



SHAPING SUMMERTIME EXPERIENCES

Opportunities to Promote Healthy Development and Well-Being for Children and Youth

Issue Brief

Research Needs for Summertime Programs

Summers in the United States, generally from June through August, mean children and youth in grades K–12 have a break from their normal school attendance. Some of them travel, others just enjoy the time off by spending time with their friends, but many of them use that time to take part in organized activities, from summer camps and programs to various remedial or supplemental academic courses. These experiences can benefit the children and youth who take part in them in a number of ways, from helping them catch up or get ahead in a particular academic areas to more general advantages, such as encouraging the development of positive cognitive, social, emotional, and physical skills and by promoting the youths' safety and their physical and mental health.

A recent publication by the National Academies of Sciences, Engineering, and Medicine, *Shaping Summertime Experiences: Opportunities to Promote Healthy Development and Well-Being for Children and Youth* (2019), explores what is known about the value of summertime experiences for children in grades K–12, with special attention paid to the research underlying those programs and which areas could benefit from further study. The *Summertime* committee consisted of 13 diverse members with expertise in sociology, education, medicine, public health, nutrition and obesity, developmental psychology, positive youth development, public policy, juvenile justice, business, workforce development, and urban planning. The committee examined the existing literature and accessible relevant data sources on demography, outcomes of interest, access, disparities, measurement, and developmental trajectories. An open session with multisectoral stakeholders was conducted and commissioned papers were secured to fill gaps in evidence and information. Based on this evidence the committee identified the following eight areas as being particularly relevant for the development of effective summertime programs and suggested a number of specific research needs in each area.

Developmental Trajectories

Children grow physically, mentally, emotionally, and socially over time, with the changes following broad patterns but with the specifics varying from child to child. Understanding these developmental trajectories is a crucial aspect of designing effective summertime programs in order to better match a youth's environment with his or her developmental needs.

The committee found little systematic research concerning the impact of summer on the developmental trajectories of school-age children and youth. To fill this gap it would be valuable to conduct longitudinal studies that examine the effect of different types of summertime experiences over the course of childhood and adolescence and that look at the effect of these experiences on long-term developmental outcomes for children and youth.

Research has found a number of gaps in developmental outcomes between children and youth from higher and lower socioeconomic backgrounds and from different racial and ethnic groups; many of these gaps are present before school entry, including gaps in the academic, social and emotional, and health domains. Redressing these gaps will be challenging, but certain types of research may help. Thus, the *Summertime* report suggests that research be conducted on resilience- and asset-based approaches to improving developmental outcomes, with special attention paid to underserved populations.

Physical and Mental Health

Effective summertime programs begin with assuring the physical and mental health of the youth attending them. The *Summertime* report identifies several areas relating to physical and mental health where research could help assure the effectiveness of summertime programs.

For example, when the free and reduced-price lunch programs available during the regular school year are suspended during the summer months, low-income children are at an increased risk of food insecurity. A number of programs exist to address that issue, including the Summer Food Service Program offered by the U.S. Department of Agriculture, but only a minority of the children who get free and reduced-price lunches during the regular school year are helped. Thus, research is needed into the best practices for reducing food insecurity for children and youth during the summer.

With youth engaging in more sports and other physical activities during the summer, there is an associated increase in the sorts of injuries associated with these activities. A study of emergency room visits by children under 18 found, for instance, that injuries associated with cycling and water activities peaked in July of each year (Loder and Abrams, 2011). But relatively little is known about whether other sorts of injuries are more common in the summer among children and adolescents. Thus, research is needed to determine whether there are changes in the rates of such things as motor vehicle injuries, various recreational injuries, firearm injuries, and self-inflicted injuries during the summer.

Being exposed to violent crime can damage a child's health and development, and research has shown that children and youth in low-income families and those living in neighborhoods with concentrated disadvantage are more likely to be affected by violent crime than others. However, relatively little is known about the exact rates and types of violence that youth are exposed to during the summer—e.g., domestic violence, child/youth homicide and victimization, or exposure to neighborhood violence—and research in this topic could help inform the design of summertime programs.

Social and Emotional Development

One often overlooked role of schools is to help children with the development of social and emotional skills. These skills include aspects of understanding and managing one's own emotions as well as interacting with the social world—that is, interpersonal and intrapersonal competencies—and they help children and youth integrate their cognition, affect, and behavior (Weissberg et al., 2015). Although individual children are often said to have high levels or low levels of social and emotional skills as if the term referred to a single competency, the reality is that individuals will generally have relative strengths and weaknesses among the various skills.

Relatively little is known about the patterns among children and youth in the development of social and emotional competencies, although some broad trends have been observed. For example, youth from families of lower socioeconomic status and youth from disadvantaged racial and ethnic minority backgrounds are generally assessed by teachers as having lower levels of social and emotional development in early childhood (Halle et al., 2009), although there is evidence that at least some of the disparity may be due to biases in how teachers view the same behavior in children from different racial or socioeconomic groups (Gilliam et al., 2016). An even larger skills gap has been observed between girls and boys, with girls seen as having more social and emotional skills than boys when they enter kindergarten and the gap growing through elementary school (DiPrete and Jennings, 2012).

The *Summertime* report identifies several areas in which research on the development of social and emotional skills is needed. For one, it would be valuable to examine the seasonal patterns related to the develop-

mental trajectories of social and emotional skills for children and youth. Do these patterns differ between the school year and summertime, for instance? It would also be valuable to identify seasonal trajectories of social and emotional learning for children and youth across grades. Finally, studies are needed to understand the effects of different types of summer experiences on social and emotional skills. Results from such studies could help inform the design of summer programs aimed at encouraging the development of these skills.

Safety, Risk-Taking, and Anti- and Pro-Social Behaviors

Summertime experiences can shape the behavior of youth in various ways, both positively and negatively. Adolescents might be more likely—or perhaps less likely—to engage in risky behaviors during the summer, for instance. Youth behavior can, in turn, influence their health, well-being, and academic success, among other things. Thus, the *Summertime* report identifies several areas related to behavior of children and adolescents in the summer that require further research.

The first such area is risk-taking. There is conflicting evidence concerning whether adolescents are more likely to engage in risky behaviors during the summer. For example, the National Survey on Drug Use and Health found that first-time use of alcohol, tobacco, marijuana, hallucinogens, and inhalants peaks in June and July, but a national survey reported that the past-month use of any illicit drug (except marijuana) is lower during the period when most students are on summer vacation, although alcohol use was higher in July than at other times of the year. Given this uncertainty, it would be useful to have research examining whether participation in risky behaviors—such as smoking and e-cigarette use, underage alcohol consumption, and unprotected sex leading to teen pregnancy—changes during the summer.

Pro-social behaviors, which are behaviors intended to help others such as helping or sharing, are known to increase from early childhood into elementary school, but the pattern after that is not clear. Some studies have found a decrease in pro-social behaviors from middle childhood into adolescence, while others have found that they increase or at least stay the same through adolescence. At this point there is relatively little known about what sorts of programs or practices might promote pro-social behavior, so it would be useful to conduct studies aimed at learning more about the characteristics of summertime programs that are effective in increasing such behavior.

Although there has been little research to date on how experiences with police influence school-age youth, research in adults combined with the importance of adolescence as a critical developmental stage indicates that interactions with police may well shape adolescent development. There is some evidence, for instance, that negative interactions between police and youth can lead to cynicism and undermine legal socialization. Researchers are increasingly recognizing police as a significant social force with the potential of shaping the development and well-being of youth, but there are still many unknowns concerning police–youth interactions at a population level. One such unknown is how the unique context of summertime may shape interactions between young people and the police. Given this, the report concludes that it would be valuable to conduct research to learn more about rates of and circumstances surrounding police contact with youth during the summer.

Academic Learning and Enrichment

Of all aspects of summertime experiences, none has been studied as thoroughly as the academic learning and enrichment provided by summer programs, and some broad patterns are clear. For example, academic progress slows during the summer months. However, more recent research shows a far less clear picture regarding whether children and youth, on average, are declining, maintaining, or slightly improving academic skills over the summer months. Another clear pattern is that the influence of summer on academic trajectories is worse for children and youth from lower-income families, communities, and schools (Cooper et al., 1996).

However, there is still much to learn, particularly about the specific approaches that are most effective in improving academic learning and enrichment and how those approaches might need to be modified for various groups of students, particularly those from disadvantaged backgrounds. The *Summertime* report makes the following suggestions for future studies concerning academic learning and enrichment:

- Conduct research to establish optimal best practices (e.g., dosage, staffing, curriculum, mix of academic and enrichment content) separately and in combination to advance the academic development of children from different backgrounds, at different developmental stages, and in different family and community contexts in targeted academic outcomes.
- Conduct research to better understand the summer-related academic learning outcomes and enrichment opportunities for subpopulations of children and youth who are currently underrepresented in the literature, which has focused primarily on the black–white and low–high socioeconomic status gaps. These populations include but are not limited to children and youth who are American Indian, Alaska Native, Native Hawaiian, Pacific Islander, immigrant, migrant and refugee, homeless, system-involved, LGBTQ+, and those with special health care or developmental needs.

Time Use of Children and Youth

To help children and adolescents get the most out of their summer months, it is necessary to understand the complete landscape of summertime experiences and youth participation in them. One of the best ways to do this is with time-use studies, which can provide rich detail about the daily activities of children and youth. Unfortunately, the *Summertime* committee found that the summer-specific literature does not provide a comprehensive inventory of the myriad experiences children and youth have during the summer.

Thus, the *Summertime* report calls for research designed to provide greater detail about children and youth activities during the summer. One useful approach, for example, would be to conduct longitudinal studies of unstructured and structured summertime experiences of youth. Furthermore, it would be valuable to expand existing time-use surveys to differentiate between summertime and other times of the year, to include children living within foster care and juvenile justice settings, to include time use by children and youth under age 15, to differentiate opportunities by agents, and to consider changes in children’s technology use and access.

Effectiveness of Programs and Practices

It is important to examine the effectiveness of the programs themselves as a way of determining the most effective approaches and using that knowledge to guide the design and implementation of future programs. Unfortunately, at present there is relatively little rigorous research that can be used as the basis of evidence-based program development. Thus, the report calls for a wide variety of research that can be used to improve the effectiveness of summertime programs across the country. Particular research areas should include:

- Developing a standardized set of effectiveness metrics for summertime program evaluations.
- Moving beyond pre-/post-program studies to carrying out prospective controlled studies, ideally with randomization.
- Conducting replication studies to understand how different contexts may change outcomes. A summertime program that is effective in one context—among children from high-income, high-education-level families, for instance—may require a different approach or may fail altogether in a different setting, such as among high-risk children who get less support at home and who have a history of poor attendance in school.
- Examining how participation in summer programs over multiple years affects outcomes for children and youth.
- Conducting studies on how to implement, disseminate, and scale effective programs and practices.

Underserved Populations

In many communities there are children who lack access to or experience greater barriers to accessing various public and private services or institutions. Underserved populations can include children who are

homeless, children with special health care or developmental needs, and children involved in the child welfare system as well as children in various minority populations, including American Indian, Alaska Native, Native Hawaiian, Pacific Islander, immigrant, migrant and refugee, and LGBTQ populations. Furthermore, in many communities children's access to developmentally supportive and enriching summer experiences is dependent on their parents' financial circumstances, in which cases the children from wealthier backgrounds who live in better-served communities are able to participate in such experiences while their peers from less financially secure families and underserved communities do not.

To date, underserved populations have been underrepresented in the research literature, so there is relatively little known about the effectiveness of summertime programs specifically for these populations. Thus, a research priority is to carry out studies designed to understand the particular characteristics that make programs effective for underserved populations. Researchers should, for example, examine how various community, neighborhood, and family contexts affect outcomes for children and youth during the summer. They should conduct research to pinpoint the characteristics of programs that have been shown to be effective for children and youth from underserved populations. And they should seek to understand the particular needs of children and youth who are involved in various systems, such as welfare, foster care, and juvenile justice systems, and to determine policies and practices that can be implemented to meet the developmental needs of these youth.



Shaping Summertime Experiences: Opportunities to Promote Healthy Development and Well-Being for Children and Youth (2019)

Available:

<https://nationalacademies.org/summertimeopportunities>

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