

ADVANCING TEEN FLOURISHING

Moving Policy Upstream

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With support from Well Being Trust



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Disclaimer

The action items outlined in this report represent the position of the authors and members of the National Expert Panel, based on review of the evidence. The views expressed here do not necessarily reflect the views of AcademyHealth.

EXECUTIVE SUMMARY

The well-being of children is an overarching societal goal. Teens ages 13 through 18 are a significant child subgroup, comprising 25.1 million Americans, or 2 out of 5 children.¹ As adolescents, teens live through a critical developmental period, during which their circumstances, brains and bodies are undergoing multiple changes. Many of today's teens—including and beyond those diagnosed with mental disorders—are not flourishing to the extent they could be.² Further, evidence is growing that thriving teens would be able to contribute to the well-being of their families, communities, and the nation.^{3,4}

Flourishing is a state where people experience positive emotions, positive psychological functioning and positive social functioning.²⁰

Emotional wellbeing includes:

- happy
- interested in life
- satisfied

Psychological well-being includes:

- environmental mastery
- positive relations with others
- personal growth
- autonomy

Social wellbeing includes:

- perceived ability to make a social contribution
- social integration (sense of belonging)
- social actualization (feeling that society is becoming a better place)
- social acceptance (feeling that people are basically good)
- social coherence (feeling that the way our society works makes sense)

In this three-part model, emotional well-being represents the hedonic stream of personal feelings of happiness, and psychological and social well-being represent the eudaimonic stream of positive functioning in life as persons and citizens.

These concepts are all currently captured in the Mental Health Continuum-Short Form (MHC-SF).^{21 22 23} However, studies of interventions,² and surveys of teens and their families,²⁴ typically use outcomes other than the MHC-SF to measure teen flourishing and its components .

The climate for supporting further efforts to advance teen well-being is becoming more favorable, as suggested by the following trends:

- Growing interest across the globe in understanding, measuring and promoting psychological, social, and emotional well-being^{5,6};
- U.S. support for research on adolescent brain changes and their implications for an expanded view of adolescent mental health⁷; emotional well-being frameworks and research⁸; and social and emotional learning in schools⁹
- Growing research and policy interest in population mental health¹⁰, the social determinants of health and mental health^{11,12}, and improving health through social policy¹³;
- Private philanthropic support for translating teen-relevant science into policy and practice.¹⁴

At the same time, there are counterforces, such as how teens are viewed by much of the public and policymakers, the stigma associated with mental illness, the focus in healthcare financing on diagnosable disorders as a basis for payment, and the relative proportions spent on social versus health services.¹⁵

This report identifies promising findings and policy recommendations to guide the development, implementation, and testing of strategies to promote positive mental health and prevent psychological distress for our teens. The report is based on a detailed and stepwise approach that included a review of systematic reviews of interventions and strategies, a global scan of policy recommendations, a set of key informant interviews, and a structured approach to identifying and prioritizing a unique set of action items for the U.S. context, all guided by a National Expert Panel (NEP).

How We Did Our Work

We used a stepwise, evidence-informed approach to identify and prioritize a set of action items for the Federal government. This included:

- Convening a 10-member National Expert Panel (NEP) to guide and review all aspects of the work;
- Conducting a rapid evidence review to outline the existing evidence base for relevant interventions and policy actions;
- Conducting a policy scan to identify current relevant policy recommendations in the U.S. and internationally, then cross-walking the recommendations with the evidence base;
- Conducting a series of key informant interviews to deepen our contextual understanding of policy needs, potential barriers, and emerging opportunities;
- Developing a preliminary set of action items, and working with the NEP to apply a modified Delphi approach to refine and prioritize them by domain/subdomain.

This work was conducted by AcademyHealth in partnership with ACT for Health with support from Well Being Trust.

Project Framework and Action Items

The outcome of our work includes 47 action items to advance teen flourishing. The items are captured within two broad categories: *Broad Cultural Changes to Attitudes and Belief* and *Systems of Caring Changes*, intended to result in the flourishing outcomes of psychological, social, and emotional well-being (Figure).

The Table depicts the highest priority action items and notes the total number of other priority actions for each subdomain.

Broad cultural changes in national attitudes and beliefs—concerning teens, mental health, and structural inequities—are important to expedite the systems of caring changes. At the same time, tangible changes to systems of caring can modify mindsets.¹⁶

Systems of caring recommendations are the most tangible and address key spheres of contact for teens: child welfare, community/extracurricular, recreational, sports, employment, digital life/social media, education, families, health and healthcare, violence prevention and criminal justice; and cross-cutting subdomains (research, measurement and monitoring, governance, and funding).

“Listen and value what we say, even though we are kids. Help us in things we cannot do ourselves.”

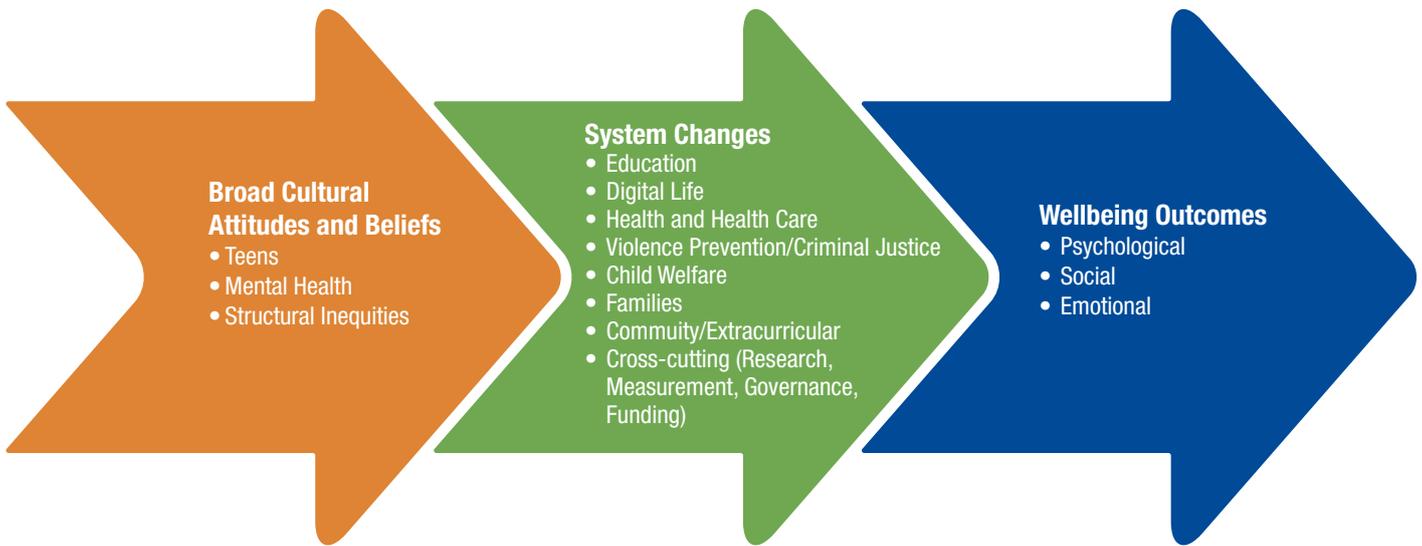
– Abby, a teen mental health advocate¹⁹

“The first 1000 days after conception are highly important for child development, but the next 7000 days are likewise important and often neglected... Focus on the first 1000 days is an essential but insufficient investment.¹⁸”

Our priority action items occur upstream, focused on public policy, environmental change, enhancing community resources, and transforming social norms. They are population-based and intended to foster flourishing across all teens. As the field grows, there will be opportunities for “targeting” within universalism, to ensure that subgroups of teens will have their specific needs met.

The action items are not mutually exclusive; a combination of strategies, at multiple levels, will be key. For example, one constant touchstone for all priorities is the need to respect and meaningfully engage teens in all aspects of policymaking. Another is the need to sustain adults who come in contact with teens to build productive relationships. Finally, a robust research agenda at multiple levels of intervention is needed to build the most effective strategies to promote teen flourishing.

Figure 1. Project Framework



Why We Focus on 13-18 year-old Teens

Adolescence is now typically defined as a period beginning at the start of puberty (around 10 years old) and ending approximately in a person's mid-twenties, when the distinct brain and related changes during adolescence development are complete.

While there are needs across all adolescent and child age groups, this project focuses on teens ages 13 through 18. Thirteen through eighteen year-olds can be considered a unique population. In high-income countries like the United States, adolescence is characterized by: (1) teens' almost universal exposure to the high school environment and its intense academic demands focused on college admission; (2) teens' exposure to widespread public misunderstandings of teen years; (3) the legal status of most 13-18 year-olds as minors limited in their capacity to act autonomously; and (4) the focus of most prevention research on younger children and adolescents, consistent with the widespread belief in the effectiveness of early intervention. Given the mental health challenges found in young adults, including college students, we argue that a focus on the high-school-aged years is also a form of early intervention. Further, a focus on teens is also a way to move beyond a focus on what an individual will become in the future to include a focus on their well-being, as they live their lives in the present.

In the Broad Cultural area, the stigmas associated with being a teen and with mental health must be diminished. Public misconceptions have held back progress in these domains for too long. An accelerated policy and action research agenda is needed to mitigate wide-ranging structural inequities, especially those affecting low-income, racial and ethnic minority teens, and teens with a range of sexual and gender identities. Given the growing diversity of our adolescent population, finding effective ways to reduce structural inequities is essential.

In the Systems of Caring area, the child welfare and criminal justice systems need to focus their attention on teens' subjective well-being. Components of teens' communities that provide extracurricular activities, sports, recreation, and employment, need evidence-based resources so they can better understand teens and help them to flourish. Multi-stakeholder engagement is needed to change the digital environment for teens, so it is safer and enables prosocial behavior. The highest priority action item for education is to change from a concentration on academic achievement alone to a dual and integrated focus on both scholarship and school climates to support social and emotional growth. For families with teens, the highest priority action is to help with material resources, either through additional basic income support or assistance with basic teen needs such as housing, transportation, food, education, and extracurricular activities. Current income policies do not address the specific needs of teens. The highest priority action item for violence prevention is to reduce the level of gun violence in the U.S., using an approach recommended by teens themselves.

"We need to reframe adolescence from eye roll to opportunity..."³⁴

Table 1. Broad Cultural Changes—Attitudes & Beliefs: Number of Action Items and Highest Priority Action Item for Each Subdomain

Domain		Total Number Of Action Items	Highest Priority Action Item For The Federal Government
 Teens	5	Adopt principles of respect for teens and include them in policymaking.	
 Mental Health	2	Develop and use a definition of teen mental health that prominently includes positive mental health, levels of flourishing, and a right to have critical opinions.	
 Structural Inequities	2	Develop and use evidence-based national, social, educational, and cultural policies and interventions to eradicate structural inequalities and discrimination.	

Table 2. Systems of Caring: Number of Action Items and Highest Priority Action Item for Each Subdomain.

Domain		Total Number of Action Items	Highest Priority Action Item For The Federal Government
 Child Welfare	3	Continue to address psychological, social, and emotional needs of teens in the child welfare system.	
 Community (Extracurricular, Recreational, Sport, Employment)	4	Provide user-friendly evidence-based resources and interventions to adult leaders of extracurricular, recreational, sport, and employment.	
 Digital Life & Social Media	4	Engage with all stakeholders to reduce harm to teens and produce more prosocial content in social media.	
 Education	3	Expand the education system’s focus from academic achievement alone to an equal and integrated focus on teen psychological, social, and emotional well-being.	
 Families	3	Provide parents and families of teens with access to adequate material resources.	
 Health & Health Care	3	Increase health and health care providers’ capacity for working with teens through regulation and expanding training capacity.	
 Violence Prevention & Criminal Justice	3	Adopt the provisions of the March for Our Lives Peace Plan.	

Table 3. Systems of Caring Cross-Cutting Domains: Number of Action Items and Highest Priority Action Item for Each Subdomain

Domain		Total Number of Action Items	Highest Priority Action Item For The Federal Government
 Funding	3	Develop additional sustainable funding to meet major gaps in teen psychological, social and emotional well-being.	
 Governance	6	Create and implement a national strategy to advance teen flourishing.	
 Measurement & Monitoring	2	Create a dashboard for national economic and social goal setting with indicators covering all aspects of a teen flourishing strategy.	
 Research	4	Support well-designed research to identify strategies to effectively advance psychological, social, and emotional well-being for all teens.	

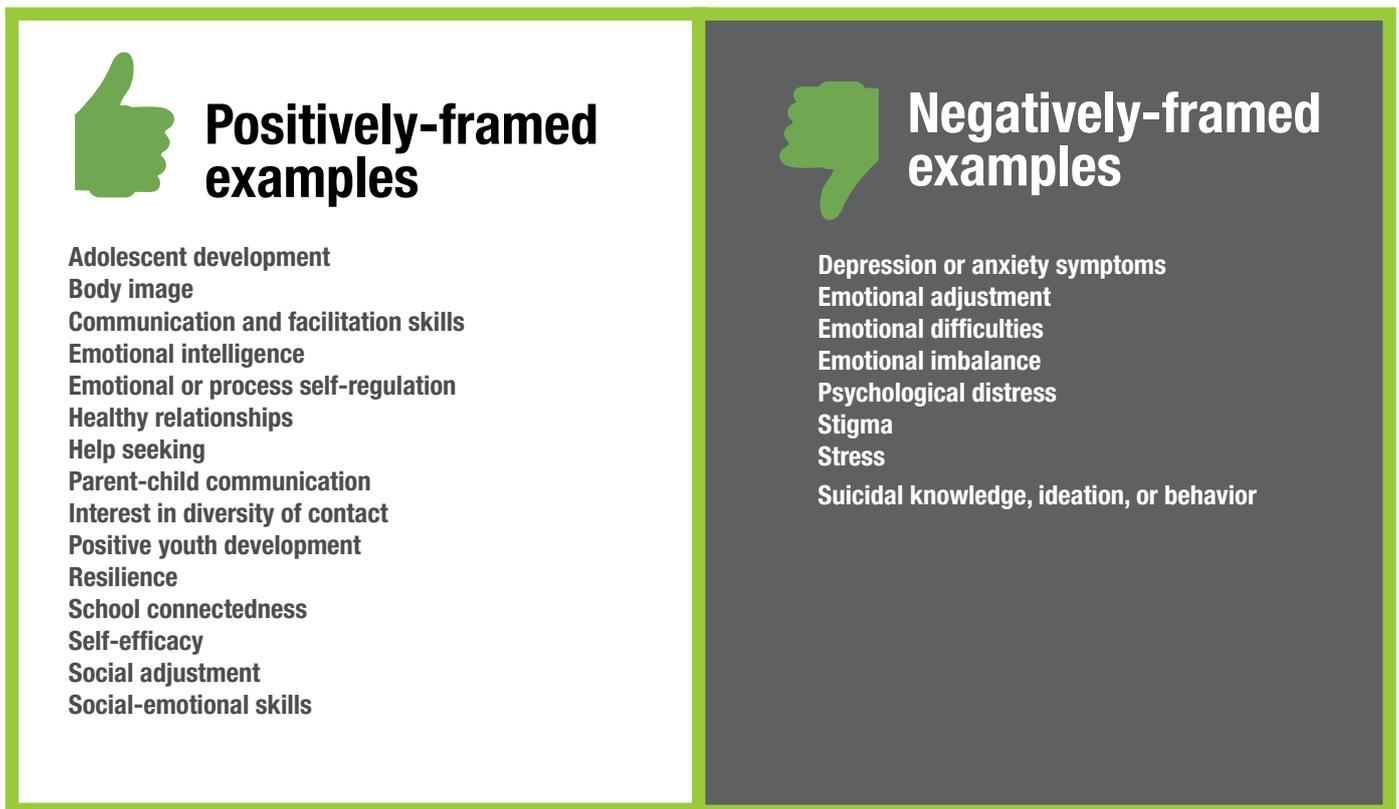
Several subdomains in Systems of Caring address the cross-cutting issues of research, measurement and monitoring, governance, and funding. As promising practices identified by our **rapid evidence review**² are implemented, rigorous research with stronger study designs is needed to assess who the interventions work for, and in what settings, as well as to develop additional innovative and effective strategies. The top priority action item for measurement and monitoring is creation and use of a dashboard of indicators so the nation can track its progress toward greater levels of teen flourishing. In the governance area, we prioritize development and implementation of a national strategy that could be jumpstarted with a Decade of Teen Flourishing. For funding, we urge development of ongoing, sustainable funding to support teen flourishing activities, through public-private partnership called Wellness Trusts.

Summary

We have identified 47 policy recommendations for the Federal Government across 11 spheres of action. All the policy recommendations can be found in the full report.¹⁷

The world shows a growing interest in advancing psychological, social, and emotional well-being as a cornerstone of overall health. Science is demonstrating how adolescence is a critical developmental period, and plastic enough for experiences during this period to make a difference throughout the teen years and across the rest of the life course. Bringing a focus on teens to the larger enterprise of healing the nation, and a focus on flourishing within an enhanced teen health policy, is a way to move forward on behalf of our teens.

Figure 2. How researchers have measured teen psychological, social, and emotional well-being outcomes. Selected examples from our Rapid Evidence Review:²



THE CHALLENGE



Adolescence is a unique, exciting, and sometimes challenging time in a young person's life. It is exemplified by waves of cognitive, psychosocial, and emotional development, as well as physical and sexual growth. For at least 60 years, there has been concern over teens' risky behaviors,¹⁴ but little attention to the subjective well-being of teens themselves. Now teens are beginning to speak out, the findings of adolescent brain science are beginning to emerge, and interest in mental health as a valuable and positive outcome is growing.

The Social Environment for Teens

Teens today are under stress.²⁶ Within the U.S., surveys find that teens and young adults are more stressed than older people.^{27 28} Teens report multiple stressful situations (Figure 3). In one survey, the most commonly reported sources of stress were school (83 percent), getting into a good college or deciding what to do after high school (69 percent), and financial concerns for their family (65 percent).²⁷ Another survey found that 70% of teens report worry about the level of anxiety and depression among their peers, 55%

report worrying about peer bullying, 51% about peer drug addiction, and 40% about poverty among their peers.

Over half of teens worry about climate change and global warming (58%), mass shootings (75%), school shootings (57%), deportation of families (57%), and reports of sexual harassment and assault (53%). Almost 3 out of 10 teens wish they had more friends, and one out of four say they come across people who try to put them down every day. One out of five teens report being bullied at school. One out of 4 teens think that social media has a mostly negative impact on them, but almost one out of 3 believe it has a positive impact. Four out of ten lower-income students report spending too little time with their parents, and that their family does not have enough money (36%). Researchers have begun to document objectively measured psychological effects of often-reported stressors such as climate change,²⁹ school shootings, changes in the political environment,³⁰ and structural inequities.³¹ Teens themselves report not going to school because of safety concerns; with twice as many Black (9%) and Hispanic teens (9.4%) making these reports as white students (4.9%).

State of Teen Well-being

Given the stresses they face, it is not surprising that teens are not flourishing to the extent they could be. While two out of five teens are flourishing by some measures, the remaining three out of five are either languishing or only moderately mentally healthy. Almost two out of five high school students report being so sad and hopeless at times that they could not engage in their usual activities.³²

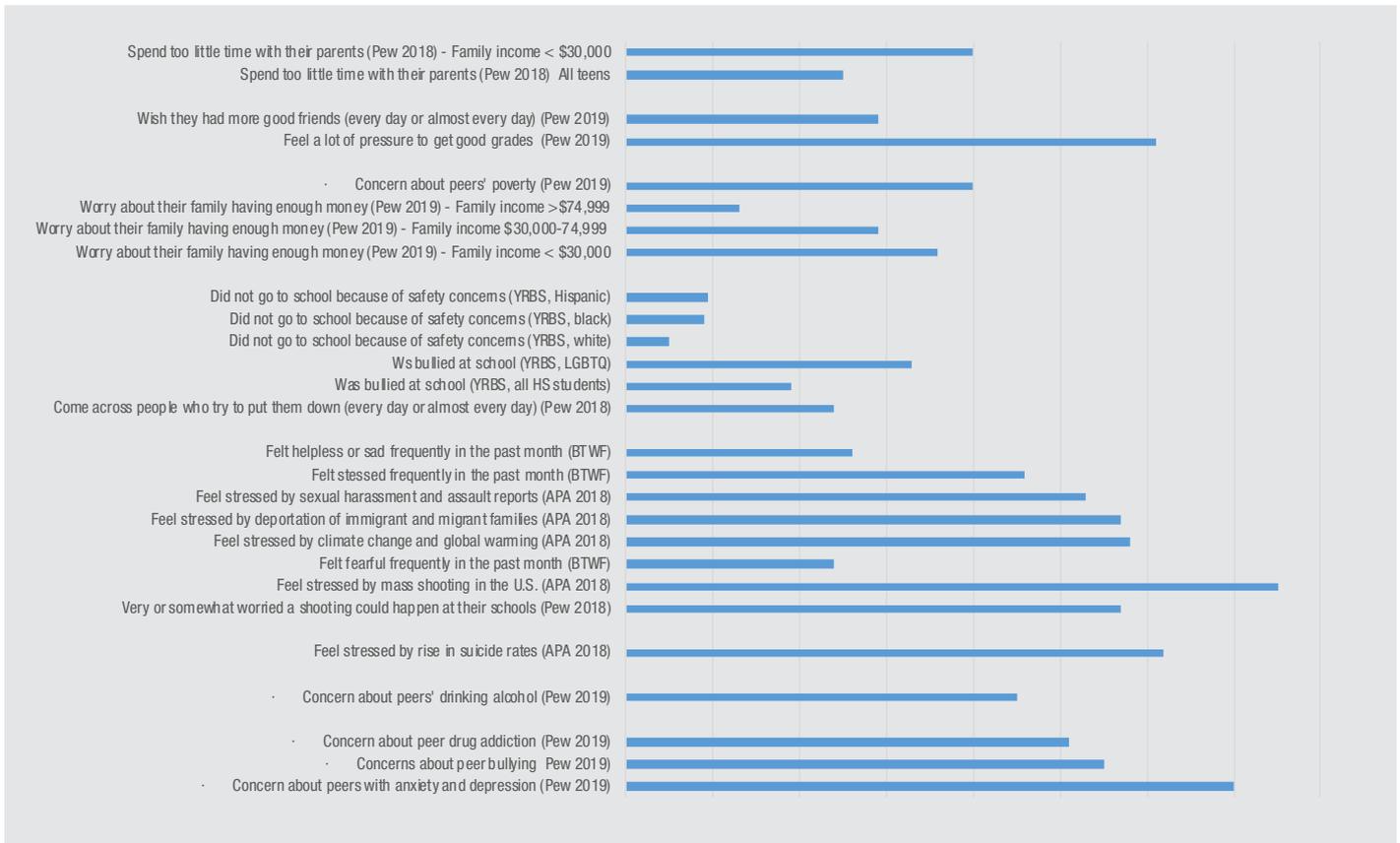
Some subgroups of teens are worse off than others (Figure 2). For example, while one out of ten male high school student reports persistent feelings of sadness and hopelessness and two out of ten had seriously considered suicide in 2017, lesbian, bisexual, gay, transsexual, and queer or questioning (LGBTQ) students were three times as likely as male students on average to report persistent feelings of sadness and hopelessness (63% v 21.4%), and four times as likely as males on average to have seriously considered suicide (47.7% v 11.9%). On these two measures, the average female fares worse than the average male. While these data do not suggest disparities

in the well-being for racial and ethnic minority teens, other data do. For example, while Hispanic teen students on average are similar to black and white students, almost half of female Hispanic students report being sad and hopeless.³³

While there is some research on risk and protective factors for teen flourishing outcomes and their variations, more research is needed before causes can be deciphered. Our **rapid evidence review** provides insights about causes through an action research lens: assessing what happens when interventions are implemented.

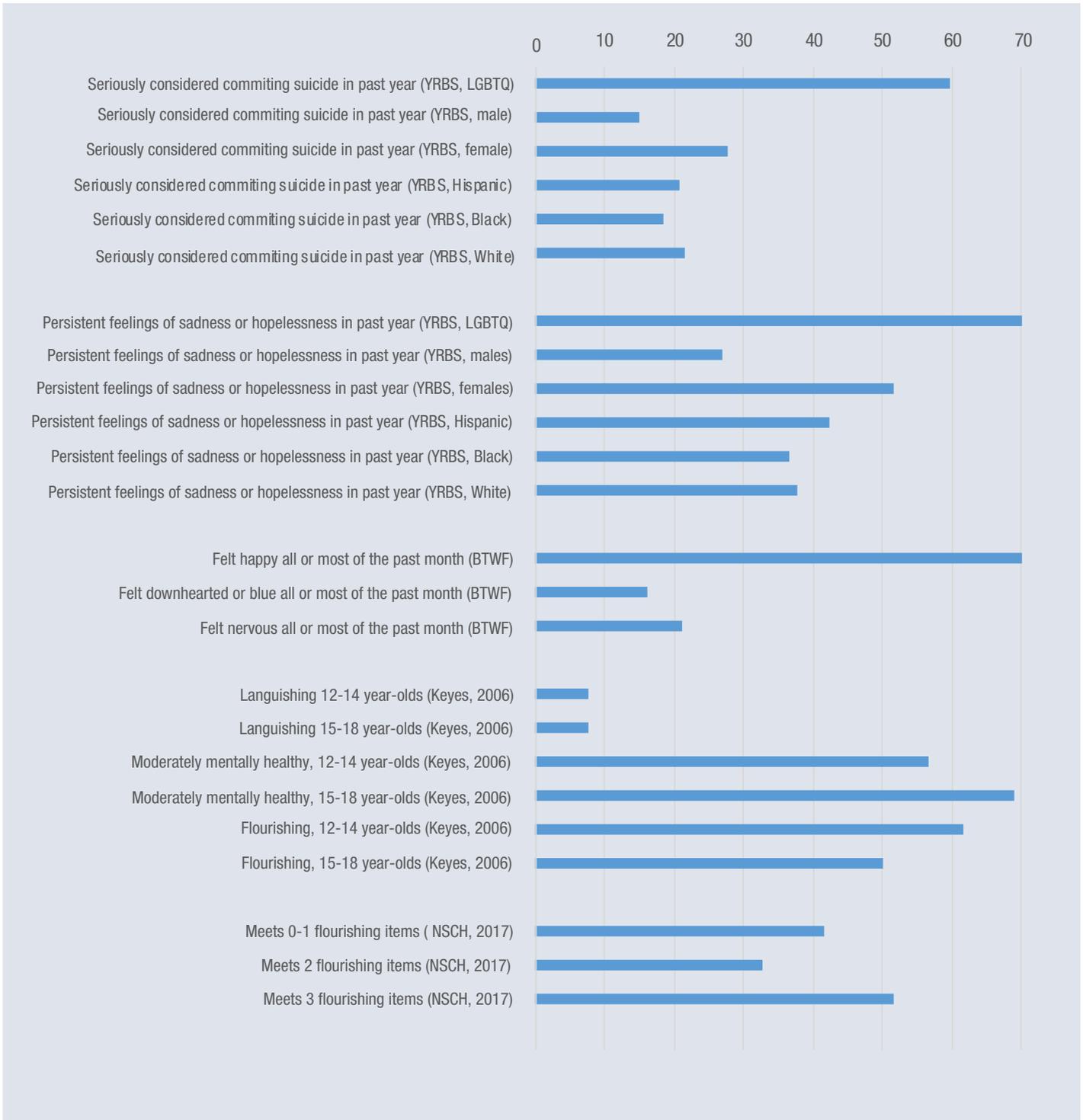
As part of its signature initiative, *Healing the Nation*,⁵ Well Being Trust asked AcademyHealth and ACT for Health to look at the state of adolescent psychological, social, and emotional well-being, the state of the evidence for strategies to advance flourishing, and existing policy recommendations, and to propose a set of prioritized, evidence-informed policy recommendations to meet the psychological, social, and emotional needs of U.S. teens. The remainder of this report focuses on the final set of action items designed to advance

Figure 3. Selected Teen and Young Adult Sources of Stress, Teen Self-Reports



Sources: APA: American Psychological Association. 2018. Stress in America: Generation Z. <https://www.apa.org/news/press/releases/stress/2018/stress-gen-z.pdf> (Gen Z are 0-21 year-olds); BTWF: Born This Way Foundation and Benenson Strategy Group. Undated. Youth Mental Health in America. (13-17 year-olds); Pew 2019: Pew Research Center, February 2019, "Most U.S. teens see anxiety and depression as a major problem among their peers" (13-18 year-olds); Pew 2018a: Pew Research Center. 2018, April. A majority of U.S. teens fear a shooting could happen at their school, and most parents share their concern. <https://www.pewresearch.org/fact-tank/2018/04/18/a-majority-of-u-s-teens-fear-a-shooting-could-happen-at-their-school-and-most-parents-share-their-concern/>; Pew 2018b: Teens, Social Media & Technology 2018. <https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/>; YRBS: Centers for Disease Control and Prevention. 2018. Youth Risk Behavior Survey, Data Summary and Trends Report, 2007-2017. <https://www.cdc.gov/features/yrebs/index.htm>

Figure 4. Selected Well-Being Indicators, Variations by Sexual Identification, Gender, Age, Race, and Ethnicity, Various Years, Various Sources



Sources: BTWF: Born This Way Foundation and Benenson Strategy Group. 2017, Jul. Kind Communities—A Bridge to Mental Wellness. <https://bornthiswayfoundation/research/kind-communities-a-bridge-to-youth-mental-wellness/>. Population sampled: High school students 15+. NCHS: Supplemental Appendix to Bethell CD, Gombojav N, Whitaker RC. Family resilience and connection promote flourishing among US children, even amid adversity. *Health Aff (Millwood)*. 2019;38(5). YRBS: Centers for Disease Control and Prevention. 2018. Youth Risk Behavior Survey, Data Summary and Trends Report, 2007-2017. <https://www.cdc.gov/features/yrebs/index.html>

ACTION ITEMS

BROAD CULTURAL CHANGE— ATTITUDES AND BELIEFS



Teens

Background



Great leaps have occurred in scientific understandings of adolescence. The second decade of life is a unique and exciting period of human development. Yet many interventions may fail because they do not reflect the emerging research.¹⁵¹ Teens, their families, and communities suffer as a result of either negative attitudes or lack of attention.^{14 34} We have to spread the word that teens are not a bundle of risk factors and that investments in teen psychological, social, and emotional well-being during the high school years can improve teens' lives and put our youth on a happy, healthy, and productive life trajectory.³⁵

Action Items

Our action items propose reforming attitudes and beliefs about teens by adopting principles of respect for teens and including them in policy-making. Teen well-being could be elevated to or beyond the level of care now devoted to early childhood interventions. Additionally, young people should be considered a resource and not a problem, and society as a whole should take responsibility for teen flourishing. Any thinking about teens should consider how digital information technology is embedded in teens' lives.

Action Item 1.

Adopt principles of respect for teens and include them in policymaking that concerns them, consistent with the rights of minors enshrined in the United Nations Convention on the Rights of the Child (UNCRC).

“... This is of utmost importance and could lead to financial investment (similar to First Five) that could yield significant impacts.”

– National Expert Panel Member,
commenting on Action Item 1

Action Item 2.

Take at least a two-track approach to positive child and adolescent development and subjective well-being that values and equally supports efforts in early childhood and in adolescence.



Action Item 3.

Develop a vision that considers young people as a resource, not a problem.



Action Item 4.

Change the locus of responsibility for teen flourishing from parents and schools to society as a whole.



Action Item 5.

Because “digital” is embedded in virtually every aspect of life, include the digital aspects of adolescents’ lives and development in all policymaking concerning their well-being, including the survey of existing laws and policies concerning youth practice, behavior, health and well-being.

The United Nations Convention on the Rights of the Child (UNCRC) is the most widely ratified human rights treaty in the world. Among member states, only the U.S. has not signed onto the agreement. The Convention has 54 articles that cover almost all aspects of a child’s life and set out the civil, political, economic, social and cultural rights to which all children everywhere are entitled. It also explains how adults and governments must work together to make sure all children can enjoy all their rights. The UNCRC defines children as anyone younger than 18, the age of majority in most nations.



“We need to reframe adolescence from eye roll to opportunity... The [current] public narrative on adolescence frames young people as dangerous threats and adolescence as an unfortunate time of life. This narrative shapes how we see and think about young people. And, in turn, how we as a society choose to support them and their development... We need to move our thinking from adolescence as a time when we close our eyes and just hope a young person gets through... to a time of opportunity when lifelong skills and relationships are built and passions spark and ignite. We need to move to [policies] that enable engagement and empower young people.”³⁴

How public views of teens vary from those of experts in adolescent development and their implications for teen flourishing¹⁴

- “[Experts] understand puberty as a set of complex biological changes that [affect] the ways in which adolescents are sensitive and respond to their social worlds. The public thinks [more] narrowly..., [which may lead them to understand puberty] as a hostile process.”
- “Experts understand adolescence as a period of development that confers not only vulnerability ... but also powerful opportunities for learning and positive adaptation, [and] the community as providing a set of rich opportunities and challenges for adolescents. The public... sees ... [the community] primarily as a source of risk and danger, which may [lead them to focus on restricting] access to contexts outside the home and the school.”
- “Experts cite a wealth of research about the collective benefits that accrue when adolescents develop in positive ways... The public... think[s] about adolescent outcomes in narrowly individual ways... [making] it hard to see supporting adolescents as a matter of collective concern”

Mental Health

Background



How the public and policymakers think about mental health has implications for the design of teen environments and services. The World Health Organization (WHO) definition and the “two-continua” mental health model suggest that, while there is often overlap, the absence of a mental disorder does not always mean the presence of mental health. To illustrate, many more teens are not flourishing than would be expected if we only considered their rates of diagnosed mental disorders.

Understanding these concepts and data could lead to universal mental health promotion strategies² that would be complementary to the current dominant focus on severely mentally ill teens and their treatment. Such a model matches past stated priorities of the National Institute of Mental Health and is represented in a recent expanded spectrum of mental health services for young people.³⁸ Given their emerging concerns about social justice, teens’ sense of social well-being could be influenced by their own or others’ experiences. For example, they may not respond positively to items that endorse “feeling that the way our society works makes sense.”

Teens are aware of the general stigma attached to mental health and illness, and perceived stigma has consequences for their own help-seeking and their feelings about peers.³⁹ Only a few of the systematic reviews in our evidence review found promising teen-focused stigma-reducing strategies, suggesting a need for additional development and real-world testing. One untested approach that might be worth further investigation is testing the impact on stigma of broadening teens’ understandings of mental health as including positive dimensions. Testing the impact of anti-stigma interventions directed more broadly at society and key adults is another possible avenue.

Action Items

The two action items for changing broad cultural beliefs and attitudes about mental health include, as a top priority, adopting fuller definitions of mental health that include teen flourishing, and, as a second priority, reducing stigma towards teens with mental illness.



Action Item 1.

Develop and use a definition of teen mental health that prominently includes positive mental health and levels of flourishing, at the same time acknowledging that many teens may not have a positive sense of social well-being due to their own or others’ experiences of injustice.



Action Item 2.

Reduce stigma toward teens with mental illness by developing effective strategies for the culture at large, health care providers, families, and teens themselves.

“Although the focus on mental illness is unassailable, the presumption that children and youth are thereby mentally healthy is tenuous.”²⁰

The World Health Organization (WHO) defines mental health as more than the absence of mental illness to include “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to her or his community.” This definition means conceiving of mental health “not only as the absence of mental illness but also as the presence of feeling good about life (e.g., a state of well-being), and functioning well in life at the individual (e.g., realizing one’s potential), and the social (e.g. contributing to community) levels.”



Structural Inequities

Background



Despite policy changes over time, the U.S. continues to experience racism, sexism, heterosexism, socio-economic discrimination and other sources of social inequality.⁴¹ Teens may be particularly affected. Brain changes during adolescence contribute to teens' increasing awareness of discrimination and interest in social justice for themselves and others.⁴² In addition, today's teens are more diverse than ever (Figure 5).

Figure 5a. U.S. Teens by Race/Ethnicity, 2016

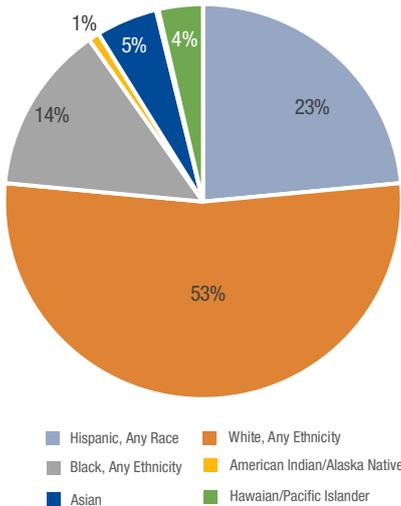


Figure 5b. Sexual Orientation of High School Students, 2017

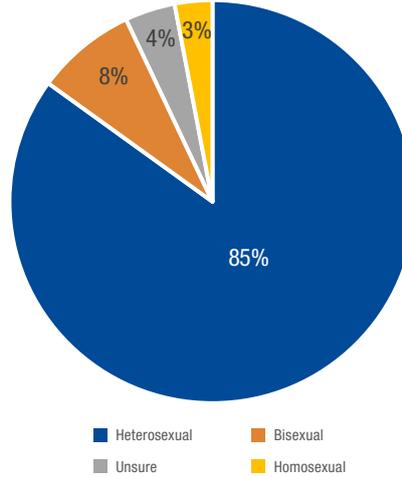
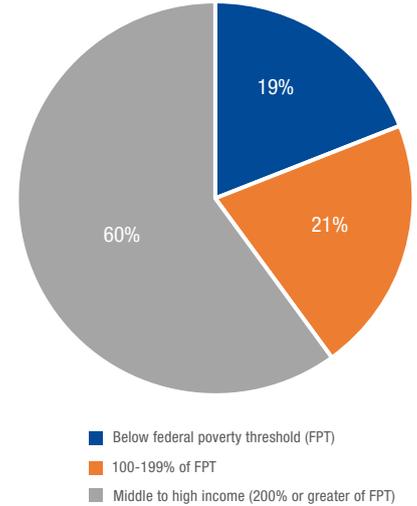


Figure 5c. Adolescents by Family Income, 2014



Teens can experience considerable discrimination (Table 4), which often has consequences for flourishing.⁴³ Leaders in pediatrics, adolescent medicine, and education suggest that public policy that undermines inclusivity and/or creates a hostile environment should be concerning to all people who care for youth.

Table 4. Discrimination Against Teens.

Nature of Discrimination	Data
Race and Ethnicity	
Online discrimination	68% ⁴⁴
In-person discrimination	58% ⁴⁴
Perceived racial discrimination (average score on a scale of 0-5)	.8 ⁴³
Perceived ethnic discrimination (average score on a scale of 1-4 (standard deviation)) ⁴⁶	
• Latino	1.31 (2.23)
• Asian	1.25 (1.56)
• European	0.26 (0.81)
Heterosexism	
LGBTQ Students	
Verbally harassed at school by students or teachers	85% ⁴⁷
Heard the term "gay" used in a negative way by students or teachers	98% ⁴⁷
Hear negative words used in association with LGBTQ on the internet, in school, from peers	92% ⁴⁸
Sexually assaulted in past 12 months	21% ⁴⁹
Transgender Youth	
Threatened or injured at school by a weapon	3.4 times the rate of cisgender students
Sexism⁵¹	
Percent of teens who strongly agree that they want "equal numbers of men and women to be leaders in work, politics, and life."	
Girls 14-19	64%
Boys 14-19	51%
Percent of teens who agree sexism is a big problem or somewhat of a problem in society	
Girls 14-19	51%
Boys 14-19	19%

Action Items

The evidence base for effective strategies to reduce interpersonal and structural inequities, including among teens, is sparse. As a result, the highest priority action item for structural inequities is to develop effective and implementable interventions. The second action item pertains to recognizing the diversity of U.S. teens in policy, research, and programming.



Action Item 1.

Develop and use evidence-based national, social, educational, and cultural policies and interventions to eradicate structural inequalities and other forms of society-wide discrimination that affect diverse teen populations.



Action Item 2.

Federal research and program entities should recognize the heterogeneity within adolescence, by developmental level, age, race, ethnicity, gender, gender identity, sexual orientation, socioeconomic status, and other characteristics, designing initiatives to meet diverse needs and reporting results to show differences by subpopulations.

Definitions of Structural Inequities

Structural inequity refers to the systemic disadvantage of one social group compared to other groups with whom they coexist, and the term encompasses policy, law, governance, and culture and refers to race, ethnicity, gender or gender identity, class, sexual orientation, and other domains.⁴¹

- Structural sexism has been defined as systematic gender inequality at the macro level (U.S. state), meso level (marital dyad), and micro level (individual).⁵²
- Heterosexism describes an ideological system that denies, denigrates, and stigmatizes any nonheterosexual form of behavior, identity, relationship, or community. Using the term heterosexism highlights the parallels between antigay sentiment and other forms of prejudice, such as racism, antisemitism, and sexism.⁵³
- Racism is an organized and dynamic system in which the dominant racial group, based on a hierarchical ideology, develops and sustains structures and behaviors that privilege the dominant group, while simultaneously disempowering and removing resources from racial groups deemed inferior.⁵⁴
- Socio-economic discrimination is when someone is judged and treated differently than normal because of their financial status. Income discrimination is sometimes called classism, which is defined as unfair treatment of people because of their social or economic class.⁵⁵

How Bias Can Affect Teen Flourishing

- African American students are likely to be suspended or expelled from school out of proportion to their numbers in the population.⁵⁶
- When teachers use biased language, students' self-esteem is affected.⁵⁷
- Beliefs about school safety affect the psychological well-being of transgender and gender-nonconforming youth.⁵⁸
- When teens believe that their families are not economically successful, they have more mental health symptoms.⁵⁹
- Teen girls are more likely than teen boys to feel pressure to always be positive and make sure that they do not disappoint others; they also have higher levels of depression and other forms of psychological distress.⁶⁰
- Negative political rhetoric results in negative affect among Mexican American youth, and negative affect is associated with lower psychological well-being.⁶¹
- Daily discrimination was associated with Black, Latinx, and Asian teens' lower levels of same-night sleep onset latency, more sleep disturbance, more next-day daytime dysfunction, and higher next-day daytime sleepiness.⁶²
- The effect size between discrimination and socioemotional distress in a meta-analysis was $r = .24$.⁶³
- Subtle forms of discrimination were concurrently associated with suicidal ideation among African American and Latinx youth, and were prospectively associated with suicidal ideation among African American adolescents, above and beyond the effects of depressive symptoms.⁶⁴

Systems of Caring

Child Welfare

Background



The almost 200,000 teens in the child welfare system represent 24% of the total caseload.⁶⁵ Teens within the child welfare system have unique needs that warrant specific policy attention. For example, without dedicated assistance, teens transitioning out of child welfare as they near 18, 21, or high school graduation, are more likely to be homeless, pregnant, and not enrolled in school.⁶⁶ Teens are more likely to be in congregate (group home) care. But, according to the report *The Promise of Adolescence*, "... the child welfare system and its resources remain focused on younger children."¹¹⁰

Most of the widely reported outcomes of focus for those aging out of the child welfare system are economic and do not include a focus on teens' or children's subjective well-being.⁶⁷ One exception is the question about having a connection to an adult in the National Youth in Transition Database (NYTD).⁶⁸ Another is in a recent rapid review of the impact of trauma-informed approaches that concluded that there was preliminary evidence for a positive impact on child psychological, social, and emotional well-being.⁶⁹

"Transitioning to adulthood is a challenging stage for all youth. But youth in foster care often have already lost parents, siblings, familiar neighborhoods, and schools. They often have moved frequently and have not developed the kinds of supportive, committed relationships that could sustain them during difficult times."⁷²

Action Items

The action items focus on making the child welfare system more responsive to teens' subjective well-being needs. Amendments to legislation, and inclusion of the child welfare system in collections of evidence-based practices are of high priority.



Action Item 1.

Address the psychological, social, and emotional well-being of teens in the child welfare system through trauma-informed and healing-centered policies and practices.



Action Item 2.

Address the unique needs of teens more explicitly in implementing the Family First Prevention Services Act (Public Law 115-123).⁷⁰; the Family First Transition and Support Act of 2019; and the listing of reviewed preventive services in the Title IV E-Prevention Services Clearinghouse.⁷¹



Action Item 3.

Develop programs for transition age (18-21) foster youth that are effective for improving their psychological, social, and emotional well-being.

What is the Federal Role in Child Welfare?

Primary responsibility for protecting children and youth from abuse and neglect rests at the state level, generally with county- or state-operated child welfare agencies governed by state law. The federal government has played an important role in funding and guiding state child welfare agencies since the passage of the Social Security Act of 1935, and Federal mandates are imposed upon states in exchange for federal reimbursement for a portion of their child welfare spending.⁷³

Community: Extracurricular, Recreational, Sport, and Employment

Background



During the high school years, teens have opportunities to more independently participate in an expanded array of activities in their local communities (Table 5). Non-academic activities provide opportunities to build both skills and self-esteem, and to identify trusted adults beyond home and school. Our evidence review found both positive and negative or null effects from activities such as nature interactions, yoga, many forms of exercise, and a youth-led community development program. However, the quality of the studies included in the reviews varied. In addition, teens face barriers to full and fulfilling participation in community activities. Cost can be a big challenge and program quality can be uneven. Beyond parental costs, teachers report trouble obtaining permission and resources for teen extracurricular activities.⁷⁴

Table 5. Teen Participation in Extracurricular Activities

Working for pay (16-17 year-olds)	20% ⁷⁵
Participation in after-school activities (middle and high school students, per parent report)	64%-82% ^{76 77}
• School sports	50%
• Arts activities (music, theater, or dance)	40%
• Clubs and student council	50%

Given the large numbers of teens who work for pay, actionable information on how employers can support teens to flourish would be useful. Our evidence review found no research on how work could be organized to advance teen well-being. However, a recent review that summarized evidence-based ways on how workplaces in general can support psychological, social, and emotional well-being could provide an initial guide for a teen-focused research agenda.⁷⁸ Guidance related to teens would be unlike guidance for adults, given how distinctive most teen employment arrangements are.

The author of a recent report arguing for greater business investment in health and well-being recently noted that the business sector has not been widely engaged.⁷⁹ One of her recommendations corresponds to one from a key informant interviewee—helping businesses to find community opportunities. The interviewee noted the dramatic disparity between national and local expenditures on healthcare and that for community-level health promotion. So far, none of the new wave of community development grants have focused on teens or measured outcomes for them.

Action Items

Several high priority action items are noteworthy for addressing this typically overlooked area of teens' lives. Just as adults serving teens in healthcare need to be adolescent-centered and knowledgeable, adults leading community activities, including employment, could serve teens better if they had more guidance. Teachers, who spend enormous amounts of time with teens and often know them well,

could use more support to work with teens on beneficial non-academic activities. More attention is needed to help teens design safe and supportive environments for out of home and out of school. The business community could be dramatically more supportive.



Action Item 1.

Provide user-friendly evidence-based resources and interventions to extracurricular activity leaders, employers, and other adults, to build their ability to advance teen flourishing, and consider a certification program.



Action Item 2.

Provide financial and other support to teachers and students to design, implement, and evaluate non-academic school-based programs to support teen flourishing.



Action Item 3.

Provide financial and other support to create safe and supportive spaces so teens can participate in activities shown to facilitate teen flourishing.



Action Item 4.

Engage the business community—including employers of teens—to develop healthy public policy for advancing teen flourishing.

Challenges to Full Teen Participation in Extracurricular, Recreational, and Sport Activities

A recent survey conducted by Capital One® found that one-third of families questioned planned to spend over \$1000 per child per year on school and after-school activities.⁸⁰ A University of Michigan poll of parents found similar numbers, with almost 30% of parents saying the cost of school extracurricular activities is higher than they expected and 10% feeling that the benefits of activities are not worth the cost—including three times as many lower-income parents.⁷⁷ The costs rise as children get older, and sports are more expensive than other activities.

Program quality (including coach-athlete relationships) can be a factor in teen dropout from activities.⁸¹ Sport cultures may create dynamics of exclusion for marginalized youth.⁸² However, there are opportunities to transform these spaces into more inclusive and positive environments to support positive growth for all young people.

Digital Life/Social Media

Background



Social media and the digital environment are an integral part of life for teens.⁸³ Adolescents' almost constant connectivity raises concerns among adults and teens themselves, even as they recognize the benefits that the new digital environment can bring (Figure 4).⁸⁴ Examples of concerns include unwelcome distractions; cyberbullying; exposure to unrealistic unhealthy body images in doctored Instagram photos; and exposure to teen "drama."⁸⁵ At the same time, social media and digital technology can make potentially profound contributions to facilitating social connectedness, enhancing well-being, and improving healthcare delivery.⁸⁶ For example, LGBTQ teens indicate a strong digital preference for reaching out when in crisis.⁸⁷ Reviews of how teens' social media use may affect their well-being have found mixed results; review authors also note the need for stronger research designs.⁸⁸ Similarly, our rapid evidence review found positive teen well-being outcomes as a result of several digitally-based interventions, while others had mixed findings.²

Discussions about whether and how to regulate the internet are plentiful although most do not focus on teen well-being. In the U.S., the FTC is revisiting the Children's Online Privacy Protection Act (COPPA) regulations of 1998,⁸⁹ and several bills have been introduced in the U.S. Congress to strengthen COPPA, extend its coverage to teens 13 through 15, or make other changes to protect children from harm in the digital environment. COPPA has also been criticized for lack of enforcement⁹⁰; the only posted FTC report on compliance was published in 2002. Regulations pertaining to teens can be complicated; for example, European Union efforts to include additional adolescent ages in regulations was met with debate about teens' rights to free expression and speech.⁹¹

Recently, California and Delaware have passed laws pertaining to minors younger than 18 that go beyond protection of children's personal information.⁹² California's law prohibits online marketing or advertising to minors of specified products or services that minors are legally prohibited from buying. Delaware's new law prohibits internet services and third parties from marketing or advertising specified products or services inappropriate for children's viewing, such as alcohol, tobacco, firearms, or pornography.

Private and public-private organizations have emerged to offer guidance to families and youth on digital activities. "NetFamilyNews.Org" aims to document developments at the intersection of youth and digital tech and media. "icanhelpdefeatnegativity.org" works in schools to empower students to use social media in a more positive, healthy way and provide them with tools for good citizenship. Internationally, the UN Convention on the Rights of the Child – discussed further in the Governance section of this report--is drafting a General Comment on the rights of children in a digital environment.

Action Items

Our action items go beyond concerns about privacy to focus on reducing harms to teens and producing more prosocial content. Toward this end, the highest priority action item is for the federal government to engage with all relevant stakeholders, establishing accountability mechanisms, innovating to support teen well-being, and supporting adults who come in contact with teens to foster positive uses of digital environments.



Action Item 1.

Engage with all stakeholders, including social media platforms, influencers/advertisers, and adolescents themselves, in reducing harm and producing more prosocial content in social media.



Action Item 2.

Establish expectations and accountability mechanisms by which social media companies, technology firms, and their partners (e.g., influencers, advertisers) will protect teens from harmful contact and engage with researchers, teens, and community stakeholders to produce more prosocial content.



Action Item 3.

Find and support avenues to source and accelerate a cohort of innovators and an ecosystem that rethinks and reshapes social technologies to support teen well-being.



Action Item 4.

Support adults who come in close contact with teens (clinicians, educators, family members, employers) to partner with youth to support media use that promotes positive psychological, social, and emotional well-being outcomes such as self-care and care for peers and communities online.

Figure 6. Positive and negative views of social media, U.S. Teens Ages 13-17, Mar-April 2018

Teens say social media helps strengthen friendships, provide emotional support, but can also lead to drama, feeling pressure to post certain types of content

% of U.S. teens who say the following about social media

 POSITIVE

81% Feel more connected to their friends

69% Think it helps teens interact with a more diverse group of people

68% Feel as if they have people who will support them through tough times

 NEGATIVE

45% Feel overwhelmed by all of the drama there

43% Feel pressure to only post content that makes them look good to others

37% Feel pressure to post content that will get a lot of likes and comments

Source: Anderson M & Jiang J. Nov 28, 2018. Teens' Social Media Habits and Experiences. Washington, DC: Pew Research Center <https://www.pewresearch.org/internet/2018/11/28/teens-social-media-habits-and-experiences>



Education

Background



Almost all U.S. teens ages 13-17 are students enrolled in high school.⁹³ Several aspects of school life can be a major source of stress for teens and affect their psychological, social, and emotional well-being,⁹⁴ and improvements in school environments and services have the potential to enhance teen flourishing.² Some countries have been able to enjoy both high academic achievement and a strong student sense of well-being; they may be examples for the U.S.⁹⁵ Some recent policy changes support improvements to the K-12 education sector focused on social and emotional learning and addressing the “whole child.”⁹⁶ However, more attention is needed to ensure that teens’ needs are met. For example, interventions based on social and emotional learning (SEL) models are not as effective for teens as they are for younger adolescents and children.

When making changes to school climate and services to enhance teen flourishing, it will be important to share responsibility for improvement, provide sufficient and equitable resources for improvement to occur, and conduct strong evaluations. The burden to change should not be placed entirely on students. Federal and State Education Departments, local school district administrators, and school-level principals, teachers, counselors, coaches and support staff all have a role to play.

Action Items

Three action items are recommended. The first priority action item calls for a shift in emphasis in schools across the U.S. so that schools will become socially and emotionally supportive for teen students. The second and third priorities speak to holding education systems accountable for teen flourishing, and supporting later school start times.



Action Item 1.

Support state and local education jurisdictions to shift their focus from academic achievement alone to an equal and integrated focus on teens’ psychological, social, and emotional well-being. Examples include making improvements to school environments in high schools, working with teens and school staff to build on activities with promising evidence, and taking a whole school, whole community, whole child approach, with a strong evaluation approach.



Action Item 2.

Consider ways to hold the education system as a whole accountable for teen psychological, social, and emotional well-being, without making students solely responsible for improved well-being outcomes.



Action Item 3.

Provide strong incentives to State and local education agencies to change school start times to facilitate developmentally appropriate teen sleep patterns. A suggested start time is 8:30 a.m.⁹⁷

“... We spend our days not hunched over our stereotypical phones, but over our textbooks. My life revolves around school and my future. Our lives are polluted with the high expectations – conscious or not—of everyone around us. High-stakes tests and the Common Core have molded us into robots. Despite all this and more, many of us intend to make this generation the greatest... We are more capable than you think. We’re loud because we have to be...”

—Keaira Cox, age 15⁹⁸

What is a Positive School Climate?

A positive school climate or environment is characterized by caring and supportive interpersonal relationships; opportunities to participate in school activities and decision-making; and shared positive norms, goals, and values.⁹⁹



Families

Background



Ninety-five percent of teens live with one or both parents.¹⁰⁰ Forty percent of all adolescents live in families with incomes at or near poverty; teens in Black and Hispanic families are more likely to live in poverty.¹⁰¹

The U.S. has the second highest post-tax, post-transfer child poverty rate (20.2 percent) among a group of 21 developed countries.)¹⁰² Teens are aware of economic disparities; one of teens' major concerns is the economic situations of their peers.¹⁰³

Even without counting college-related costs, teenagers are more costly than younger children,¹⁰⁴ but this reality is not reflected in tax and other federal policy. For example, the Coronavirus-related payment for child dependents applies only to children 16 years of age and under. Studies included in our evidence review find that additional family income and exposure to higher-income neighborhoods improve some aspects of teen psychological, social, and emotional well-being in some cases.² In response to a Congressional request, a committee of the National Academies developed policy options that would halve child poverty.¹⁰⁵ This work could provide a start for developing teen-specific policies.

Observers have suggested that the effects of material-resource-focused policy interventions could be strengthened with specialized attention to the psychosocial needs of teens and their families. Unfortunately, while there have been many studies of parent-level interventions with younger children, there has been little research on strategies to build positive teen-parent relationships.² Teens need parents or other committed and effective caregivers to provide support and help them navigate the challenges of adolescence. Surveys have found discrepancies between how parents and adolescents view their relationships, with parents having more positive views of parent-teen communications than teens have.¹⁰⁶

Action Items

Three high priority action items for teens and their families are helping families with the material costs of having a teen, the need for specialized help and guidance to improve parent-teen interactions across all families, and the need for specialized services for teens and families in stressful situations.



Action Item 1.

Provide parents and families of teens with access to adequate material resources – such as food, shelter, or money for education or extracurricular activities – by supplementing income or directly providing resources through government programs.



Action Item 2.

Develop and implement programs and practices that can promote family resilience and parent-child connection for families of teens.



Action Item 3.

Develop and implement specialized services to families of teens undergoing stressful situations as defined by the families.



Health and Health Care

Background



The U.S. health care delivery system has not been considered a major environmental context for advancing adolescent psychological, social, and emotional well-being, as opposed to treating disorders. Our rapid evidence review did not identify any reviews with flourishing outcomes from health-care-based interventions.

Despite being more likely to have one or more health conditions (Table 6), teens are less likely than younger children to have health insurance, a usual source of care, and annual medical and wellness visits.¹⁰⁷ Nonetheless, health care provides opportunities to advance teen flourishing, as interest in integrating traditional medical care and other services, and making services youth friendly, grows.¹⁰⁸ Teen needs could also be addressed more explicitly in Medicaid child-focused social determinants screening.¹⁰⁹ Like other adults in teens' lives, health care providers' capacity for understanding and interacting well with adolescents could be enhanced.¹¹⁰ Given that flourishing challenges run across all socioeconomic levels, private payers could also support these innovations.

The health care delivery system has massive resources; few are used for services for adolescents.¹¹² A potential danger of involving the health care delivery system is in medicalizing teen flourishing. Making health care a setting to advance teen thriving will take both political will and additional resources.

Action Items

The top action item for health care is to build adolescent- and mental-health-specific expertise in the health professions. Understanding and meeting the social needs of teens and providing flourishing-specific appropriations throughout the government are also important to advance teens' psychological, social, and emotional well-being beyond those covered by direct service reimbursement.

Table 6. Health Care Opportunities to Advance Teen Flourishing

Has one or more current or lifelong health conditions from a list of 27 conditions	12-17 year-olds, NSCH, 2017-2018	47% ¹¹¹
Has a special health care need	12-17 year-olds, NSCH, 2017-2018	24.2% ¹¹¹
Teen saw a doctor, nurse, or other health care professional for sick-child care, well-child check-ups, physical exams, hospitalizations or any other kind of medical care, in past year	12-17 year-olds whose parents participated in the NSCH, 2017	81.5% ¹¹¹
Teen had one or more preventive medical care visits in past year	12-17 year-olds whose parents participated in the NSCH, 2017	78.4% ¹¹¹
Health care provider discussed mental health and emotional issues (e.g., stress, anxiety)	13-18 year- old national survey respondents, 2016	57%
Teen had a chance to speak with a . . .health care provider privately, without parent or another caregiver in the room, at the most recent visit	12-17 year-olds whose parents participated in the NSCH, and who had a medical visit in the past 12 months, 2017-2018	51% ¹¹¹

Source: NSCH: National Survey of Children's Health

Action Item 1.

Increase health and health care providers' capacity for working with teens through regulation and expanding training capacity. For example, regulatory bodies for health professions in which an appreciable number of providers offer care to adolescents should include a minimum set of competencies in adolescent development and teen mental health into their licensing, certification, and accreditation requirements, and all such providers should have a minimum level of competency in adolescent medicine.

Action Item 2.

Consider social prescribing—identifying and responding to patients' social needs in general practice.¹¹³

Action Item 3.

Address teen psychological, social, and emotional well-being within Congressional appropriations for U.S. Department of Health and Human Services (HHS) programming, including for the Agency for Healthcare Research and Quality (AHRQ), the Centers for Disease Control and Prevention (CDC), the Centers for Medicare & Medicaid Services (CMS), the Health Resources and Services Administration (HRSA), the National Institutes of Health (NIH), and the Substance Abuse and Mental Health Services Administration (SAMHSA).



The Integrated Care for Kids (InCK) Model

The Integrated Care for Kids (InCK) Model is a CMS-supported 7-year test of child-centered local service delivery and state payment models that aim to reduce expenditures and improve the quality of care for children under 21 years of age covered by Medicaid through prevention, early identification, and treatment of behavioral and physical health needs.¹¹⁴ Some programs also include Children's Health Insurance Program (CHIP) beneficiaries and pregnant woman over age 21 who are covered by Medicaid. The model will empower states and local providers to better address these needs, as well as the impact of opioid addiction through care integration across all types of healthcare providers. In early 2020, almost \$126 million in InCK Model funding was awarded to seven states: Connecticut, Illinois, North Carolina, New Jersey, New York, Ohio, Oregon.

Violence Prevention and Criminal Justice

Background



Although crimes against teens dropped markedly since the 1990s, teens are still exposed to many forms of violence (Figure 7). Some of the exposure comes from other teens, who themselves may have been victimized; some of it comes from the system in place to deal with teen perpetrators; and some comes from mass shootings, including massacres at schools.¹¹⁵ Fear of mass school shootings is a top concern of teens and their parents, and exposure to fatal school shootings is associated with psychological distress.¹¹⁶ There are multiple opportunities for enhancing the evidence base on violence prevention among and for teens, including prevention of bullying, cyberbullying, and gun violence.

While crime is down, numerous young people get involved with the justice system. The Office of Juvenile Justice and Delinquency Prevention estimates that, 742,000 13-17 year-olds were referred to juvenile courts in 2017.¹¹⁷ The Prison Policy Initiative estimates that in 2018 48,000 youth were being held away from home as a result of their criminal involvement.¹¹⁸ As of 2016, around 250,000 youth are tried, sentenced or incarcerated as adults in the United States every year.¹¹⁹ Teens involved with the criminal or juvenile justice systems have typically been exposed to multiple social risk factors and are likely to be psychologically distressed. While adolescent brain science has changed some aspects of some local systems—such as when juveniles can be charged as adults¹²⁰—and the 2018 Juvenile Justice Reform Act advocates evidence-based trauma-informed strategies, there is ample room for a greater emphasis on teen flourishing, possibly using healing-centered strategies.^{121 122} Given the paucity of evidence on these approaches, further development and testing of interventions seems warranted.

Action Items

The action items focus on preventing violence, researching gun violence, and healing the teens who become involved in the justice system.



Action Item 1.

Take the steps recommended by the teen-led organization March For Our Lives, to dramatically reduce gun violence: comprehensive background checks; declare and act on a national gun violence emergency; hold the gun lobby and manufacturers accountable; appoint a Director of Gun Violence Prevention and provide them with an initial \$250 million in annual funding for research; generate, implement, and evaluate evidence-informed community-based solutions; and empower the next generation.



Action Item 2.

Incorporate trauma-informed and healing-centered models in juvenile justice and violence prevention programs.



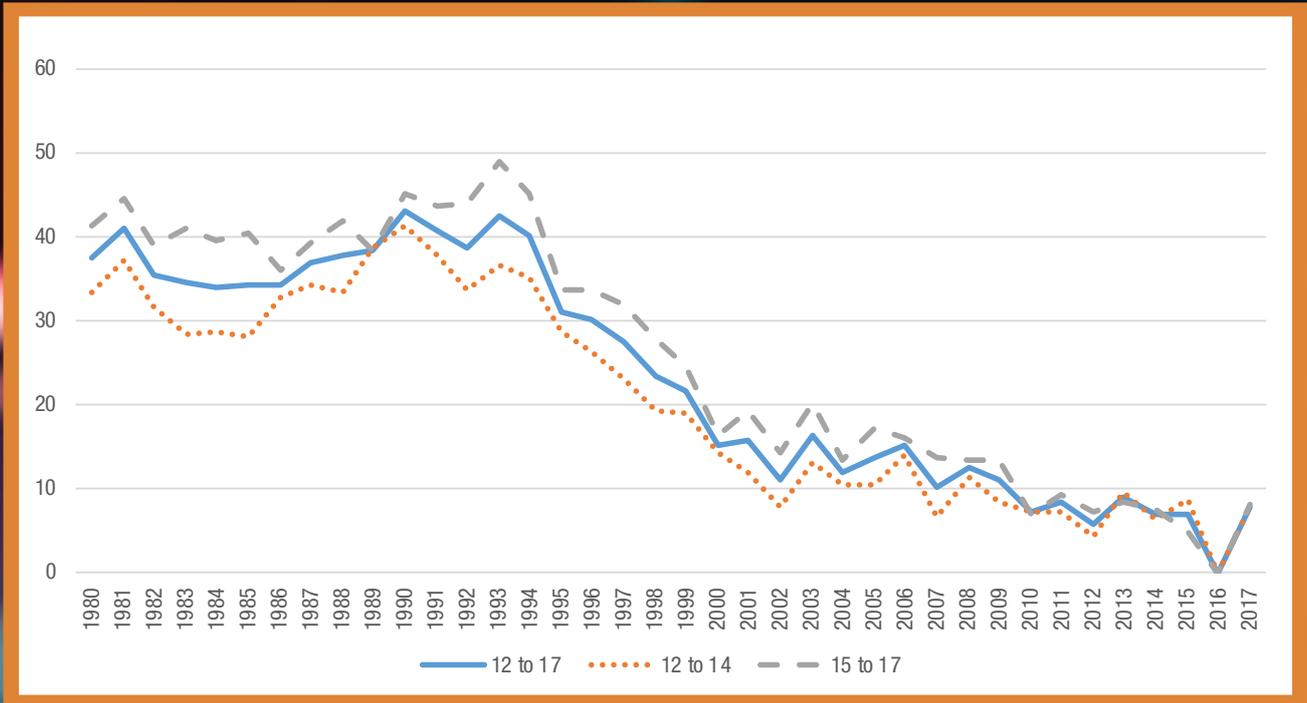
Action Item 3.

Using the new \$50 million in dedicated funding for gun violence prevention research split evenly between the National Institutes of Health (NIH) and Centers for Disease Control and Prevention (CDC), include research on teen-focused random gun violence prevention, and promotion of positive mental health in violence-prone neighborhoods and in the juvenile justice system.

Promising Strategies to Reduce Symptoms and Attitudes of Teen Aggression²

- Income supplementation
- Violence reduction and gender-equality-focused interventions with training for school counselors and parent involvement
- Universal school-based mental health promotion
- Life skills education
- Programs to develop young men's well-being

Figure 7. Violent Crime Victimization, Teens Ages 12-17, Rate per 1000 Youth, 1980-2017.



Cross-Cutting: Funding

Background



Some of the policy changes recommended elsewhere in this report have fiscal implications; some may be minimal, nonexistent, or potentially provide a substantial return on investment (e.g., improved agency collaboration). In this section, we discuss current

federal funding estimates relevant to teens, and provide action items that could provide additional funding.

Dollar amounts for federal spending on adolescents as a group or on psychological, social, and emotional well-being as a category are not available. Adolescents are typically included in funding analyses of child spending. Year over year, analysts have noted that, except for health care expenditures, federal spending on children, which includes adolescents, is shrinking.^{123 124 125}

Without a dedicated child and adolescent budget and/or conducting a child and adolescent impact statement for the federal budget, it seems unlikely that more funding would be available from the federal government alone. However, a Wellness Fund or Wellness Trust combining multiple sources of revenue is a high priority policy recommendation.

Action Items

The action items for funding to advance teen flourishing include as the highest priority the federal government working with others in the private sector and, perhaps local jurisdictions, to develop sustainable Wellness Funds. Such multi-source funding sources could even help entities such as the CDC's Division for Adolescent and School Health (DASH) to focus more on enhancing teen psychological, social, and emotional well-being. The second-most important priority is to design the U.S. federal budget based on teen well-being priorities, a model

that follows the 2019 New Zealand "well-being budget" that emphasized children's needs.⁵ At a smaller level, the third-most critical funding priority of extending Project LAUNCH to teens is a specific action focused directly on advancing psychological, social, and emotional well-being. Project LAUNCH is a relatively small (\$23 million¹²⁶) program within SAMHSA currently limited to young children from birth to 8 years of age, and their adult caregivers. However, its focus on social and emotional development could make it relevant to teens.



Action Item 1.

Develop additional, sustainable funding (e.g., Wellness Funds) to close major gaps in teen psychological, social, and emotional well-being. For example, increase investment in the Division of Adolescent and School Health at the CDC to expand programs to promote school connectedness.¹²⁷



Action Item 2.

Design the national budget based on teen well-being priorities by, for example, conducting and using a teen psychological, social, and emotional needs assessment and budgeting impact statement and try Wellness Funds to improve teen well-being at a population level.



Action Item 3.

Expand Project LAUNCH to teens, modifying it as needed.

Federal Spending on Children and Teens

Federal investments in children ages 0-18 fell to 1.9 percent of GDP in 2018, the lowest level in a decade.^{123, 125} In 2017, only about 9 percent of the federal budget was spent on children. While NIH's total budget approximates \$41 billion,¹⁴⁸ it reports that its support for pediatric research across all offices and institutes totals around \$4 billion,¹²⁸ approximately ten percent. Children ages 0 through 17 comprise almost 20% of the U.S. population.¹

Some examples of teen-focused federal spending suggest that the nation underinvests in teens (including their psychological, social, and emotional well-being). For example, the National Institute of Child Health and Human Development is allocating only \$200,000 to the new emotional well-being announcement, and limiting its interests to quality of life measures.⁸ Within NIH, estimated funding for youth violence and youth violence prevention research—the only line items with youth in the title—is \$51 million for FY2020.¹²⁹ For adolescent sexual activity research – the only category label including adolescent – FY2020 spending is estimated to be \$106 million.¹²⁹ The Urban Institute notes that spending on youth training programs grew from \$0 in 1960 to \$6 billion in 1980 but then fell dramatically to \$1 billion in 2018.¹²⁴ CDC's total FY2020 budget request was \$6.6 billion; DASH is sited within the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention and is not featured in CDC budget details.



Wellness Funds/Wellness Trusts

A wellness trust is a funding pool raised to support prevention and wellness interventions that improve population health outcomes. Sources of funding can include public and/or private money.

Cross-Cutting: Governance

Background



Governance refers to the formal and informal arrangements that determine how decisions are made and how actions are carried out.¹³¹ A current area of study examines how changes in governance can enhance population well-being. A large cross-national

study in this area finds significant positive relationships between changes in the quality of delivery of national government services and changes in country residents' overall life evaluations.¹³² Delivery quality is typically defined and measured using four indicators: effectiveness, rule of law, regulatory quality, and control of corruption.¹³³

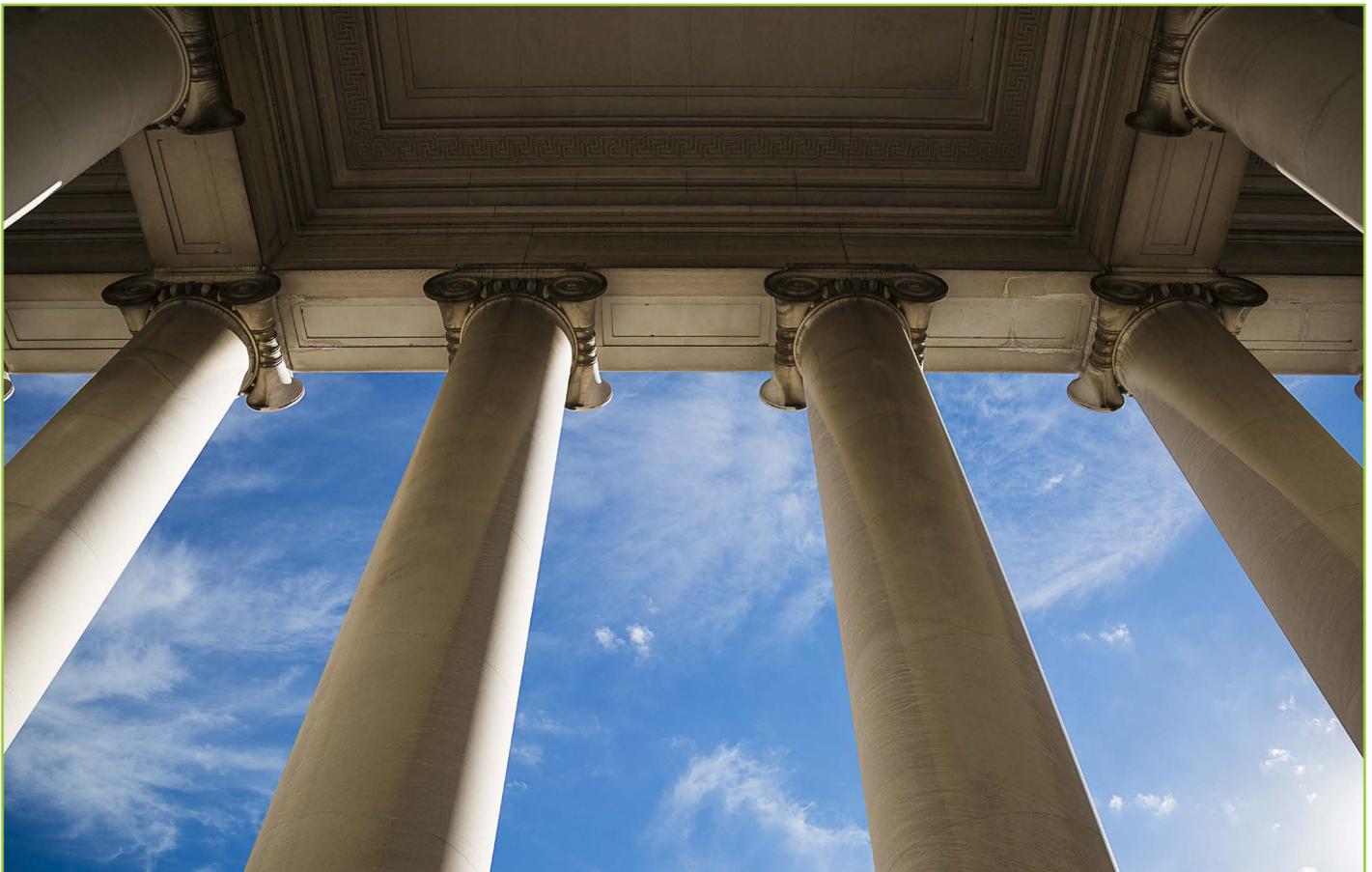
As an example, effectiveness is intended to “capture perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies.” Data to measure effectiveness come from over 30 separate measures and international sources. Research on governance and its implications has so far focused on adult well-being.

Despite multiple reports, adolescents have been largely overlooked in public policy in the U.S.¹³⁴ Although it is difficult to prove a negative, one indicator is that apparently responsible government entities and activities typically do not feature adolescents in their names

(e.g., Maternal and Child Health Bureau; National Institute of Child Health and Human Development; Child Mental Health Awareness Month¹³⁵). However, a few federal efforts past and present may provide valuable information for advancing teen flourishing through enhanced governance. These include the establishment of Offices of Adolescent Health, the survey known as ADD-Health (now called The National Longitudinal Study of Adolescent to Adult Health), and the recommendations of a 2013 Interagency Working Group on Youth Programs¹³⁶; all of these were mandated by Congress. “Youth.gov” is an ongoing federal website that includes reference to adolescent psychological well-being. Information from recent reports might be useful to examine current U.S. governance structures, and the extent to which they can enhance teen flourishing.

Internationally, the U.S. could choose to participate and play a stronger role in the United Nations Convention on the Rights of the Child (UNCRC); the U.S. is the only UN member state that has not signed on to the UNCRC. The U.S. government could also join The Lancet 2020 Campaign¹³⁷ and the World Health Organization (WHO)-United Nations Children’s Fund (UNICEF) Helping Adolescents Thrive initiative.¹³⁸

More immediately, governments could take seriously the concerns expressed by teens, working with them on solutions. Manifestly working on issues of importance to teens would send teens a message that they and their concerns are valued.



Action Items

The highest priority action item for governance recommends declaring, and acting upon, a Decade of Teen Flourishing. Similar proclamations, when accompanied by resources, have had some success.¹³⁹ The second action item recommends that the federal government thread enhancing teen social, psychological, and emotional well-being throughout all programs and policies. The third action item recommends enhancing coordination vertically and horizontally. The fourth action item is a common theme of good governance: citizen responsiveness. By acting on the expressed concerns of teens, governments may create new cadres of engaged and satisfied citizens. Our fifth action item recommends that the U.S. adopt and strengthen international standards for advancing teen flourishing, such as the UNCRC, which applies to people through age 17. The UNCRC is a living document; for example, it has been considering how to protect children from harmful business practices, including the digital media industry. The final action item could be an integral part of action items 1 and 5: engaging with others in a global advocacy campaign on teens' behalf.



Action Item 1.

Create and implement a national strategy for advancing adolescent well-being, jumpstarted with Decade of Teen Flourishing, with a primary focus on engaging adolescents in leadership roles, and being sure to focus beyond mental disorders.



Action Item 2.

Make every contact with teens count to promote positive relational, physical, and mental health, and remediate programs and policies that are not designed to effectively advance teen flourishing.



Action Item 3.

Foster greater collaboration across systems (e.g., educational, welfare, juvenile justice, health) and jurisdictional levels (Federal, State, local).



Action Item 4.

Be responsive to teen concerns about policy. Examples include climate change, economic opportunity, justice, academic pressure, gun policy, peer mental health issues, availability of adults to talk to, and social media.



Action Item 5.

Adopt and strengthen international standards that aim to promote child and adolescent well-being. Examples of adoption include joining the United National Convention on the Rights of the Child (UNCRC), The Lancet 2020 Campaign on Child and Adolescent Health, Helping Adolescents Thrive, the UN Sustainable Development Goals, the UN Secretary-General's Global Strategy for Women's Children's and Adolescents' Health, UN Guiding Principles on Business and Human Rights. Examples of strengthening include fighting for the UNCRC to have a separate category for teens and a focus on social media and digital life; and giving teens a voice, opportunities for entrepreneurship, and psychological support in the Global Strategy.



Action Item 6.

Use global advocacy awareness raising (including surveys to engage the public), and evidence building to promote adolescent mental well-being.

Cross-Cutting: Measurement and Monitoring

Background



Measurement and monitoring are often necessary first steps to improving vital health and economic conditions and outcomes.¹⁴⁰ The U.S. routinely collects and reports data on multiple indicators, with the most frequent and visible public reporting on economic indicators such as the unemployment rate.¹⁴¹ Some states report on data from the Youth Risk Behavior Survey (YRBS); for purposes of making teen flourishing a national goal, the nation and states could label results using flourishing-related terms.¹⁴² A national dashboard could drill down to state and local level data. The United Kingdom uses dashboards to report explicitly on well-being for adults,¹⁵ which could be a model for reporting teen flourishing data. Overall, annual reports rather than continuously updated dashboards remain more common, and teen well-being data can be difficult to access.

Measures such as the Mental Health Continuum-Short Form, the contemporary version of the measure used in Keyes' analysis of the Child Development Supplement of the early 2000s Panel Study of Income Dynamics, have been validated.¹⁴³ However, other measures are also available, and the Research subdomain of this report suggests investing in consensus development and testing to ensure we have the best measures for the U.S. teen context. Testing could occur even as currently available psychological, social, and emotional flourishing measures and data get included in large scale federal data collection and reporting efforts such as Health US¹⁴⁴ and America's Children: Key National Indicators of Well-Being.¹⁴⁵ A teen self-report version of relevant items could be added to the National Survey of Children's Health, the Medical Expenditure Panel Survey, private surveys,⁸⁷ or CDC's health and healthcare surveys, which are all conducted frequently; however they now rely on parents or guardians for responses.

Action Items

Two action items address measuring and monitoring. The first is an overarching recommendation for measurement and routine reporting in the context of a national strategy for advancing teen flourishing (addressed in the *Governance* section). The second is a specific example of how teen flourishing indicators can be included in measurement initiatives supported by newly appropriated dollars.



Action Item 1.

Create a dashboard for national economic and social goal-setting initiatives covering all aspects of a teen flourishing strategy.



Action Item 2.

Address teen psychological, social, and emotional well-being in new allocations for updating data collection and surveillance.

“What gets measured gets done.”¹⁴⁶

What is a Dashboard?

“A dashboard is a visual display of the most important information needed to achieve one or more objectives; consolidated and arranged on a single screen so the information can be monitored at a glance.”¹⁴⁷

Cross-Cutting: Research

Background



The results of our evidence review were promising in that they suggest at a minimum that interventions at various levels can advance teen flourishing. A belief that psychological distress is a natural and unchangeable feature of adolescence is unfounded.² However, due to limitations of the included studies, we were not able to rank interventions by strength of findings to make recommendations for which kinds of interventions policymakers should adopt without additional evaluation. Accordingly, our evidence review can be used as a starting point for a teen-focused flourishing intervention evaluation research agenda and also provides methodological recommendations.

The overall federal budget for research is substantial,¹⁴⁸ and many entities include child-specific research in their portfolios. The level of research funding on adolescent health has been difficult to assess, but that may be changing. The new child inclusion policy for National Institutes of Health-funded clinical research, in effect since January 2019, requires that the age of enrollment of each participant be collected in progress reports.¹⁴⁹ The new policy defines children as people ages 0 through 17. When these subgroups are included, reporting of the intended numbers of such research participants is required. This will be helpful in tracking research investments going forward.

Recent declines in federal funding for children overall and child-specific research¹⁵⁰ suggest that not much is currently available to support an expanded adolescent research agenda. Moreover, the Eunice Kennedy Shriver National Institute of Child and Human Development's comparatively small commitment (\$200,000) to the new research network for emotional well-being science is not encouraging.⁸

Action Items

The action items address, first, the need for well-designed intervention research at multiple socioecological levels, and, second and third, the need for research to clarify operational definitions of flourishing-related outcomes and interventions such as school climate. The fourth priority would help advance the knowledge base on adolescent well-being with reporting for adolescents separately from other age and developmental groups, and for demographic and other key categories within the teen population.



Action Item 1.

Support well-designed research to identify strategies at multiple socio-ecological levels that will effectively advance teen psychological, social and emotional well-being.



Action Item 2.

With the participation of teens, clarify the elements of psychological, social, and emotional well-being to develop a set of standardized outcome measures for use in research and monitoring.



Action Item 3.

Create valid measures of school climate for secondary schools, and for other socio-ecological environments hypothesized to be important to teen flourishing.



Action Item 4.

Separately report findings for high-school-aged adolescents and report separate findings by other demographics in teen flourishing research.

Recommendations for Future Research on Interventions to Advance Teen Flourishing²

Our **evidence review** revealed a promising, but limited, evidence base. Many of the well-being intervention studies were conducted in international settings; the studies were usually small and not rigorous; almost none of the reviews focused on teens or adolescents as a sole population of interest, and we found no teen-subgroup-focused systematic reviews. Reviews and studies also differed widely in how they defined interventions (e.g., social and emotional; school climate) and outcomes. We found a paucity of higher-level socio-ecological and multi-tiered strategies (e.g., global, national, community, school) to advance teen flourishing outcomes, despite the current interest in cultures of health and social determinants. Further, key teen concerns have not been addressed (e.g., perceived social isolation).

As intervention research moves forward, there is opportunity for funders and researchers to:

- Design interventions based on findings of adolescent developmental science;
- Conduct additional investigations of innovative strategies with as yet few studies; strategies focused on ameliorating teens' self-reported concerns (e.g., loneliness; climate change; sexual harassment); and interventions for which evidence is limited to, or better for, younger adolescents (e.g., Communities That Care for well-being outcomes; SEL-based strategies);
- Focus original research and reviews on interventions for adolescents, and report findings by teen subgroup;
- Test effectiveness of interventions using larger samples, multiple sites, and more rigorous evaluation designs; and
- Expand considerations of social and other environmental determinants of mental health beyond the usual suspects to influences most important to teens, and include impacts on positive mental health and psychological, social, and emotional well-being.

Appendix: Methods

Overview

The recommendations contained in this report, *Advancing Adolescent Flourishing: Moving Policy Upstream*, are based on a stepwise approach that included:

1. The appointment of a National Expert Panel (NEP) that guided all aspects of the work; (Table 7)
2. A rapid evidence review (review of systematic reviews) of interventions and strategies designed to enhance teens' psychological, social, and emotional well-being;
3. A global scan of policy recommendations designed to improve psychological, social, and emotional well-being, with an emphasis on recommendations for youth or teens;
4. A set of key informant interviews; and
5. A modified Delphi approach to identifying and prioritizing a set of action items for the U.S. context.

The work was conducted by AcademyHealth, in partnership with Adolescents and Children Together for Health (ACT for Health),¹⁵² and supported by Well Being Trust (Figure 7).

Key staff for the project were:

- AcademyHealth
 - Principal Investigator: Elizabeth L. Cope, PhD, MPH, Senior Director, Public and Population Health
 - Technical Lead and Subject Matter Expert: Denise Dougherty, PhD, Senior Scholar in Residence; Board of Directors member, ACT for Health
 - Senior Advisor: Lisa A. Simpson, MB, BCh, MPH, FAAP, President and Chief Executive Officer
 - Research Support:

- Nisha Shah Kanani, MPH, Senior Associate
- Paul Armstrong, Research Assistant
- Norman LeBlanc, Health Policy Intern
 - Communications Support:
- Lauren Adams, MA, Director of Communications and Public Relations
- Ed Brown, Manager, Graphic Design and Art Direction

- ACT for Health
 - Senior Advisor: Richard L. Wittenberg, President and Chief Executive Officer
- Well Being Trust
 - Project Officer: Benjamin F. Miller, PsyD, Chief Strategy Officer

This appendix provides a summary of the methods used at each stage of the project: 1) National Expert Panel; 2) Rapid Evidence Review; 3) Policy Scan; 4) Key Informant Interviews; and 5) Identification and Prioritization of Policy Recommendations Using Modified Delphi Process.

1. National Expert Panel

The National Expert Panel (see Table 7) was invited to participate in the project in summer 2019. They provided overall guidance throughout the project. Specifically, the NEP reviewed protocols for each of the project's components, evaluated reports of findings, and were provided with the final reports for each project element.

2. Rapid Evidence Review Methods

The rapid evidence review (RER) produced an interim report that was made available as a separate product and also served as one foundation for assessing the evidence base for the identified action items.¹⁵³ The purpose of the RER was to identify interventions and strategies for their effectiveness in enhancing the psychological, social, and emotional well-being of high-school-aged teens (approximately 13 through 18 years old). A full description of the methods used for the RER is available in [Appendix 2: Methods of the RER report](#).¹⁵⁴

Figure 7. Project Methods and Timeline

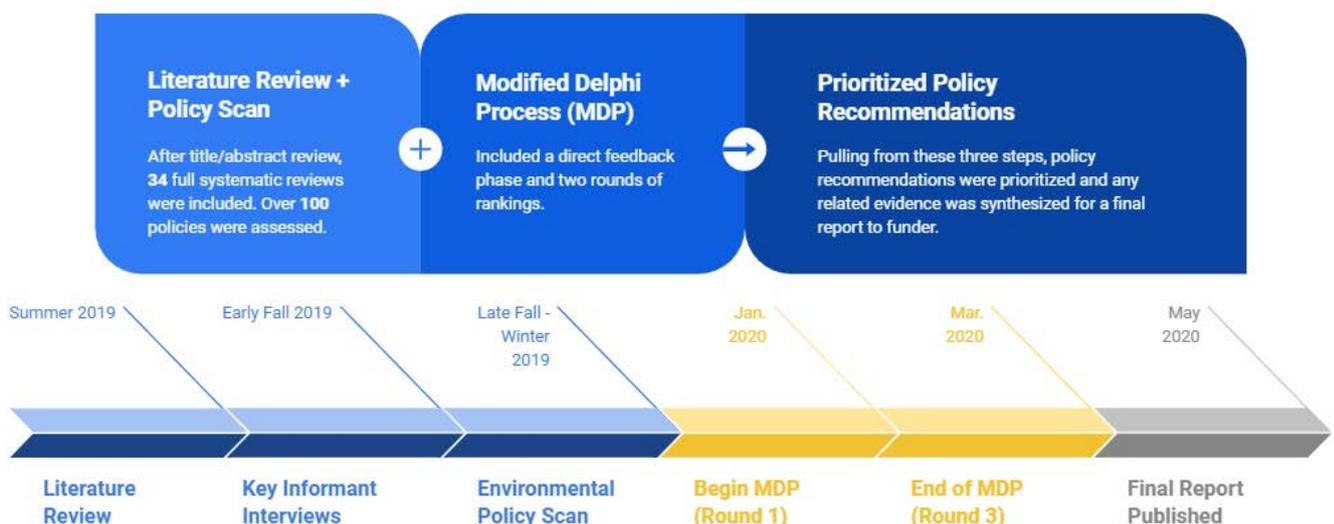


Table 7. National Expert Panel

Name	Title	Affiliation
Johanna Bergan	Executive Director	Youth MOVE National
Christina Bethell, PhD, MBA	Director; Professor	Child and Adolescent Health Measurement Initiative; Johns Hopkins University
Anne Collier, MA	Executive Director	Net Safety Collaborative
Angela Diaz, MD	Director, Mount Sinai Adolescent Health Center	Icahn School of Medicine
J. Nadine Gracia, MD, MSCE	Executive Vice President and Chief Operating Officer	Trust for America's Health
Vicki Harrison, MSW	Program Director, Center for Youth Mental Health and Well-being	Stanford University
Corey L.M. Keyes, PhD	Professor	Emory University
Matt Soeth, MEd	Founder and Board Member	#ICANHELP
Shawn Sprecker	Strategy Consultant	#ICANHELP
Qi Wang, PhD	Director, Culture and Social Cognition Lab	Cornell University

We leveraged existing systematic reviews of interventions, strategies, and policies, identified by searching for outcomes conceptually related to the definition of psychological, social, and emotional well-being (PSEWB) as roughly defined initially by Keyes¹⁵⁵ and expanded upon by ACT for Health's previous work on teen well-being and mental health promotion.¹⁵⁶

The RER used primarily an outcomes-focused search; that is, our search terms were focused on outcomes (results) of interventions, rather than the interventions themselves. In some cases, when we became aware of interventions that either did or might have teen flourishing outcomes, we conducted non-systematic searches to find systematic reviews of such intervention types and to see if those reviews actually reported on flourishing-related outcomes for teens. For example, the World Health Organization (WHO) and the Centers for Disease Control and Prevention recommend an approach to school improvement which is sometimes called the "Whole Child, Whole School, Whole Community"¹⁵⁷ approach, or some variant of this label (e.g., the WHO's label Health Promoting Schools Framework). The few reviews we found did not meet our criteria for inclusion. In one review, the adolescent findings were not separable from those for younger children.¹⁵⁸ Another was published earlier than 2014.¹⁵⁹

We attempted to use a population-based approach focusing on universal interventions (interventions focused on all teens in a setting or settings, rather than those identified as in need due to risk factors, symptoms, or disorders). We were also advised that the diversity and vulnerability of teens to unhealthy social determinants and poor traditional health and mental health outcomes, was such that a focus on universal interventions could miss important sources of evidence. However, other than reviews focused on studies conducted among low-income families, in low- and middle-income countries, and on male teens, we did not find reviews pertaining to subgroups of teens. If we found information on the characteristics of teens involved in the studies, we included it on our tabular summaries of reviews.

In summary, our key steps included:

- Development and review of a protocol specific to teen flourishing. The external reviewers who kindly assisted were Eric Fein, MD, University of California Los Angeles, and Anthony James, PhD, Miami University of Ohio. Members of the NEP also reviewed the protocol, and reviewed a draft of the RER findings report.
- A search strategy using terms for concepts related to:
 - Systematic reviews (including systematic review, scoping review, rapid review, and review).
 - Year of publication or posting between 2014 and July 22, 2019. We subsequently focused on reviews published in 2018 and 2019, to narrow the scope of the review and because many of the reviews published in 2018 and 2019 covered the same topics covered in 2014-2017, and the most recent reviews were assumed to be more comprehensive. One 2016 review was not superseded by reviews from 2018 and 2019.
 - Population (adolescent, youth, teen, high school students, secondary school students).
 - Outcomes of positively or negatively framed PSWEB concepts, such as: flourish; languish; psychological OR emotional OR social OR mental AND well-being; positive youth development; stress OR anger OR internalizing OR externalizing or racism or ((racial or ethnic) AND discrimination OR prejudice) OR stigma OR bias OR (suicidal AND thoughts), and many more.
 - Intervention indicator concept ((interv* OR policy OR strategy* OR program OR training OR curricular OR initiative); (school OR education OR parent OR family OR nation* OR federal OR state OR community OR neighborhood OR employment OR work-place OR "social environment" OR "school climate"); universal

- Exclusion criteria included: failure to assess PSEWB outcomes; failure to include studies with high-school-aged teens (13-18-year-olds); lack of interventions; failure to qualify as a systematic review (defined as conducting a quantitative analysis of results).
- Application of the search strategy to databases including PubMed, Google Scholar, What Works Centre for Well-being, Health Evidence, Cochrane Collaboration.
- One member of our 3-member team searched assigned databases, followed by reliability checks by another team member for articles selected for inclusion or exclusion, by looking at titles and, if necessary, abstracts. Differences were resolved by group discussion.
- PRISMA approach to elucidating article section.
- Detailed tables for each full systematic review paper focusing on: the Focus of the Review (e.g., age, outcomes, intervention type, settings); Systematic Review Methods (date range, databases searched, review inclusion and exclusion criteria, guidance used to structure the review [e.g., PRISMA, GRADE]); Relevant Findings (number of studies in the review; high-level findings for all ages if review was not adolescent specific; adolescent-specific findings related to 13-18 year-olds or similar); Systematic Review Limitations as noted by the review author(s), and as noted by AcademyHealth (if any). In addition, because many reviews did not conduct a separate analysis for 13-18 year-old teens, we examined individual studies cited in reviews and listed any such studies in the tabular summaries of the relevant reviews. When assessing whether a review was teen-focused, we counted the study as such if either of the following two conditions were met: 1) more than 50% of the sample population fell within our age range; or 2) the mean age of the sample population was within our desired age range.

We also included findings from two large-scale quasi-experimental studies of social policy changes that measured PSEWB outcomes for teens, even though there were no teen-focused systematic reviews of such interventions. The Moving to Opportunity experiment provided Section 8 housing vouchers to randomly selected volunteer families in public housing so they could move to higher-income neighborhoods. The Great Smoky Mountains study assessed the impact on aspects of teen well-being of universal family income supplements, that were provided by local Indian tribes who opened successful gambling casinos, during the time in which children and families in the Great Smoky Mountains were participating in an observational study of mental health. This was the only way in which we could include interventions at the national and community levels of the socio-ecological framing we used.¹⁶⁰

A summary of findings from the RER, and RER appendices with methods, definitions, narrative summary, summary by intervention, and summary by outcomes, and detailed tables for each included review, are available at the AcademyHealth and ACT for Health websites.¹⁵³

3: Policy Scan Methods

As a source of inspiration for policy recommendations that might be actionable in the U.S., we conducted a policy scan and subjected each policy recommendation to an assessment of its evidence base, primarily using the findings from our RER.

To guide our work, we developed a policy scan protocol, which was reviewed in draft by the NEP and revised according to their feedback. An outline of the approach is provided below.

To our knowledge, there is no single site where one can find a comprehensive collection of policy recommendations for health, mental health, PSEWB, or for teens or adolescents. Therefore, based on techniques used by others, adapted to our content area, we conducted an online search of the following sources:

- Published and grey literature, prioritizing policies specific to teens.
 - Published: PubMed, Google Scholar, Health Evidence; journals relevant to mental health and well-being policy (e.g., The Lancet; Journal of Adolescent Health);
 - Grey: Key think tanks, policy organizations, advocacy organizations
- National Expert Panel member recommendations
- Policy recommendations in systematic reviews included in the RER (added at the end of the process)

We used search terms similar to key terms included in our RER protocol:

- Population: (adolescent OR teen OR youth)
- Policy Level: (global OR national OR federal OR State or community OR organization OR family OR school OR individual OR interpersonal OR recreational OR program OR council)
- Policy focus: ((social OR emotional OR psychological OR mental) AND well-being) OR “positive youth development” OR flourishing OR pro-social OR happiness OR “emotional intelligence” OR (life satisfaction OR satisfaction with life) OR subjective well-being OR (well-being AND (hedonic OR eudemonic))

Our inclusion criteria were:

- Policies and policy recommendations must seek to improve well-being in one or more of the following categories: psychological, social, emotional, mental, measured either hedonically or eudamonicly;
- Policies and policy recommendations were focused on or relevant to high-school-aged adolescents (i.e., 13-18 years of age);
- Policy recommendations were published between 1/1/2014 and 7/15/2019;
- Policy recommendations could be from any country but had to be published in the English language;
- Included policy recommendations must aim to either indirectly produce an enhancement of adolescent flourishing levels through benefits obtained from deliberate changes to social, built, and/or natural environments (national, community, school, parent) or directly by targeting teens in any environment.

We organized the policy recommendations according to each of seven ecological levels:

- Global/Cultural
- National
- Community
- School
- Family
- Interpersonal
- Individual

and targeted those that operate on one of five core areas of policy impact (economic, health, social, environment, governance).

We summarized the policy recommendations in individual tables for each ecological level. The tables were each organized to include:

- The topic heading and overall rationale(s) for the policy recommendation domain;
- A brief description of the policy recommendation;
- The source document(s) serving as the basis for the recommendation;
- A summary of results from the RER relevant to the policy recommendation; and
- A column summarizing NEP member comments and, if available, the AcademyHealth/ACT for Health response.

During their review of the draft policy scan findings, NEP members were asked to address the following questions:

- Are any key policy recommendations missing?
- Are any opportunities to include findings from the RER missing?
- Are the policy recommendations organized appropriately (e.g., by level of influence)?
- Are any of the policy recommendations irrelevant to advancing teen psychological, social, and emotional well-being?

The project team revised the policy scan findings after the NEP review, and produced a final report that was distributed to the NEP for use as background during the modified Delphi process (see Section 5 below).

4. Key Informant Interviews

Key Informant Interviews are essential for obtaining the experience and perspectives of a field's active members who may not be writing for the scientific or policy literature. Obvious examples for teen flourishing are teens themselves.

With input from the NEP and Well Being Trust, the project team identified a set of key informants, developed an interview script, and conducted nine interviews in October and November of 2019.

Key informants represented a variety of perspectives related to adolescent flourishing, including: policymakers (county, state, and federal), a teen advocacy organization, a mental health program, a high school teacher, and two 18-year-old teens.

Interviews were semi-structured, 45 minutes in duration, conducted over the telephone, and recorded (with permission from the interviewee). Key informants were advised that their responses would remain confidential, and that their names would not be associated with any specific ideas or comments. They were offered a copy of the final report from the project.

Interviews were led either by Denise Dougherty, Senior Scholar in Residence at AcademyHealth (seven interviews), or Elizabeth Cope, Senior Director, Public and Population Health at AcademyHealth (two interviews). For each interview, an additional AcademyHealth staff member took notes to document the discussion.

Key informants received a copy of the interview guide in advance of their interview. The interviews began with a description of the project and key concepts and definitions. In particular, we wanted to emphasize that the project was not about teens with mental disorders, but about teens overall and the so-called critical middle of teens who may not be flourishing psychologically, socially, and emotionally to the extent they could be. During the interviews, participants were asked to base their answers on their personal/professional cumulative experience and expertise rather than as an official representative of any current or past organizational affiliations. Specifically, participants were asked to:

1. describe their vision of an ideal environment for adolescent flourishing;
2. describe current gaps in the U.S. that would need to be addressed to achieve this vision; and
3. identify barriers and opportunities for enacting policies to move the U.S. closer to their vision.

To close the interview, informants were asked to reflect on how adolescent flourishing policy should be prioritized on the national level and on the local level, in the context of all other policy priorities, based on a scale of 1 to 10, with 1 being the highest priority.

The report of the key informant interview findings was shared with the NEP to serve as one foundation for the policy identification prioritization exercise in the fourth and final phase of the project. The NEP received the report in early January as they received the first round of the modified Delphi process (see below).

5. Identification and Prioritization of Policy Recommendations Using a Modified Delphi Approach

Here we outline the methods and results of the three-round modified Delphi process we used to identify and prioritize policy recommendations to advance teen flourishing in the U.S. context.

A modified Delphi process (see Text Box) typically involves a predetermined number of rounds of feedback which build off previous rounds by compiling responses and presenting them back to the group to keep all members informed about the group's thoughts. For the teen flourishing project, a 3-round modified Delphi process was employed. The methodology was developed after reviewing reports of other similar projects.^{164 161 162}

Modified Delphi process

A Modified Delphi process seeks to complement research by developing expert consensus through multiple rounds of collected feedback. It is a useful tool in areas of study where there is insufficient research or a need for agreement on the applicability of research to real world settings.¹⁶³ Developed by RAND in the 1950s, the method entails a group of experts who anonymously reply to questionnaires and subsequently receive feedback in the form of a statistical representation of the group response, after which the process repeats itself. Goals can include reducing the range of responses and arriving at something closer to expert consensus.¹⁶⁴

Panel Selection

The NEP served as the panel for the modified Delphi process. NEP responsibilities specific to the modified Delphi process included reviewing a draft plan for the identification and prioritization process, and then applying the protocol by identifying (Round 1), then prioritizing (Rounds 2 and 3) policy recommendations. All 10 members participated in the modified Delphi process.

Round 1: Identifying Draft Priority Recommendations for the Two Domains and Eleven Subdomains

For Round 1 of the modified Delphi process, project staff generated an initial list of policy recommendations based largely on those identified through the policy scan and key informant interviews.

In early January 2020 we sent the NEP excel spreadsheets containing 44 draft initial recommendations organized by domain and subdomain, as well as instructions and a new bibliography containing citations not included in the policy scan findings report. For each policy recommendation, the spreadsheet noted the source(s) of the policy recommendation, a summary of related evidence, primarily from the RER. This initial round was intended to ensure that the modified Delphi process emerges from the knowledge of the NEP, based on its experience and the findings to date from the project.

NEP members were invited to annotate each policy recommendation included in the excel spreadsheet as to whether the project should “keep”, “modify”, or “delete” the recommendation. In addition, the NEP was asked to identify additional recommendations. They were asked to provide additional sources and evidence to support any changes or additions; to explain the rationale for their modifications; and to make any other comments they thought would be useful to other NEP members’ deliberations. For policies the NEP members marked “modify,” they were encouraged to alter the description of the policy recommendation. NEP members were advised that

Round was their last opportunity to add, or modify the wording of, policy recommendations.

We received all Round 1 NEP comments by January 31, 2020, at which point three members of the project team reviewed the NEP’s additions and modifications and met to discuss how to interpret modifications and comments if interpretation was needed, and how best to present NEP changes in the materials for Round 2.

During Round 1, no NEP members advocated for a policy recommendation to be deleted. NEP members made a total of 4 additions to the list of policy recommendations and recommended splitting one policy recommendation into two. As a result, all policy recommendations from Round 1 advanced to Round 2, and 5 were added, for a total of 49 to be ranked within the subdomains.

Round 2: First Round of Ranking

For Round 2, a document compiling all 49 policy recommendations and incorporating Round 1 NEP feedback was shared with NEP on February 11, 2020. This round asked NEP members to rank policies within each subdomain based on their perceived importance to advancing teen flourishing. The number 1 indicated the highest rank. Beginning on February 25, 2020, when rankings had been collected from all participating NEP members, the average rank of each policy recommendation was calculated along with a standard error and a range. These average rankings were then used to reorder the policy recommendations within each subdomain from highest average ranking to lowest average ranking. NEP comments explaining NEP rankings were added to a “Rationale and Comments” column; the relevant rank order pertaining to each comment was included.

Round 3: Opportunity to Change Priority Rankings

A set of individual spreadsheets for Round 3 were sent to NEP members on March 3, 2020. These sheets showed the policy recommendations reprioritized based on the Round 2 average NEP ranking and standard difference calculations, and additional NEP comments from Round 2. We constructed individual sets of worksheets for each NEP member, so they could see how their own Round 2 ranking compared to the average NEP rankings. NEP Round 3 responses were completed and returned to the project team by March 18th, 2020.

We calculated new averages/standard differences and reordered the recommendations within each subdomain from highest priority to lowest priority based on the Round 3 average rankings and standard difference calculations. Although a few NEP members changed their priority scores, rankings were not altered between Rounds 2 and 3.

We used the rank-ordered policy recommendations to create the report. We noticed that two recommendations (each at the bottom of the rankings for their subdomains) duplicated higher-level recommendations and excluded them from the report or merged them with the existing recommendation.

Endnotes

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