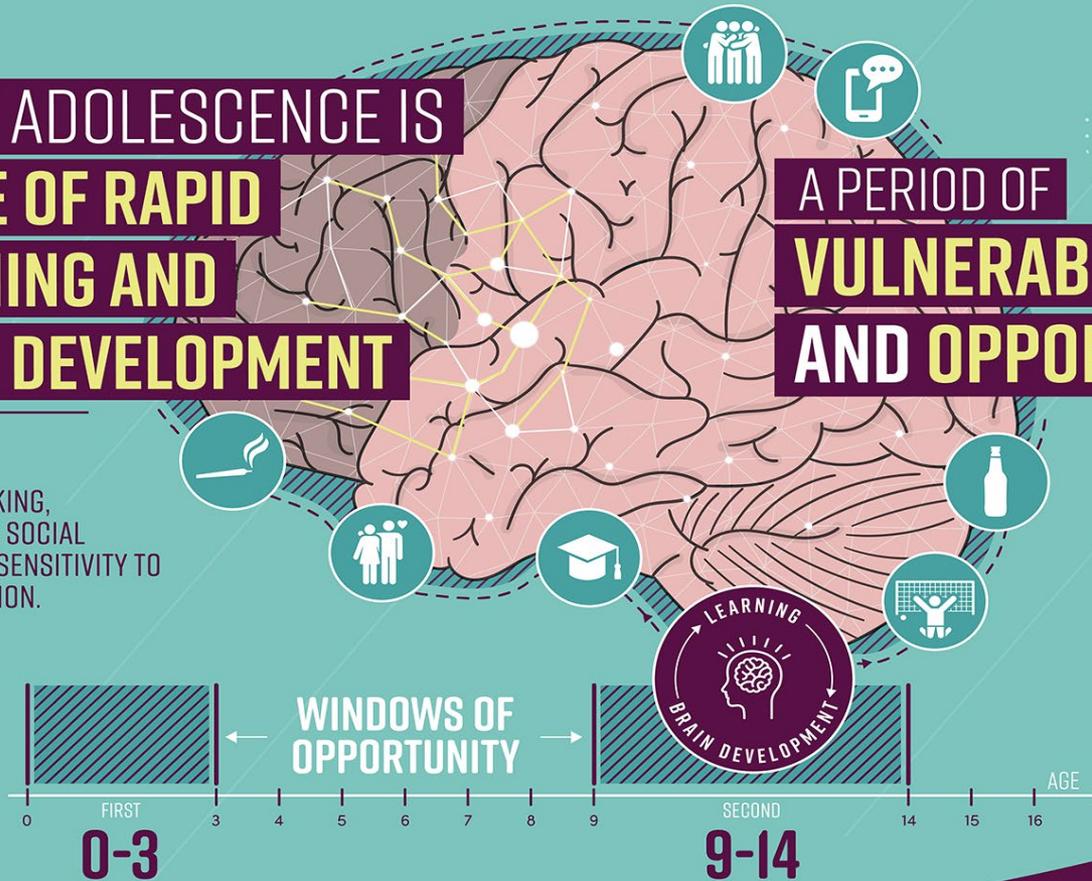
A SECOND WINDOW OF OPPORTUNITY

EARLY ADOLESCENCE IS
A TIME OF RAPID
LEARNING AND
BRAIN DEVELOPMENT

THESE INCLUDE INCREASES IN SENSATION-SEEKING, MOTIVATION FOR SOCIAL RELATIONS AND SENSITIVITY TO SOCIAL EVALUATION.

A PERIOD OF
VULNERABILITY
AND OPPORTUNITY

PUBERTY INITIATES INTENSE LEARNING & BRAIN DEVELOPMENT, WHICH LEAD TO STRUCTURAL REMODELING AND NEURAL RE-CONFIGURATION OF KEY BRAIN SYSTEMS. IT'S A CRUCIAL TIME TO INVEST IN ADOLESCENTS.



DOWNLOAD

“THE ADOLESCENT BRAIN:
A SECOND WINDOW OF OPPORTUNITY”
WWW.UNICEF-IRC.ORG/ADOLESCENT-BRAIN

POSITIVE AND NEGATIVE SPIRALS

DURING ADOLESCENT BRAIN DEVELOPMENT

EXAMPLE OF A
POSITIVE SPIRAL

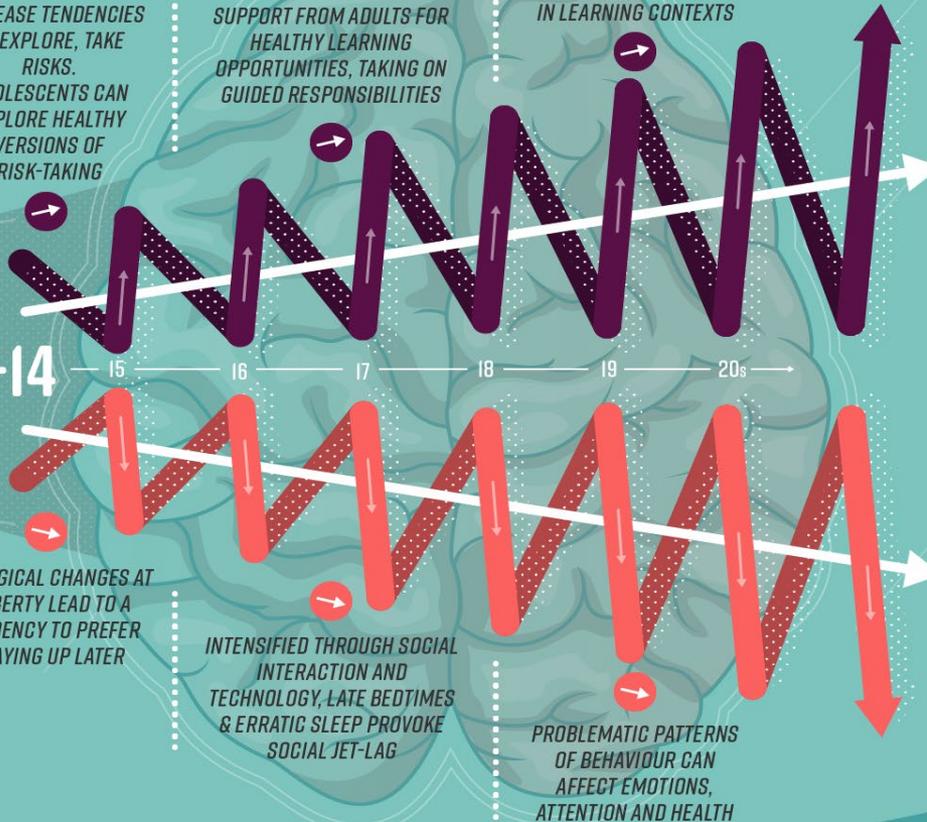


BIOLOGICAL CHANGES INCREASE TENDENCIES TO EXPLORE, TAKE RISKS. ADOLESCENTS CAN EXPLORE HEALTHY VERSIONS OF RISK-TAKING

SUPPORT FROM ADULTS FOR HEALTHY LEARNING OPPORTUNITIES, TAKING ON GUIDED RESPONSIBILITIES

IMPROVED SELF-CONFIDENCE, SUPPORTED RISK-TAKING IN LEARNING CONTEXTS

AGE
9-14



BIOLOGICAL CHANGES AT PUBERTY LEAD TO A TENDENCY TO PREFER STAYING UP LATER

INTENSIFIED THROUGH SOCIAL INTERACTION AND TECHNOLOGY, LATE BEDTIMES & ERRATIC SLEEP PROVOKE SOCIAL JET-LAG

PROBLEMATIC PATTERNS OF BEHAVIOUR CAN AFFECT EMOTIONS, ATTENTION AND HEALTH

EXAMPLE OF A
NEGATIVE SPIRAL

THE ADOLESCENT BRAIN

NEEDS SUPPORT

TO CREATE

POSITIVE SPIRALS,

AVOIDING NEGATIVE

TRAJECTORIES

DOWNLOAD

“THE ADOLESCENT BRAIN:
A SECOND WINDOW OF OPPORTUNITY”

WWW.UNICEF-IRC.ORG/ADOLESCENT-BRAIN

Need for a Multipronged Approach

16

- In line with an ecological theoretical framework:
 - Children and adolescents are embedded in multiple contexts, ranging from peer and family to school, community, and the macrosystem.
 - Risk and resilience factors interact in multiple ways, across multiple contexts
- (Re)discovering the joy of learning:
 - Schoolwide prevention and intervention approaches should consider adopting a multipronged approach – targeting the *individual, relationship, community, and societal* levels.

Schoolwide Prevention and Intervention

17

- **Individual level:**
 - Social problem solving skills training
- **Relationship level:**
 - Build positive and supportive relationships with parents / families, teachers, peers
- **Community level:**
 - Social environments such as schools, classrooms, and help students stay meaningfully connected to school and school-related activities
- **Societal level:**
 - Address social norms about the acceptability of violence in schools
 - Educational systems to promote learning and wellbeing for all students
 - Adopt cross-sector, integrated nation-wide policies for violence prevention

Individual Level

18

- Social problem solving skills training (Dodge et al., 2013; Ooi et al., 2015; Sorensen et al., 2016)
 - emotional awareness, emotional regulation
 - anger coping
 - social competence
 - positive peer relations
 - interpersonal problem-solving
- An example:
 - Help the child de-personalize the provocation, slow down before responding, respond to all cues (not some cues) and actual cues (not memories) when making an attribution



Relationship Level

19

- **Parent-Child**
 - Positive parenting training and multisystemic treatment delivered in a family context (Browne & Herbert, 1997; Henggeler et al., 1998)
 - Parent involvement in academic and social aspects of their children's school experiences (Lesneskie & Block, 2017)
- **Teacher-Student**
 - Developing positive and supportive teacher-student relationships (Ang, 2005, De Laet et al., 2015; Sabol & Pianta, 2012)
- **Peer-Peer**
 - Developing positive peer relationships (De Laet et al., 2015; Wang & Eccles, 2012)

Community Level

20

- Positive youth development (PYD) (Lerner et al., 2005) – harnessing developmental assets of youths
 - Harness adolescents’ natural motivations in interventions
- Engage children/youth, help them stay meaningfully connected to school (Ang et al., 2014; Fredricks & Eccles, 2006)
 - academic, non-academic activities, co-curricular programs
 - structured and supervised afterschool opportunities
- Pre-service and in-service teachers – coached on how to create a positive social and emotional climate for learning within their classrooms (Hughes, 2012)

Societal Level

21

- Need to change beliefs, social and cultural norms that support acceptability of aggression/violence – at the individual level, as well as in schools and the wider community (Werner & Nixon, 2005)
 - Approval-of-aggression beliefs are not easy to modify but they are nevertheless malleable.
 - Teach children/adolescents that bullying is not a legitimate response and that bullying hurts the victims and that victims do not deserve to be hurt.
- Cross-sector, coordinated, integrated efforts (health, economic, educational and social policies) including allocation of resources

Example 1: Fast Track

- Dodge, K. A., Godwin, J., & The Conduct Problems Prevention Research Group (2013). Social-information-processing patterns mediate the impact of preventive intervention on adolescent antisocial behavior. *Psychological Science, 24* (4), 456 - 465.
- Sorensen, L. C., Dodge, K. A., & The Conduct Problems Prevention Research Group (2016). How does the Fast Track intervention prevent adverse outcomes in young adulthood? *Child Development, 87* (2), 429–445

Fast Track

23

- Fast Track Program (Elementary phase, Adolescent phase)
 - Multiyear intervention that addressed high risk kindergarten children's social-cognitive processes through:
 - ✦ Social skills training group activities
 - ✦ Universal classroom curricula
 - ✦ Parent training groups, guided parent-child sharing time
 - ✦ Peer coaching
 - ✦ Academic tutoring

FAST TRACK WAS:

1. An intervention to help children become successful across their development...



Fast Track

24

- Dodge et al. (2013) tested whether the intervention's impact on social-cognitive processes in Grades 1 through 5 would mediate the intervention's impact on antisocial behavior after Grade 9.
- 891 high-risk kindergarten children (69% male, 31% female; 49% ethnic minority, 51% ethnic majority) randomly assigned to an intervention or a control group by school cluster.
- The effect of intervention on antisocial behavior was mediated by **3 social-cognitive processes**
- 27% of intervention's impact on antisocial behavior after Grade 9 was mediated by:
 - ✦ **Reducing hostile-attribution bias**
 - ✦ **Increasing competent response generation to social problems**
 - ✦ **De-valuing aggression / view aggression as detrimental**

Fast Track

25

- One of the strongest pieces of evidence showing the long-term positive impact of the Fast Track preventive intervention on reducing antisocial behavior in adolescence.
 - ✦ Children will be successful in achieving long-term behavioral goals if they can improve social-cognitive processes in the short term
 - ✦ Focus on proximal improvement in children's social competence, particularly in social-cognitive skills, as an indirect way to prevent distal antisocial problem-behavior outcomes

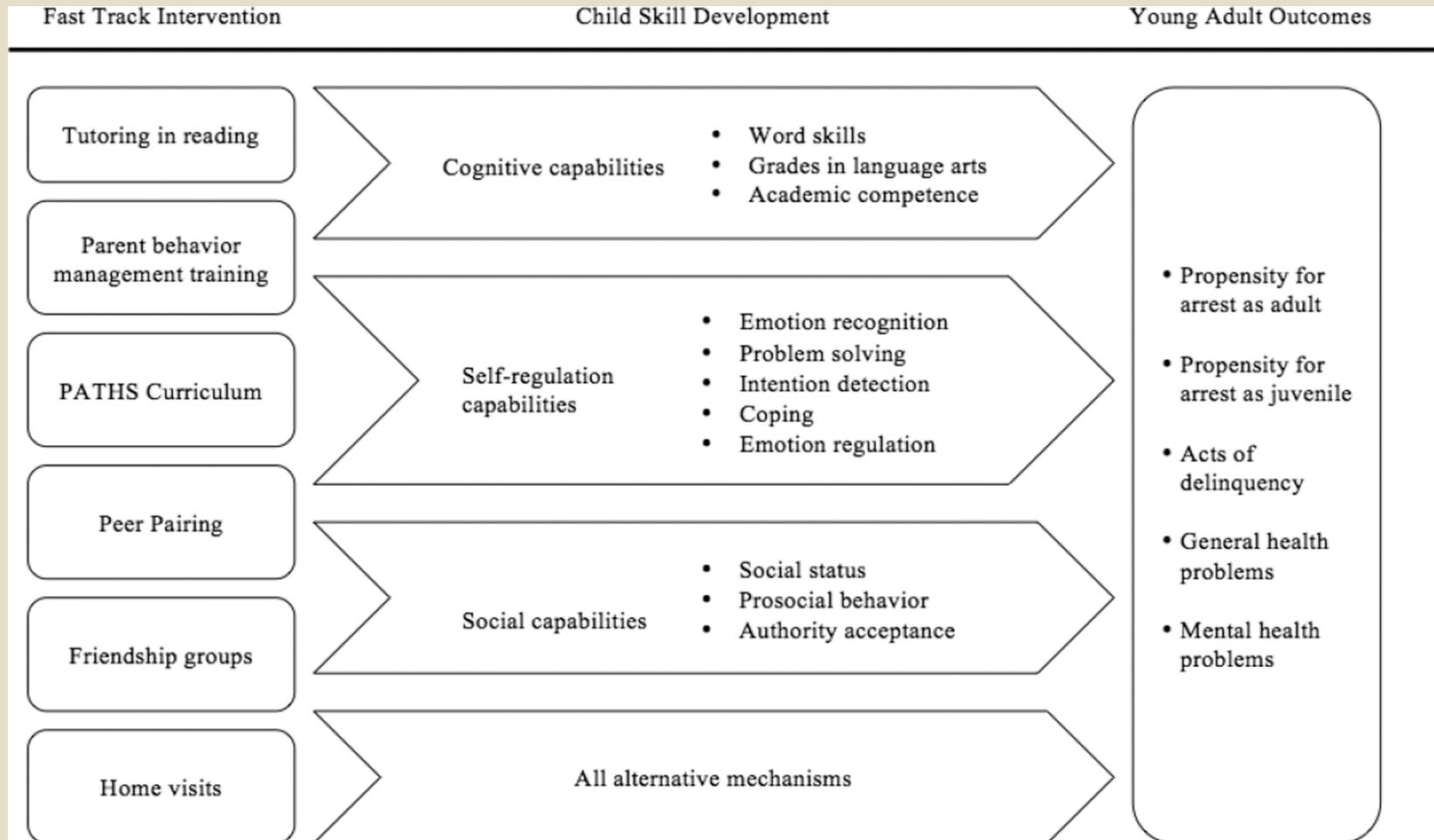
Fast Track

26

- Sorensen et al. (2016) tested the hypothesis that improving child competencies in high-risk children would contribute to the prevention of adverse outcomes in adolescence and young adulthood.
- Competencies were conceptualized in four domains
 - ✦ academic (cognitive) skills - via academic tutoring
 - ✦ intrapersonal self-regulatory skills - via social-cognitive skills training groups; parent management training
 - ✦ interpersonal social skills - via peer pairing/coaching, friendship groups
 - ✦ parenting [not examined in this study]
- Sorensen et al.'s study (2016) went beyond Dodge et al.'s (2013) - included additional outcome measures such as arrest, health, and mental health outcome measures through young adulthood.

Fast Track

27



Fast Track

28

- Different components of Fast Track had different effects on children's capabilities
- The authors statistically decomposed treatment effects
 - ✦ improvements in **intrapersonal and interpersonal skills** had a significant treatment impact on **delinquency and crime outcomes**

Fast Track

29

- **Intrapersonal, interpersonal skills** improvement:
 - ✦ social-emotional training components, parent behavior management training may have increased children's intrapersonal skills in emotional regulation, making them less prone to anger, aggressive outbursts in adolescence
 - ✦ friendship groups and peer pairing programs may have enhanced children's positive interpersonal peer relationships, thus preventing violent crime and delinquency in late adolescence

Fast Track

30

- Sorensen et al. (2016) – some study limitations
 - ✦ A large portion of Fast Track’s reductions in criminal behavior and mental health and health problems remains unexplained by child skill development
 - ✦ But accumulation of skills in childhood still accounts for a substantial proportion (27%) of prevention of youth arrest, delinquency, and mental health service utilization.
- Nonetheless, it is worth considering evidence that early skills such as self-control, emotion awareness, problem solving, and prosocial behavior, constitute important developmental mechanisms for prevention of adverse adult outcomes

Example 2: PYD & the 4-H Study

- Lerner, R. M., Lerner, J. V., Geldhof, G. J., Gestsdóttir, S., King, P. E., Sim, A. T. R., Batanova, M., Tirrell, J. M., & Dowling, E. (2018). Studying positive youth development in different nations: Theoretical and methodological Issues. In J. E. Lansford & P. Banati (Eds.), *Handbook of adolescent development research and its impact on global policy*. New York: Oxford University Press.

PYD & the 4-H Study

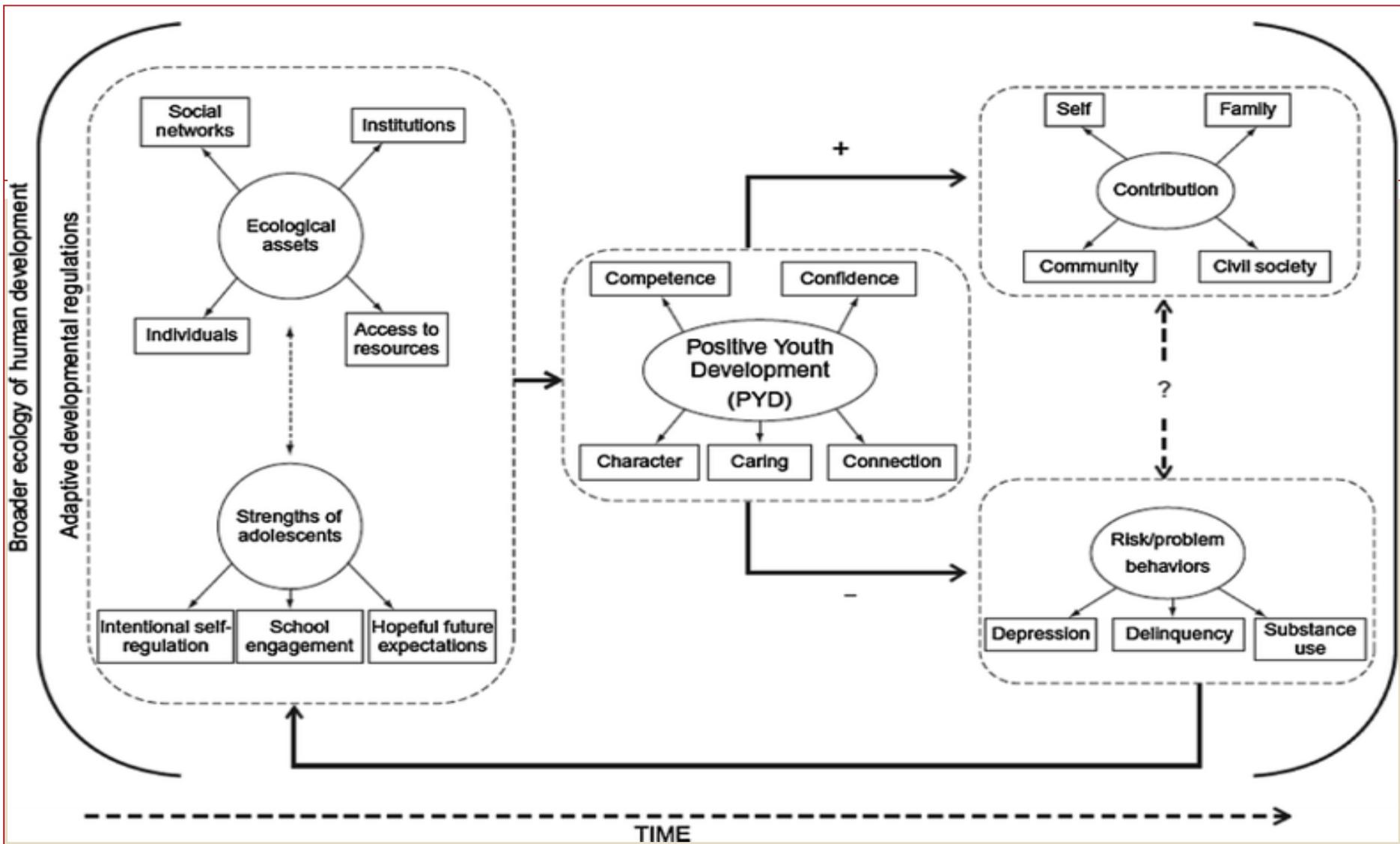
32

- Five Cs of PYD:
 - competence
 - confidence
 - character
 - connection
 - caring
- These 5 Cs are hypothesized to lead to the 6th C – youth contributions
- The 4-H study research is helping families, schools, communities and youth programs develop strategies to support children's and adolescents' development.

PYD & the 4-H Study

33

- 4-H study of PYD:
 - Participants in Grade 5 and extending through Grade 12.
 - Overall, across eight waves of the study, approximately 7,000 youth and 3,500 of their parents from 42 US states were surveyed.
 - Three aspects are emphasized in 4-H:
 - ✦ Positive and sustained relationships between youth and adults
 - ✦ Activities that build important life skills
 - ✦ Opportunities for youth to use these skills as participants and leaders in valued community activities



The Lerner and Lerner Model of PYD, 2005

PYD & the 4-H Study

35

- Generally, across all the waves of the 4-H study, findings showed that:
 - Strengths of young people and the ecological assets in their families, schools, out-of-school programs, peer groups, and neighborhoods predict their thriving (the 5 Cs of PYD) and, in turn, active and engaged citizenship and reduced problem behavior.

Summary: Multipronged Approach Needed

36

- To help students (re)discover the joy of learning, employ prevention/intervention approaches for aggression and antisocial behavior that:
 - Target different levels, different components within levels
 - ✦ *Individual*
(develop socioemotional, problem-solving competencies)
 - ✦ *Relationship*
(parents / families, teachers, peers)
 - ✦ *Community*
(positive youth development within and outside of school)
 - ✦ *Societal*
(change approval-of-aggression beliefs; coordinated, cross-sector policies and resourcing)

Summary: Multipronged Approach Needed

37

• Adolescence as a window of risk and opportunity (Dahl, 2004)

- “Modern problem” – longer adolescence period - pubertal onset begins at 9-12 years and adult roles are delayed till early 20s
- Catch this window of opportunity to facilitate specialized learning in the social-emotional domain so that adolescents can gain that broader set of skills/knowledge for adult roles and responsibility.
 - ✦ Appropriate social scaffolding from adults (parents, teachers, coaches, others) to develop skills of self regulation/control while still being afforded support and protection
 - ✦ Gradual fading of scaffolding

Summary: Multipronged Approach Needed

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M. Seligman on “What’s Next?”

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Joy of Learning

Prevention & Intervention

Systems Thinking

Risk & Resilience