Positive Youth Development Programs in the U.S: History and Effects on Adolescent Reproductive Health

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I am a board member of the Channing Bete Company, publisher of Staying Connected with Your Teen, Supporting School Success, and Guiding Good Choices used in two of 30 programs reviewed
### Brief History of Positive Youth Development Programs: United States Experience

<table>
<thead>
<tr>
<th>Period</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early 1900’s</td>
<td>Adolescence emerges as a distinct stage of development</td>
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<td></td>
<td>Service programs, YM(W)CA, Scouting, Boys and Girls Clubs, develop, education extended to be more universal</td>
</tr>
<tr>
<td>1950’s</td>
<td>Juvenile crime intervention and treatment programs first supported by government</td>
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<tr>
<td>1950-1970</td>
<td>Treatment programs for adolescents expand to substance use, conduct disorder, academic failure, teen pregnancy</td>
</tr>
<tr>
<td>Mid 1960’s-mid 1970’s</td>
<td>Prevention programs focused on a single problem begin to be developed, most ineffective</td>
</tr>
<tr>
<td>Mid 1970’s-1980’s</td>
<td>Prevention programs begin to focus on precursors of a single problem, some successes occur</td>
</tr>
<tr>
<td>Late 1980’s-early 1990’s</td>
<td>Critiques begin of single problem approach to prevention</td>
</tr>
</tbody>
</table>
## Critiques of the Single Problem Behavior Focus of Early Prevention Programs

<table>
<thead>
<tr>
<th>Practitioners and Policy Makers</th>
<th>Prevention Scientists</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Focus on single problems ignores the whole child.</td>
<td>• Overlapping risk and protective factors predict diverse problems.</td>
</tr>
<tr>
<td>• Focus on the individual and downplays the role of the environment.</td>
<td>• Risk and protective factors located in individual and environment.</td>
</tr>
<tr>
<td>• Developmental needs and competencies ignored.</td>
<td>• Developmental needs, processes and tasks often ignored.</td>
</tr>
<tr>
<td>• Problem-free does not mean fully prepared or healthy.</td>
<td>• Protective factors often not addressed.</td>
</tr>
<tr>
<td>• Separates promotion from prevention.</td>
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</tbody>
</table>
# Recommendations for a Broader Conception of Youth Development

**Practitioners/Policy Makers**
- Focus on whole child
- Focus on developmental needs and challenges.
- Focus on the individual as well as environment.
- Address cultural competence in program delivery
- Include promotion and prevention.

**Prevention Scientists**
- Address risk and protective factors for multiple problems
- Address risk and protective factors during critical developmental periods
- Engage multiple socialization units.
- Understand developmental epidemiology of the community target population.
- Include those at greatest risk.
Convergence in critiques and recommendations led DHHS Assistant Secretary for Planning and Evaluation to commission the first review of youth development program efficacy (Catalano et al., 1998)
Positive Youth Development (PYD) Concepts

- Reviewed literature that described youth development approach (1996)
- Identified concepts being discussed to define the purview of this developing field
- Augmented through subsequent national and international reviews eg., Annenberg-Sunnylands Task Force on PYD (Seligman, Berkowitz, Catalano et al., 2005)
Positive Youth Development

Concepts

- Social, emotional, behavioral, cognitive and moral competence
- Self-efficacy
- Positive emotions
- Clear and positive identity
- Opportunities for positive social involvement and contribution
- Recognition for positive behavior
- Bonding
- Positive norms
- Self-determination
- Belief in the future
- Spirituality/Moral Development
- Resiliency
- Life satisfaction

Catalano et al., 1998; 2002; Seligman, Berkowitz, Catalano et al., 2005; Shek et al., 2007; Catalano, Hawkins & Toumbourou, 2008
1998 PYD Review Results

25 of 77 Positive Youth Development Programs met the inclusion criteria and had evidence of effectiveness (Catalano et al., 1998)

Several subsequent articles continued the dialogue to translate this work to other fields including moral development (Catalano, Hawkins and Toumbourou, 2008), mental health (Seligman et al., 2005), positive psychology (Catalano and Toumbourou, 2009), as well as respond to comments from the field (Catalano and Hawkins, 2002)
2010 PYD Review

Sponsored by Centers for Disease Control and Prevention

CDC and University of Texas Health Sciences Center collaboration

Role as senior advisor

Focus on PYD studies with adolescent reproductive health outcomes

Gavin, Catalano, David-Ferdon, Gloppen, Markham, 2010. A review of positive youth development programs that promote adolescent sexual and reproductive health. Journal of Adolescent Health, 46 (3 Suppl. 1)*
Percentage of high school students ever having had sex, by race/ethnicity and year--U.S., YRBS, 1991-2007
Why is Adolescent Sexual and Reproductive Health a Public Health Concern?

- 750,000 teens get pregnant every year
- 1 in 4 young women (26%) aged 14-19 years – or 3.2 million teenage girls – is infected with at least one of the most common sexually transmitted infections (STI)
Inclusion Criteria*:
Program Characteristics

- Addresses one PYD “concept” in multiple socialization domains (family, school or community), or two or more concepts in one socialization domain
- At least 50% of program activities focus on promoting general PYD concepts (v. focus on direct sexual health content)
- Program focused on promotion or prevention
- Youth were less than 20 years of age

*Adapted from Catalano et al 1998
Inclusion Criteria: Study Methods

The evaluation must have:

- An experimental or quasi-experimental design
- Appropriate statistical methods
- An appropriate unit of analysis
- Assessed the program’s impact on at least one reproductive health outcome measured during adolescence (e.g., sexual initiation, use of condom of birth control, pregnancy, STI)
Review Methods

- Electronic search of 8 online databases plus review of grey literature (1985-2007)
- Identified studies summarized using a standard review form
- Each summary prepared independently by two reviewers who then met to reach consensus
- Program summaries were confirmed by original program developers (~70%)
Results

- 30 PYD programs met the eligibility criteria
- 15 of 30 programs improved at least one reproductive health outcome:
  - Delayed initiation of sexual intercourse (7)
  - Decreased frequency or recency of sex (3)
  - Increased use of birth control or condoms (6)
  - Decreased number of sexual partners (2)
  - Fewer pregnancies or births (6)
  - Fewer reported STIs (2)
- Most efficacious programs sustained impact well beyond the end of intervention
- Many affected other youth outcomes
## Effective Programs Pre-and Elementary School Age

<table>
<thead>
<tr>
<th>PYD Program</th>
<th>ARH outcomes</th>
<th>Other outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abecedarian Project (Campbell, Ramey et al., 2002)</td>
<td>Teen birth</td>
<td>Academic achievement, employment, substance use</td>
</tr>
<tr>
<td>High/Scope Perry Preschool (Schweinhart et al., 1992, 2005)</td>
<td>Teen pregnancy</td>
<td>Crime, academic achievement, family relationships, substance use, employment</td>
</tr>
<tr>
<td>Seattle Social Development Project (Hawkins et al., 1999; Lonczak, Hawkins et al., 2005; 2008)</td>
<td>Ever sex, # of partners, delayed initiation, condom use, STI, pregnancy or birth</td>
<td>Academic achievement, high school graduation, crime/delinquency, violence, mental health, SES</td>
</tr>
<tr>
<td>PYD Program</td>
<td>ARH outcomes</td>
<td>Other outcomes</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Aban Aya – SCI (Flay et al., 2004)</td>
<td>Recent sex, condom use</td>
<td>Violence, school delinquency, substance use</td>
</tr>
<tr>
<td>Reach for Health (O’Donnell et al., 1998, 2002)</td>
<td>Recent sex, ever sex</td>
<td>Violence</td>
</tr>
<tr>
<td>Adult Identity Mentoring (Clark et al., 2005)</td>
<td>Ever sex</td>
<td>Academic achievement, school suspensions</td>
</tr>
<tr>
<td>Gatehouse Project (Patton et al., 2006)</td>
<td>Ever sex</td>
<td>Substance use, antisocial behavior</td>
</tr>
<tr>
<td>Keepin’ it REAL (Dilorio et al., 2002; 2006)</td>
<td>Condom use last sex</td>
<td></td>
</tr>
<tr>
<td>Staying Connected with Your Teen (Haggerty et al., 2007)</td>
<td>Ever sex</td>
<td>Substance use, violence</td>
</tr>
<tr>
<td>New Beginnings (Wolchik, Sandler et al., 2002, 2007)</td>
<td># of partners</td>
<td>Mental health, substance use</td>
</tr>
</tbody>
</table>
## Effective Programs Middle – High School Age

<table>
<thead>
<tr>
<th>PYD Program</th>
<th>ARH outcomes</th>
<th>Other outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teen Incentives Program</td>
<td>Frequency of sex, contraception use</td>
<td>Substance use, gang activity, school truancy</td>
</tr>
<tr>
<td>(Bayne Smith, 1994)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adolescent Sibling Pregnancy</td>
<td>Ever sex, pregnancy, condom use</td>
<td></td>
</tr>
<tr>
<td>Prevention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(East et al., 2003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS-Carrera Program</td>
<td>Ever sex, contraception or condom use, teen</td>
<td></td>
</tr>
<tr>
<td>(Philliber et al., 2002)</td>
<td>pregnancy</td>
<td></td>
</tr>
<tr>
<td>Familias Unidas</td>
<td>STI, unprotected sex</td>
<td>Substance use</td>
</tr>
<tr>
<td>(Prado et al, 2007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teen Outreach Program</td>
<td>Teen pregnancy</td>
<td>Academic achievement</td>
</tr>
<tr>
<td>(Allen, Philliber et al., 1997)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Characteristics of Youth Served by Efficacious Programs

- Most programs targeted youth exposed to multiple risk factors (e.g., poor, living in disorganized neighborhoods, single-parent households, siblings of parenting teens, school drop outs, children of divorce)

- 14 of 15 programs delivered to mixed gender groups of youth

- 8 of 15 focused on a single racial/ethnic group:
  - African American 5 programs
  - Latino/a 1 program
  - White 2 programs
# PYD Concepts Addressed among Efficacious Programs

<table>
<thead>
<tr>
<th># programs</th>
<th>PYD Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half or more</td>
<td>Bonding, opportunities for prosocial involvement, cognitive competence, social competence, emotional competence, belief in the future, self determination</td>
</tr>
<tr>
<td>One-third</td>
<td>Behavioral competence, moral competence, self-efficacy, prosocial norms</td>
</tr>
<tr>
<td>One-quarter</td>
<td>Clear and positive identity</td>
</tr>
<tr>
<td>None</td>
<td>Spirituality</td>
</tr>
</tbody>
</table>
Seattle Social Development Project (SSDP): Example of PYD Long Term Effects

Investigators:

Funded by:
National Institute on Drug Abuse, Office of Juvenile Justice and Delinquency Prevention, Robert Wood Johnson Foundation, National Institute on Alcoholism and Alcohol Abuse, National Institute on Mental Health, Burlington Northern Foundation, Seattle Public Schools
SSDP
Design

• Quasi-experimental study

• 18 elementary schools assigned to 3 conditions
  
  Full treatment (grades 1-6) \( n=149 \)
  Late treatment (grades 5-6) \( n=243 \)
  Control \( n=206 \)

• 77% of the 5th grade student population constitute the longitudinal study sample

• At least 91% of students retained at ages 18-30
SSDP Addressed PYD Concepts

- Social, emotional, behavioral, cognitive and moral competence
- Self-efficacy
- Positive emotions
- Clear and positive identity
- Opportunities for positive social involvement
- Recognition for positive behavior
- Bonding
- Positive norms
- Self-determination
- Belief in the future
- Spirituality
- Resiliency
- Life satisfaction
### SSDP Also Addressed Risk Factors

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Substance Abuse</th>
<th>Delinquency</th>
<th>Teen Pregnancy</th>
<th>School Drop-Out</th>
<th>Depression &amp; Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Family History of the Problem Behavior</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Family Management Problems</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Family Conflict</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>FAVORABLE PARENTAL ATTITUDES AND INVOLVEMENT IN THE PROBLEM BEHAVIOR</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td><strong>School</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Failure Beginning in Late Elementary School</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td>Lack of Commitment to School</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td><strong>Individual/Peer</strong></td>
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<tr>
<td>Early and Persistent Antisocial Behavior</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Alienation and Rebelliousness</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Friends Who Engage in the Problem Behavior</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>FAVORABLE ATTITUDES TOWARD THE PROBLEM BEHAVIOR</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Early Initiation of the Problem Behavior</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Constitutional Factors</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
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</table>
SSDP

Intervention Components

- Component One: *Teacher Training in Classroom Instruction and Management*

- Component Two: *Parent Training in Behavior Management and Academic Support*

- Component Three: *Child Social, Emotional, and Cognitive Skill Development*
Intervention has specific benefits for children from poverty through age 18.

- More attachment to school
- Fewer held back in school
- Better achievement
- Less school misbehavior
- Less drinking and driving

SSDP Changed Risk, Protection and Outcomes

By age 18 Youths in the Full Intervention had
- Less heavy alcohol use
- Less initiation of delinquency
- Better family management
- Better family communication
- Better family involvement
- Higher attachment to family
- Higher school rewards
- Higher school bonding

By the start of 5th grade, those in the full intervention had
- Less initiation of alcohol
- More high school graduates
- More attending college
- More employed
- Better emotional and mental health
- Fewer with a criminal record
- Less drug selling
- Less co-morbid diagnosis of substance abuse and mental health disorder

By age 21, broad significant effects were found on positive adult functioning:
- More high school graduates
- More attending college
- More employed
- Better emotional and mental health
- Fewer with a criminal record
- Less drug selling
- Less co-morbid diagnosis of substance abuse and mental health disorder

By age 27, significant effects were found on educational and occupational outcomes, mental health and risky sexual activity:
- More above median on SES attainment index
- Fewer mental health disorders and symptoms
- Fewer lifetime sexually transmitted diseases

SSDP Reduced Disparities in Sexually Transmitted Infections

Sig. Tx X Ethnicity Interaction on STI onset, p < 0.0401
Conclusions

There is evidence that PYD programs:

- Promote adolescent reproductive health, and many promote other positive outcomes as well
- Have a relatively robust and sustained impact
- Have the potential to reduce health disparities
Recommendations

- Support implementation of PYD programs with evidence of promoting ASRH (e.g., Office of Adolescent Health Initiative on evidence-based teen pregnancy prevention)
- Support dissemination/implementation research of these programs
- Support identification of more PYD programs that promote ASRH; evaluate new & existing programs
- Encourage measurement of multiple outcomes so the full impact of PYD programs can be discovered
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