January 2018

Protective Factors for Youth Substance Abuse and Delinquency

The Role of Afterschool Programs

PREPARED FOR

Alaska Afterschool Network

PREPARED BY

McDowell GROUP

Protective Factors for Youth Substance Abuse and Delinquency: The Role of Afterschool Programs

Prepared for:

Alaska Afterschool Network

A Program of:

act alaska children's trust

Prepared by:

McDowell Group Anchorage Office
1400 W. Benson Blvd., Suite 510
Anchorage, Alaska 99503

McDowell Group Juneau Office
9360 Glacier Highway, Suite 201
Juneau, Alaska 99801

Website: www.mcdowellgroup.net

McDowell GROUP

January 2018

Table of Contents

List of Tables

Introduction

The Alaska Children's Trust (ACT) asked McDowell Group to create a brief that describes how protective factors reduce youth substance abuse and delinquency and the role that afterschool programs (ASPs) can play within this context. First, this brief defines protective factors and describes their capacity to reduce youth substance abuse and delinquency. Recent data from the Anchorage Youth Risk Behavior Survey (YRBS) is presented to underscore the experience of local youth. Next, it presents an overview of afterschool programs (ASPs) and their potential to provide and enhance protective factors for youth. Distinguishing features of successful ASPs are noted. In closing, a case study of the Icelandic Model showcases a leading-edge preventive strategy that cultivates youth protective factors at multiple levels of the social ecology.

McDowell Group conducted a literature review of relatively recent, peer-reviewed research from a number of online resources. Additional resources were provided by the Alaska Afterschool Network, Afterschool Alliance, and the American Institutes for Research. To help interpret the results, several informal interviews were conducted with ASP professionals. All photos were provided by the Alaska Afterschool Network from local programming.

McDowell Group thanks Barbara Dubovich of Camp Fire Alaska, the National Institute on Out-of-School Time, and the American Institutes for Research for their support on this project.

The following definitions are used in this report:

> **Afterschool programs** (ASPs) are regular, structured or semi-structured activities for school-age (K-12) youth that occurs before school, after school, between school terms, or during the summer. Other terminology—out-of-school time or OST, extra-curricular activities, organized activities, expanded learning time, school-age care—is synonymous in this context and used interchangeably.[1,2]
>
> **Protective factors** are features within an individual, family, or community that enhance healthy development and help a person cope successfully with life's challenges.
>
> **Risk factors** are individual, family, school, or community features that increase the likelihood youth will engage in unhealthy behavior.



[1]American Youth Policy Forum. (2006). ***Helping Youth Succeed through Out-of-School Time Programs.*** Washington, DC: American Youth Policy Forum.
[2]Little, P., Wimer, C., & Weiss, H. B. (2008). After school programs in the 21st century: Their potential and what it takes to achieve it. ***Issues and opportunities in out-of-school time evaluation. 10***(1-12).

Risk & Protective Factors

This section first describes how risk and protective factors influence behavior through conditions at the individual, family, and community levels, then presents risk and protective factors linked with decreasing youth risk behaviors. Finally, it displays analysis of protective factors and efforts to prevent risk behaviors among students in the Anchorage School District (ASD).

Overview

Extensive research has shown an individual's social conditions, personal traits, genetic disposition, and life experiences are associated with different types of healthy or unhealthy behavior. These social and personal influences are defined as risk and protective factors.[3]

> **Risk factors** are individual, family, school, or community features that increase the likelihood youth will engage in unhealthy behavior (such as substance abuse or misuse [e.g. alcohol, tobacco, marijuana, and other drugs] or personal, domestic, or interpersonal violence). The more risk factors present in a child's life, the greater likelihood unhealthy behavior will develop.
>
> **Protective factors** are features within an individual, family, or community that enhance healthy development and help a person cope successfully with life's challenges. Protective factors are sometimes called resiliency factors or developmental assets. They are integral to strength-based abuse-prevention efforts.

Some protective and risk factors are fixed and cannot change, while others are considered variable. Factors are also cumulative and interrelated: the more protective factors in place for an individual, family, school, and community, the less likelihood of community members engaging in unhealthy behavior. Researchers believe an imbalance of risk and protective factors leads to negative outcomes. This means, if a person has enough protective factors in his or her life, s/he may be able to navigate even numerous risk factors to positive outcomes.[4]

Individual protective factors are associated with each phase of a child's life. Infancy and early childhood factors (under age 5) include self-regulation, secure attachment, mastering communication and language skills, and the ability to make friends and get along with others. Factors specific to middle childhood (age 5-12) include increasing academic skills, positive behavior at home, school, and in public, and the ability to make and keep friends.

For adolescents and youth (over age 12), protective factors also include engagement in meaningful activities (e.g. participation in clubs, sports teams, volunteering activities, service-learning projects and/or peer-based programs); social, emotional, and life skills (e.g. problem-solving, decision-making, grades, educational attainment); connection to culture, religion, peers, and/or community; and positive personal qualities, self-awareness, and peer influence. As youth enter early adulthood, this base of protective factors increases their

[3] Alaska Department of Health and Social Service's Division of Behavioral Health. (2011). "Risk and Protective Factors for Adolescent Substance Use (and other Problem Behavior)." http://dhss.alaska.gov/dbh/Documents/Prevention/programs/spfsig/pdfs/Risk_Protective_Factors.pdf.
[4] Bernat, D. H., & Resnick, M. D. (2006). Healthy youth development: Science and strategies. Journal of Public Health Management Practice (Supplement), S10-S16.

capacity to explore their identity, self-sufficiency and independent decision-making, and helps them be future- and achievement-orientated.

Family protective factors include family connectedness, attachment, and bonding; positive parenting styles characterized by reliable and consistent responsiveness, support, and discipline; adequate socioeconomic supports for the family; clear expectations for family behavior and values; and strong family communication, attention, and sense of caring.

School protective factors include a strong connection to school; a caring school climate with positive norms; participation in extracurricular activities and healthy peer groups; positive teacher expectations; reliable and steady school administration and management; positive partnerships and overlap between family, school, and community life; physical and psychological safety, including policies to ensure a welcoming atmosphere from school staff and other students; and high academic expectations.

Community protective factors include positive connection to other adults and strong role models; safe, supportive, and connected neighborhoods and communities; strong community infrastructure, including access to mental health and health care; a strong regulatory system for childcare providers; healthy social norms and programs to enhance them; a variety of opportunities for youth engagement; a sense of belonging and connection to community and culture; and strong cultural traditional activities.

Factors that Impact Youth Substance Abuse and Delinquency

Numerous risk and protective factors affect youth substance abuse, delinquency, and other risk behaviors. The more risk factors an adolescent has at the individual, family, school or community level, the more likely s/he is to engage in risk behaviors. The more protective factors present in an adolescent's life, the more likely s/he is to engage in prosocial and developmentally-healthy behaviors. For example, youth who experience adverse childhood experiences (ACEs), witness family members engaging in substance use, and live in disconnected or transient communities are more likely to engage in risk behaviors themselves. On the other hand, youth who have a positive self-concept, are engaged in meaningful activities, and are connected to their families and other adults in their community are more likely to avoid risk behaviors.

Table one summarizes risk and protective factors shown in national research to be associated with increases and decreases in adolescent risk behavior.

(See next page.)

Table 1. Types of Risk and Protective Factors for Adolescent Risk behaviors

Level	Risk Factor	Protective Factor
Individual	• Early initiation of risk behavior • Depression or suicidal ideation • Loss of cultural identity and connection • Childhood media exposure to violence and alcohol • Friends who engage in risk behavior • Early and persistent antisocial behavior • Low perceived risk of harm from risk behavior • Gang involvement • Older physical appearance than peers • Working more than 20 hours/week • Perceived risk of early death • Academic failure • Lack of personal commitment to school • Experience of child abuse and/or other family violence	• Engagement in meaningful activities (e.g. organized activities outside of school such as clubs, lessons, sports or volunteering) • Life skills and social competence • Cultural identity and connection • Positive personal qualities • Positive self-concept • Positive peer role models • Religious identity • High grade point average • Student participation in extracurricular activities
Family	• Family history of risk behavior, adverse childhood experiences (ACEs), and family violence • Family management problems • Family conflict • Favorable parental attitudes towards and involvement in risk behavior • Household access to guns or substances (alcohol, tobacco, marijuana, or other illegal drugs)	• Family connectedness • Positive parenting style • Living in a two-parent family • Higher parent education • High parental expectations about school
School	• Disconnected from school	• Connected to school • Caring school climate
Community	• Availability of drugs and alcohol • Community norms and laws favorable toward drug use and crime • Availability of firearms • Transitions and mobility • Low neighborhood attachment • Community disorganization • Poverty	• Positive connection to other adults • Safe, supportive, and connected neighborhoods • Strong community infrastructure • Local, state policies and practices that support healthy norms and child-youth programs • Range of opportunities within the community for meaningful youth engagement (e.g. volunteering or participation in community-based projects)

Source: Adapted from Alaska Department of Health and Social Service's Division of Behavioral Health. (2011). "Risk and Protective Factors for Adolescent Substance Use (and other Problem Behavior)."

Local Protective Factor Data

The relationships in the table above have been identified in Alaska as well. Analysis of 2003-2013 YRBS[5] data from ASD traditional high schools shows protective factors perform a preventive function for student risk behaviors.[6] Using correlational and multiple regression analyses, Garcia, Price, and Tabatabai examined the relationships between eight protective factors for ASD students—talking to parents about school every day, having one adult besides a parent to ask for help, spending at least one hour a week volunteering or helping at school or in the community, engaging in organized after school activities at least one day a week, not feeling alone, feeling like s/he matters to the community, having teachers who care and provide individual encouragement, and attending schools with clear rules and consequences for behavior—and substance abuse and delinquency.

The study found that "[f]or every one unit increase in the number of protective factors, youth are 15% less likely to currently drink alcohol; 16% less likely to binge drink; [and] 20% less likely to smoke marijuana.[7] The study also analyzed the associations between the eight protective factors and the following risk behaviors:

1. Alcohol use during the past 30 days
2. Binge drinking (five or more servings of alcohol in one sitting)
3. Smoking marijuana during the past 30 days
4. Missing class without permission during the past 30 days

The protective factors associated with the greatest reduction in likelihood a student will drink alcohol, binge drink, or smoke marijuana are 'having teachers who students feel really care' and 'regularly talking to their parents about school.' The strongest protective factors for reducing school absenteeism are 'having teachers who students feel really care' and 'attending schools with clear rules and consequences.'[8] In addition, the study illustrated a dosage effect related to afterschool program participation. The next table details the strength of association between each of protective factors and risk behaviors measured. Statistically significant results are highlighted in blue. The impacts of afterschool programming are discussed in detail in the following chapter.

(See next page.)

[5] The Youth Risk Behavior Survey (YRBS) is a risk-based survey administered to all high school students (grades 9 through 12) every other year regarding risk-related behaviors. The nationwide survey assesses youth risk in six main areas.
1. Behaviors that contribute to unintentional injuries and violence
2. Sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases
3. Alcohol and other drug use
4. Tobacco use
5. Unhealthy dietary behaviors
6. Inadequate physical activity

[6] Garcia, G. M., Price, L. and Tabatabai, N. (2014). Anchorage Youth Risk Behavioral Survey Results: 2003-2013 Trends and Correlation Analysis of Selected Risk Behaviors, Bullying, Mental health conditions, and protective factors. UAA Department of Health Sciences. This study was completed at the request of the Anchorage Youth Development Coalition (AYDC), in partnership with United Way of Anchorage.
[7] Garcia, G. M., Price, L. and Tabatabai, N. (2014). Anchorage Youth Risk Behavioral Survey Results: 2003-2013 Trends and Correlation Analysis of Selected Risk Behaviors, Bullying, Mental health conditions, and protective factors. UAA Department of Health Sciences. This study was completed at the request of the Anchorage Youth Development Coalition (AYDC), in partnership with United Way of Anchorage.
[8] Ibid.

Table 2. Strength of Association Between Protective Factors and Risk Behaviors for Anchorage Students at Traditional High Schools

Protective Factor		Risk Behavior: Current Alcohol Use	Binge Drinking Ever	Current Marijuana Use	Recently Missed Class without Permission
Talking to parents about school everyday		32% less likely	34% less likely	39% less likely	32% less likely
Having one or more adults to ask for help		not significant	20% less likely	not significant	27% less likely
Spending at least one hour/week volunteering at school or in the community		18% less likely	21% less likely	33% less likely	not significant
Feeling like s/he matters to people in the community		19% less likely	17% less likely	35% less likely	34% less likely
Not feeling alone		21% less likely	24% less likely	30% less likely	29% less likely
Having teachers who really care about him/her		51% less likely	46% less likely	45% less likely	44% less likely
Attending a school with clear rules and consequences for behavior		25% less likely	23% less likely	29% less likely	34% less likely
Participating in organized after school activities...	at least one day per week	not significant	16% less likely	31% less likely	not significant
	at least two days per week	18% less likely	not significant	39% less likely	28% less likely

Source: Garcia, G. M., Price, L. and Tabatabai, N. (2014). Anchorage Youth Risk Behavioral Survey Results: 2003-2013 Trends and Correlation Analysis of Selected Risk Behaviors, Bullying, Mental health conditions, and protective factors. UAA Department of Health Sciences. Note: Table results are rounded to the nearest percent.

Afterschool Programs

This section presents an overview of afterschool programming followed by a discussion of the role of ASPs within the context of protective factors. Then it describes features linked with successful ASP outcomes.

Overview

ASPs can vary tremendously in structure, content, emphases, goals, and student demographics. Some ASPs are sponsored within schools, others are hosted by private organizations, religiously affiliated entities, community organizations, park districts, youth service agencies, health agencies, libraries, museums, etc.[9,10] Except for summer programs, most ASPs operate for 2 to 3 hours a day, 4 to 5 days a week.[11] One useful way to differentiate ASPs is by activity category, whether they are structured as:

1. Team sports, sports clubs, or organized sports activities out of school.
2. Prosocial activities, such as participation in volunteering, service clubs, and/or religious service activities in the community.
3. Performing arts, including participation in band, drama, art, or dance.
4. Academic-oriented clubs and experiential/enriched learning programs.
5. School involvement, such as participation in student government.[12]

ASPs are tasked with a range of goals "from providing supervision and reliable and safe childcare for youth during the afterschool hours to alleviating many of society's ills, including crime, the academic achievement gap, substance use, and other behavioral problems and academic shortcomings."[13] ASPs vary in the degree to which they articulate and target their goals. For example, some ASPs explicitly target outcomes such as improved school attendance, while other ASPs have unwritten goals or lack overt outcome goals altogether.[14]

Not all youth have access to ASPs. A consistent finding in the literature is that substantial barriers—cost, availability, travel, etc.—disproportionally limit participation for lower-income and ethnic minority youth.[15] Although many ASPs specifically target underserved youth in their missions, children of higher income families are most likely to participate in ASPs and at a greater frequency; they are also more likely to participate in diverse programming with an enrichment (rather than tutorial) emphasis.[16]

[9] American Youth Policy Forum. (2006). *Helping Youth Succeed through Out-of-School Time Programs.* Washington, DC: American Youth Policy Forum.
[10] Little, P., Wimer, C., & Weiss, H. B. (2008). After school programs in the 21st century: Their potential and what it takes to achieve it. *Issues and opportunities in out-of-school time evaluation, 10*(1-12).
[11] Ibid.
[12] Fredricks, J. A., & Eccles, J. S. (2006). Extracurricular involvement and adolescent adjustment: Impact of duration, number of activities, and breadth of participation. *Applied Developmental Science, 10*(3), 132-146.
[13] Kremer, K. P., Maynard, B. R., Polanin, J. R., Vaughn, M. G., & Sarteschi, C. M. (2015). Effects of after-school programs with at-risk youth on attendance and externalizing behaviors: a systematic review and meta-analysis. *Journal of youth and adolescence, 44*(3), 616-636.
[14] Ibid.
[15] Ibid.
[16] Little, P., Wimer, C., & Weiss, H. B. (2008). After school programs in the 21st century: Their potential and what it takes to achieve it. *Issues and opportunities in out-of-school time evaluation, 10*(1-12).

Researchers tend to categorize afterschool programming in terms of several broad, often overlapping, purposes:

- **Enrichment** – to augment the educational experience of youth by offering skill-development, training, and other enrichment opportunities outside of the regular school day.[17,18]
- **Development** – to improve the academic, social and emotional learning, and health outcomes of youth and that are not a focus during the standard school day. [19]
- **Supervision** – to provide afterschool care for the children of full-time working parents who would either not be able to work or be required to leave their children in some form of self-care.
- **Prevention** – to prevent delinquency and other risk behaviors by keeping youth occupied during the peak hours for juvenile crime.

While these purposes are not mutually-exclusive—enrichment experiences, for example, can improve physical health—programs adopt a variety of target populations, strategies, and levels of sophistication to reach their identified outcomes.

Afterschool Programs Outcomes and Protective Factors

ASPs have the potential to serve as protective factors in and of themselves, as well as present youth with opportunities to develop or experience other protective factors. Several studies link ASP participation directly to reduced risk behaviors:

- Locally, University of Alaska Anchorage researchers found that students who participate in organized ASPs at least once a week are 16 percent less likely to binge drink and 31 percent less likely to use marijuana. Students who participate in ASPs at least two days a week are 18 percent less likely to use alcohol, 39 percent less likely to use marijuana, and 28 percent less likely to miss class without permission.[20]
- A review of youth risk and protective factors related to substance abuse found engagement in meaningful activities—volunteering or participating in peer-based programs or service learning projects—was associated with reduced alcohol, tobacco, and drug use, teen pregnancy, school suspensions, and school dropouts.[21]
- Analysis of 43 studies of ASPs serving children between the ages of 5 and 14 observed declines in drug use or arrests and/or changes in attitudes towards drugs.[22]
- A review of 2,587 citations related to youth externalizing behaviors (delinquency, maladjustment, drug use, discipline problems, alcohol use etc.) found a positive, but not statistically significant, effect on externalizing behaviors.[23]

[17] American Youth Policy Forum. (2006). ***Helping Youth Succeed through Out-of-School Time Programs***. Washington, DC: American Youth Policy Forum.
[18] Little, P., Wimer, C., & Weiss, H. B. (2008). After school programs in the 21st century: Their potential and what it takes to achieve it. ***Issues and opportunities in out-of-school time evaluation, 10***(1-12).
[19] American Youth Policy Forum. (2006). ***Helping Youth Succeed through Out-of-School Time Programs***. Washington, DC: American Youth Policy Forum.
[20] Garcia, G. M., Price, L. and Tabatabai, N. (2014). Anchorage Youth Risk Behavioral Survey Results: 2003-2013 Trends and Correlation Analysis of Selected Risk Behaviors, Bullying, Mental health conditions, and protective factors. UAA Department of Health Sciences. This study was completed at the request of the Anchorage Youth Development Coalition (AYDC), in partnership with United Way of Anchorage.
[21] Alaska Department of Health and Social Service's Division of Behavioral Health. (2011). "Risk and Protective Factors for Adolescent Substance Use (and other Problem Behavior)." http://dhss.alaska.gov/dbh/Documents/Prevention/programs/spfsig/pdfs/ Risk_Protective_Factors.pdf.
[22] Mahoney, J. L., Parente, M. E., & Zigler, E. F. (2010). After-school program participation and children's development. In J. L. Meece & J. S. Eccles (Eds.), ***Handbook of research on schools, schooling, and human development*** (pp. 379-397). New York, NY: Routledge.
[23] Kremer, K. P., Maynard, B. R., Polanin, J. R., Vaughn, M. G., & Sarteschi, C. M. (2015). Effects of after-school programs with at-risk youth on attendance and externalizing behaviors: a systematic review and meta-analysis. ***Journal of youth and adolescence, 44***(3), 616-636.

- A longitudinal study of 3,000 elementary and middle school students participating in ASPs in eight states found reports of misconduct declined and, among middle school students, use of drugs and alcohol was less than their unsupervised peers.[24]

Depending on purpose and design, ASPs have the potential to cultivate a variety of protective factors linked with youth substance abuse and delinquency prevention including:

- Life skills and social competence
- Cultural identity and connection
- Positive personal qualities
- Positive self-concept
- Positive peer role models
- Religious identity
- High grade point average
- Connected to school
- Positive connection to other adults
- Safe, supportive, and connected neighborhoods
- Range of opportunities within the community for meaningful youth engagement

Many studies and evaluations have found that ASPs can cultivate protective factors:

- In their review of the value of ASPs, RAND found evidence that multipurpose programs (such as 21st Century Learning Centers, school-aged childcare and Boys and Girls Clubs) can improve youth's feelings of safety.[25]
- The same review found that ASPs that specifically target academic instruction and skill development can improve student achievement.[26]
- Similarly, ASPs that deliberately focus on social and emotional skill development have been linked to reduced risk behaviors.[27]
- Lauer et al. found that ASPs can have positive effects on math and reading achievement for at-risk students.
- A review of 43 studies of ASPs found most describe positive associations between ASP participation and increases in student motivation, effort and attachment to school.[28] Likewise, most studies included in the review found that participants experienced an improved sense of well-being (increased self-efficacy and self-concept, and decreased anxiety and depression) compared to non-participants.[29]
- A longitudinal study of 3,000 students' participation in ASPs in eight states found participating elementary school students showed gains in social skills with peers and prosocial behaviors, as well as decreases in aggressive behaviors with peers.[30]

In addition to cultivating specific protective factors for youth substance abuse and delinquency, ASPs can yield other positive outcomes for participating youth as well. An extensive range of positive academic, social/emotional, prevention, and health outcomes are associated with ASPs. While many of these outcomes are identified by research as protective factors for youth substance abuse and delinquency, others—such as

[24] Vandell, D. L., Reisner, E. R., & Pierce, K. M. (2007). *Outcomes linked to high-quality afterschool programs: Longitudinal findings from the study of promising afterschool programs.* Washington, DC: Policy Studies Associates.
[25] McCombs, J.S., Whitaker, A., and Youngmin Yoo, P. (2017) The Value of Out-of-School Time Programs. Santa Monica, CA: RAND Corporation. Available at https://www.rand.org/pubs/perspectives/PE267.html.
[26] Ibid.
[27] Ibid.
[28] Mahoney, J. L., Parente, M. E., & Zigler, E. F. (2010). After-school program participation and children's development. In J. L. Meece & J. S. Eccles (Eds.), *Handbook of research on schools, schooling, and human development* (pp. 379–397). New York, NY: Routledge.
[29] Ibid.
[30] Vandell, D. L., Reisner, E. R., & Pierce, K. M. (2007). *Outcomes linked to high-quality afterschool programs: Longitudinal findings from the study of promising afterschool programs.* Washington, DC: Policy Studies Associates.

improved homework completion or improved body image—support positive youth development in other important ways. The following table groups ASP associated outcomes by domain.

Table 3. Anticipated Outcomes of Participation in After School Programs

Supportive Outcomes by Domain
Academic Outcomes
Better attitudes towards school and higher educational aspirations
Higher school attendance rates and less tardiness
Less disciplinary action
Lower dropout rates
Better performance in school (achievement test scores, grades)
Greater on-time promotion
Improved homework completion
Engagement in learning
Social/Emotional Outcomes
Decreased behavioral problems
Improved social and communication skills and/or relationships with peers, parents, and teachers
Increased self-confidence, self-esteem, and self-efficacy
Lower levels of depression and anxiety
Development of initiative
Improved feelings and attitudes toward self and school
Prevention
Avoidance of drug and alcohol use
Decreases in delinquency and violent behavior
Increased knowledge of safe sex
Avoidance of sexual activity
Reduction in juvenile crime
Health and Wellness Outcomes
Better food choices
Increased physical activity
Increased knowledge of nutrition and health practices
Reduction in BMI
Improved blood pressure
Improved body image

Source: Table compiled by McDowell Group using information from Little, P., Wimer, C., & Weiss, H. B. (2008). After school programs in the 21st century: Their potential and what it takes to achieve it. *Issues and opportunities in out-of-school time evaluation, 10*(1-12).

Success Features Among Afterschool Programs

Several modifier effects—including intensity of participation, program type, program quality, and system integration—influence ASP outcomes.

Participation Intensity

For ASPs to impact outcomes, the frequency, duration, and quality of participation matter.[31] Fredricks and Eccles researched how the duration of youth involvement in afterschool programming, the total number of activities pursued, and the breadth of participation affect youth development and risky behavior.[32] Analysis of longitudinal data showed that, in general, longer duration of participation predicted more positive outcomes, including higher grades, resilience, academic peer context, and a less risky peer context.[33] Likewise, the greater number of activities was associated with school belonging, resilience, academic peers, and negatively with stress and risky peers.[34] The number of different types of ASPs was indicative of positive school belonging, resilience, and academic peers.[35] Adolescents who participate in programs because of their own intrinsic interest or motivation realize a greater degree of developmental growth.[36]

Activity Type

Researchers have found that different types of ASPs—sports, academic clubs, performance arts, volunteering/service, community-based, and religious—support different developmental outcomes.[37] For example, some studies suggest that youth who participate in sports-based ASPs learn to sustain effort, set goals, and develop values like responsibility, persistence, and self-control; studies of academic-based clubs, predictably, are associated with positive academic outcomes; while research on participation in service activities develops moral and political identity and predicts subsequent civic engagement.[38] One study found that "ASPs that emphasize social skill and character development are more effective at reducing delinquent behavior than are programs lacking such an emphasis."[39]

Program Quality

Program quality is of paramount importance and varies greatly. Outcome gains appear to depend on the quality of an ASP's structure (smaller program size, educated staff, low turnover, more mature programs), process (positive social inter-changes among staff and participants), and participation (frequency, duration, intrinsic motivation to participate).[40] In a study of high-quality programs, researchers found positive outcomes for youth who regularly attended high-quality programs and negative outcomes for youth who intermittently attended unstructured programs.[41] Positive outcomes are more likely when the participant's needs are well-matched with

[31] Weiss, H. B., Little, P., & Bouffard, S. M. (2005). More than just being there: Balancing the participation equation. *New Directions for Student Leadership, 2005*(105), 15-31.
[32] Fredricks, J. A., & Eccles, J. S. (2006). Extracurricular involvement and adolescent adjustment: Impact of duration, number of activities, and breadth of participation. *Applied Developmental Science, 10*(3), 132–146.
[33] Ibid.
[34] Ibid.
[35] Ibid.
[36] Mahoney, J. L., Vandell, D., Simkins, S., & Zarrett, N. (2009). Adolescent out-of-school activities. In R. Lerner, & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 228–269). New York, NY: John Wiley.
[37] Ibid.
[38] Ibid.
[39] Gottfredson, D. C., Gerstenblith, S. A., Soulé, D. A., Womer, S. C., & Lu, S. (2004). Do after school programs reduce delinquency? *Prevention Science, 5*(4), 253-266.
[40] Mahoney, J. L., Parente, M. E., & Zigler, E. F. (2010). After-school program participation and children's development. In J. L. Meece & J. S. Eccles (Eds.), *Handbook of research on schools, schooling, and human development* (pp. 379–397). New York, NY: Routledge.
[41] Vandell, D. L., Reisner, E. R., & Pierce, K. M. (2007). *Outcomes linked to high-quality afterschool programs: Longitudinal findings from the study of promising afterschool programs.* Washington, DC: Policy Studies Associates.

the intentions of the ASP.[42] In a review of 69 ASPs, Durlack et al. found that four SAFE qualities differentiated programs with positive outcomes:[43]

1. **Sequenced:** Does the program use a connected and coordinated set of activities to achieve skill development objectives?
2. **Active:** Does the program use active learning to help youth learn?
3. **Focused:** Does the program have at least one component that addresses personal and social skills?
4. **Explicit:** Does the program target specific personal or social skills?

Compared to programs that did not follow these evidence-based practices, the researchers found that "SAFE programs were associated with significant improvements in self-perceptions, school bonding and positive social behaviors; significant reductions in conduct problems and drug use; and significant increases in achievement test scores, grades and school attendance."[44]

System Integration

In recent years, the Icelandic Model—a prevention effort that includes ASPs in a multi-dimensional strategy to combat youth substance abuse in Iceland—has demonstrated the power to reduce risk factors for substance use while increasing protective factors by integrating efforts at family, school, and community levels. The government-led response has three main components:

1. **Parental education** about the importance of providing emotional support, reasonable monitoring, and time with their teenage children;
2. **Youth participation** in organized sports, extracurricular activities, and other recreational programs; and
3. **Strengthened networks** between agencies in the community and schools. [45]

In addition to the components mentioned above, the model has several other elements:

- National media campaigns to discourage alcohol and cigarette use
- A national, school-based anti-smoking initiative focused on positive peer influence
- Legislation to decrease the visibility of and access to alcohol and tobacco
- Mandated labelling of cigarettes with anti-smoking messages
- A national ban on alcohol and tobacco-related advertising, display of tobacco products in shops, and smoking in all outdoor places
- Increasing the legal age of maturity from 16 to 18
- A publicized Prevention Day[46]

Survey data and evaluation findings have found substantial declines in national rates of substance use and simultaneous increases in protective factors coinciding with the Icelandic Model's interventions.[47]

---

[42] Ibid.
[43] Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American journal of community psychology*, *45*(3-4), 294-309.
[44] Durkak, J. A., & Weissberg, R. P. (2013). Afterschool programs that follow evidence-based practices to promote social and emotional development are effective. In *Expanding Minds and Opportunities: Leveraging the Power of Afterschool and Summer Learning for Student Success*. Available at http://www.expandinglearning.org/expandingminds/article/afterschool-programs-follow-evidence-based-practices-promote-social-and.
[45] Sigfusdottir, I. D., Kristjansson, A. L., Thorlindsson, T., & Allegrante, J. P. (2008). Trends in prevalence of substance use among Icelandic adolescents, 1995–2006. *Substance Abuse Treatment, Prevention, and Policy*, *3*(1), 12.
[46] Kristjansson, A. L., James, J. E., Allegrante, J. P., Sigfusdottir, I. D., & Helgason, A. R. (2010). Adolescent substance use, parental monitoring, and leisure-time activities: 12-year outcomes of primary prevention in Iceland. *Preventive medicine*, *51*(2), 168-171.
[47] Sigfusdottir, I. D., Kristjansson, A. L., Thorlindsson, T., & Allegrante, J. P. (2008). Trends in prevalence of substance use among Icelandic adolescents, 1995–2006. *Substance Abuse Treatment, Prevention, and Policy*, *3*(1), 12.

Concluding Remarks

The research supports the following general conclusions:

- **Reduction of risk factors and promotion of protective factors are linked with decreases in youth substance abuse and delinquency.** These findings are demonstrated nationally and have been replicated for local Alaska students.
- **ASPs can serve as protective factors as well as cultivate protective factors at individual, family, school, and community levels,** but not all youth have access to ASPs. A consistent finding in the literature is that barriers limit participation for lower-income and minority youth.
- **ASPs vary in structure, content, emphases, goals, and student demographics.** Some ASPs are sponsored within schools, others are hosted by private organizations, religiously affiliated entities, community organizations, park districts, youth service agencies, health agencies, libraries, and more.
- **Different types of ASPs—volunteering/service, community-based, performance arts, academic clubs, and sports—support different developmental outcomes**. For ASPs to impact outcomes, the frequency, duration, and quality of participation matter. Program quality is also of paramount importance.
- **Effective ASPs share design features.** ASP best practices include explicit targeting of outcomes, engaging supportive and trained staff, and utilizing sequenced programming.
- **ASPs work best as part of a systemic prevention effort.** The Icelandic Model, a leading-edge prevention effort, exemplifies inclusion of ASPs in a multi-dimensional strategy to combat youth substance abuse.