ParentingMontana.org
Health Professional Resources

ParentingMontana.org
PARENTING MONTANA
TOOLS FOR YOUR CHILD'S SUCCESS

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Contents

Introduction

Health professionals can play an important role in helping parents access and utilize ParentingMontana.org tools and resources. By engaging parents and those in a parenting role in the website and resources and encouraging use of ParentingMontana.org tools, you can improve outcomes for Montana's youth.

ParentingMontana.org was designed specifically for parents and those in a parenting role to

- address everyday challenges like creating routines, growing confidence, or managing anger;
- while at the same time growing their child's self-awareness, self-management, social awareness, relationship skills, and the ability to make responsible decisions.

ParentingMontana.org is a simple, free way health professionals can

- engage parents to support their children in their home, and
- provide tools and resources to parents to address issues like tantrums, peer pressure, stress and anxiety, and others that impact a child's health.

The tools and resources can be viewed online (using a computer, tablet, or phone), downloaded and printed, or even listened to (there are audio versions). Health professionals can download, print, or email links of developmentally appropriate tools and resources to share with parents.

ParentingMontana.org is designed for parents and those in a parenting role of children from birth to age 19. Topics include anger, back talk, bullying, confidence, conflict, discipline, friends, homework, listening, lying, tantrums, reading, sharing, stress, disrespect, responsibility, and more.

The website contains a variety of tools and resources valuable for parents and health professionals including

- tools, tool summaries, and audio versions of tools (to guide parents through five steps to address specific topics);
- brief tool summaries and rack cards that can be printed and used as quick references;
- "I Want to Know More" background information written for parents that provide additional information on specific topics;
- research summaries written for professionals;
- podcasts discussing key ideas in more depth; and
- supportive media including articles, podcasts, videos, and print materials.

ParentingMontana.org Purpose

The Montana Department of Public Health and Human Services partnered with the Center for Health and Safety Culture (Montana State University) to create ParentingMontana.org – an intentional effort to promote the healthy mental, emotional, and behavioral development of Montana's children by actively growing their skills of self-awareness, self-management, social awareness, relationship skills, and the ability to make responsible decisions.

Those who care for youth are the greatest stakeholders in their development and often the greatest influencers on their skill development. ParentingMontana.org provides tools and resources to enhance parenting skills in growing the skills of children. The tools are appropriate for children from birth through the teen years.

Research[1] shows that growing skills around self-awareness, self-management, social awareness, relationships, and the ability to make responsible decisions

- reduces risky behaviors (such as underage drinking and the misuse of other drugs);
- prevents mental, emotional, and behavioral disorders including depression, anxiety, and substance use disorders;
- reduces negative outcomes such as dropping out of school, poor education attainment, unemployment, suicide, and others;
- improves academic performance; and
- leads to better employment outcomes (like being employed full time) later in life.

Positive outcomes from growing these skills occur across the lifespan and in diverse cultural settings. Parents and those in a parenting role can develop these skills of their children at any age while addressing common parenting challenges like reading, stress, discipline, and making sure homework is completed.

As parents and those in a parenting role use the ParentingMontana.org tools with their children, both the children and the parents develop their skills around self-awareness, self-management, social awareness, relationships, and the ability to make responsible decisions – thus bolstering the parents' abilities while strengthening protection for the child.

Why ParentingMontana.org?

Mental, emotional, and behavioral health are critical for individuals to have the opportunity to flourish, that is to lead meaningful, productive, and engaged lives.[2] An individual's mental, emotional, and behavioral health develops across the lifespan. Much of this development occurs in the first two decades of life.

Individuals with poor mental, emotional, and behavioral health are more likely to engage in risky behaviors (such as excessive drinking or substance misuse), experience mental health disorders (depression, anxiety, etc.) and substance use disorders, and experience negative outcomes such as physical illness, disability, low education attainment, incarceration, homelessness, and suicide.[2]

Individuals with good mental, emotional, and behavioral health are more likely to have positive wellbeing. Positive wellbeing includes experiencing positive emotion, being engaged in activities, finding meaning in life, having positive relationships, and experiencing achievement.[3]

Mental, emotional, and behavioral health are impacted by a complex interaction of genetic, biological, social, and environmental factors. Efforts at the societal, community, organizational, and individual levels can intentionally promote healthy development and prevent risky behaviors, disorders, and negative outcomes. Such efforts can actively grow the social and emotional skills of children at all ages to promote healthy mental, emotional, and behavioral development.[2]

The logic behind ParentingMontana.org is shown in Figure 1.

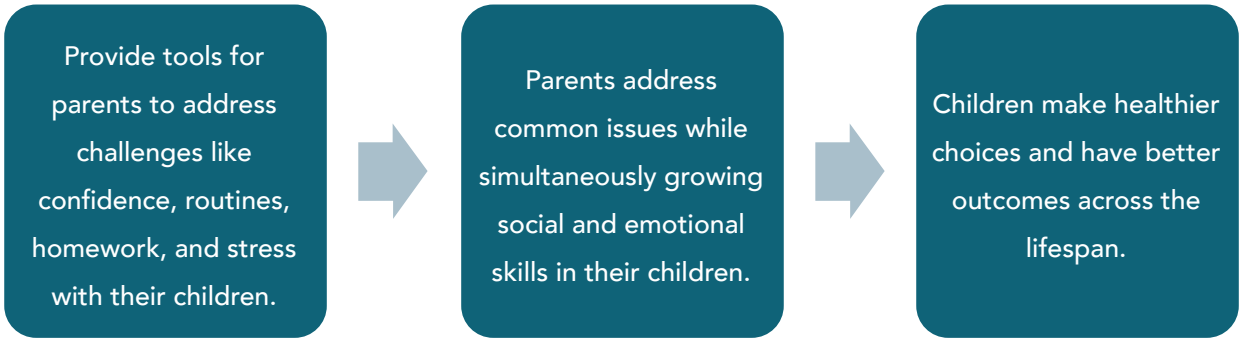

Figure 1. Logic Behind ParentingMontana.org

The Mental, Emotional, and Behavioral Health of Montana's Children

Mental, emotional, and behavioral health have been assessed periodically on the National Survey of Children's Health.[4] This survey measures several indicators of mental, emotional, and behavioral "flourishing" including behaviors like bouncing back quickly when things don't go well, showing interest and curiosity in learning new things, working to finish tasks, and generally showing positive emotion.

In 2016-17, 68% of Montana's young children (ages 6 months to 5 years) were reported to have high levels of flourishing (6% had low levels, and 26% had moderate levels). However, only 34% of Montana's children and youth ages 6 to 17 years had high levels of flourishing (39% had low levels, and 27% had moderate levels).[5]

The Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System measures several indicators of mental, emotional, and behavioral health among high school students.[6] The 2021 results reveal several areas for concern about Montana's high school students:

- 31% consumed alcohol in the past month
- 16% engaged in high-risk drinking
- 20% consumed cannabis in the past month
- 41% felt sad or hopeless almost every day for two weeks or more so they stopped doing some usual activities in the past year
- 22% seriously considered attempting suicide in the past year

Poor mental, emotional, and behavioral health can lead to negative outcomes including death. According to the Centers for Disease Control and Prevention, motor vehicle crashes (many involving the misuse of alcohol), overdoses, and suicide account for six out of every 10 deaths of children and young adults between the ages of 5 and 25 in the United States.[7] While the rates of fatal motor vehicle crashes are declining, most crashes are caused by human behavior, which is often influenced by mental, emotional, and behavioral health. Unfortunately, rates of suicide are increasing – especially among young people.

ParentingMontana.org – A Three-Generation Approach

Research supports growing skills around self-awareness, self-management, social awareness, relationships, and the ability to make responsible decisions of parents improves the mental, emotional, and behavioral development of children. This connection between parent and child makes this strategy a two-generation approach.

Furthermore, research is now showing that a child with strong skills develops into an adult with similar skills and that these skills as an adult will foster the healthy development of the next generation. In this way, growing skills around self-awareness, self-management, social awareness, relationships, and the ability to make responsible decisions is a three-generation approach with the potential for much broader impact.

Selected Research Behind ParentingMontana.org

Extensive research was used to inform ParentingMontana.org. The research summaries are standalone PDF files that you can view, download, and share. These brief documents summarize the research to bolster efforts to promote ParentingMontana.org.

- Social and Emotional Development
- Social and Emotional Development Among Tribal Nations in Montana
- Social and Emotional Development as a Strategic Approach to Reduce Risk Factors and Bolster Protective Factors Associated With Underage Drinking
- Reducing Underage Drinking by Strengthening Social and Emotional Skills
- Adverse Childhood Experiences, Substance Misuse, and Social and Emotional Development
- Risk Factors and Supportive Strategies for Youth in Foster Care
- Grandparents Raising Grandchildren: Circumstances, Impact, and Actions for Success
- Prescription Medications
- Cannabis
- Methamphetamine

An Overview of the Website

Getting Started

On the homepage, many parents find that getting started is easiest when they begin by reviewing:

- The Parenting Process for Your Child's Success, a step-by-step process for dealing with simple and challenging parenting topics to build critical life skills and improve their relationship with their child.
- Intentional Communication, where they can learn how to communicate in a purposeful way with their child to support and enhance their relationship.
- Intentional Ways to Grow a Healthy Parenting Relationship, where they discover ways to promote a healthy parenting relationship with their child.

Tools for the Age of Your Child

ParentingMontana.org provides easy to use parenting tools and resources to support a child's success from birth through the teen years. The website includes practical topics to support Montana parents and those in a parenting role. On the ParentingMontana.org website, parents can search by age and issue to find tools addressing a variety of topics. A few topics include:

- Anger
- Back Talk
- Bullying
- Chores
- Confidence
- Conflict
- Defiance and Power Struggles
- Discipline
- Disrespect
- Eating
- Empathy
- Establishing Rules About Alcohol
- Establishing Rules About Marijuana
- Friends
- Happiness
- Homework
- Kindness
- Listening
- Lying
- Mixed Messages About Alcohol
- Mixed Messages About Marijuana
- Peer Pressure
- Reading
- Repairing Harm
- Resilience
- Responsibility
- Routines
- Sharing
- Stress and Anxiety
- Talking About Differences
- Tantrums

Audio Files

Audio files are included for each tool. Parents can listen to an audio file from the tool page or find the tools for the age of their child altogether, like a podcast, which can be found on popular podcast players.

Parenting Process for Your Child's Success

The tools are based on an easy-to-use 5 step process that creates an environment for learning that allows parents and those in a parenting role and their children to practice and grow critical life skills. Parents can download a summary of the 5 steps to keep close or even put on the refrigerator. The tools give specific actions to take, and ideas of the words to say to engage their children, to build their relationship, and strengthen their communication. At the end of each tool, there is an option to download the tool, save it, or email it.

I Want to Know More

In addition to the parenting tools, ParentingMontana.org includes additional resources (called "I Want to Know More") written for parents on such topics as:

- Parenting Process for Your Child's Success
- Communication
- Relationships
- Development
- Risky Behavior
- Foster Care
- Child Care
- Child Trauma

Media

Media include articles, podcasts, videos, and print materials.

Articles: Parenting articles written by experts in the field

- Guiding Children With Tools for Success: Parenting With Social and Emotional Learning. Learn how to parent in an intentional way that develops social and emotional skills within children.
- Empathizing With a Bigger World in Your Own Backyard: How Parents Can Support a Child's Growing Social Awareness. Learn a number of ways you can help your children and teens become more socially aware.
- Decisions, Decisions...Preparing Our Children to Make Responsible Choices. Learn how preparing your child for independence requires numerous small chances to make decisions so that they are ready for the big choices to come.
- Cultivating Trusting Relationships. Learn how an adult can become "ask-able" -- the kind of adult in which children and teens are comfortable approaching and confiding.

- Children's Growing Identity: Cultivating Self-Awareness to Inspire Confidence. Ideas on how to cultivate self-awareness in children by teaching them to recognize their emotions and how they influence their behavior.
- A Parent's Greatest Gift: Self-Management. Ideas for how parents and those in a parenting role can best promote the invaluable skill of self-management at various ages.

ParentingMontana.org Podcast: Inspirational and educational podcasts highlighting information from ParentingMontana.org including:

- Introducing The PareningMontana.org Podcast. Join the ParentingMontana.org podcast in conversations about the challenges and the joys of being in a parenting role in Montana and learn how we can raise our kids to be confident, respectful, and make healthy choices.
- Guidance and Discipline for Skill Building. In this episode, we have a conversation about how providing guidance with discipline can grow skills and improve our relationships with our children. We are joined by Jennifer Miller, author of the book, Confident Parents, Confident Kids: Raising Emotional Intelligence In Ourselves and Our Kids — From Toddlers to Teenagers.
- Intentional Ways to Grow a Healthy Parenting Relationship. In this conversation, we talk about our relationships with our children. Joined by Dr. Shannon Wanless, an Applied Developmental Psychologist and the Director for the Office of Child Development at the University of Pittsburgh School of Education, we learn intentional ways we can grow a healthy relationship that can be a foundation for our children's success.
- Parenting Process for Success. In this episode, we have a conversation about a step-by-step process parents or someone in a parenting role can follow for dealing with simple and challenging parenting topics. The process can help to build critical life skills and improve your relationship with your child.
- Social and Emotional Development. In this conversation, we talk about social and emotional development. We are joined by Maurice Elias, Ph.D., one of the pioneers of social and emotional development, director of the Rutgers University Social-Emotional Development Lab, and author of Emotionally Intelligent Parenting. We discuss the importance of social and emotional development for a child's success.
- Communication. In this episode, we talk about intentional communication. Intentional communication is a way of communicating that deliberately fosters social and emotional skill development. It supports and enhances the relationship between parents and their child.
- Having Conversations About Alcohol and Drug Use. In this episode, we talk about some of the conversations we should be having with our children about alcohol and drugs and get specific ideas about what those conversations could sound like.

- Being at Your Best as a Parent. Taking Care of Your Health and Wellbeing. In this episode, we have a conversation about ways parents and those in a parenting role can be at their best for their children. We discuss intentional ways to develop our own skills and care for our own well-being – both physical and mental. We welcome back Jennifer Miller, author of the book, Confident Parents, Confident Kids: Raising Emotional Intelligence In Ourselves and Our Kids — From Toddlers to Teenagers.
- Improve Your Relationship With Your Parenting Partner - Part 1. As parents, we want to be at our best for our children. In part 1 of this episode, we discuss how taking care of our own health and wellbeing can include learning ways to improve our relationships with our parenting partners.
- Improve Your Relationship With Your Parenting Partner - Part 2. In part 2 of this episode, we continue the conversation on ways to improve our relationships with our parenting partners.

How-to-Videos: How-to videos demonstrating information from ParentingMontana.org

Rack Cards: Printable at-a-glance resources highlighting key information from ParentingMontana.org

Resources

There is a resources section that connects parents to additional Montana resources.

Other Resources Available

In addition, ParentingMontana.org has more detailed information and resources that can be accessed through a child care resource and referral agency or a Montana prevention specialist in your region. These two entities are local experts available to help you engage parents and those in a parenting role in your community to use the ParentingMontana.org website and tools. They have guidance and resources to work with schools, child care providers, social service agencies, health professionals, law enforcement, and others to connect parents and those in a parenting role to the ParentingMontana.org website. They also have access to additional media resources and online training to support their efforts to promote the website and tools.

How to Engage Parents

Reaching and engaging parents and those in a parenting role are essential in connecting them with the tools and resources available through ParentingMontana.org. The tools and resources found on ParentingMontana.org can be used to engage with parents in a variety of ways.

Tools For the Age of Your Child

- Download pdf files and print tools to share with parents
- Email links to tools directly to parents
- Email or print out tool summaries to share with parents

I Want to Know More

- Download and print (or email directly) to share with parents and those in a parenting role

Mixed-Length Videos (90, 30, 15, and 6 seconds) for Use in Office

- Use before or after other presentations or videos as short videos to direct parents to ParentingMontana.org
- Share as hyperlinks with other professionals
- Share directly with parents and those in a parenting role

How-To Videos

These longer videos tell a story, provide more details, and demonstrate key topics. These can be shared directly with parents.

- **Guidance and Discipline for Skill Building (How-To Video).** Learn how as a parent or someone in a parenting role, you can choose to be purposeful and deliberate in the ways you provide guidance and discipline.
- **Intentional Ways to Grow a Healthy Parenting Relationship (How-To Video).** Learn how to be purposeful and deliberate in the ways you parent to create a foundation for your child's success.
- **Parenting Process for Success (How-To Video).** Learn about a process for interacting with your children that helps you address simple and challenging issues while, at the same time, developing their skills so they can manage their emotions and make better decisions.

Display Posters & Rack Cards

- At-a-glance resources highlighting key information from ParentingMontana.org to distribute or display in office
- Distribute directly to parents

Conclusion

ParentingMontana.org provides tools and resources to help parents and those in a parenting role raise healthy kids. Developing the social and emotional skills of youth (and their parents) will lead to positive academic and behavioral outcomes and will reduce risky behavior.

Health professionals can play an important role in helping parents access and utilize ParentingMontana.org tools and resources. By engaging parents and those in a parenting role in the website and resources and encouraging use of ParentingMontana.org tools, you can improve outcomes for Montana's youth.

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Appendix A:
Research Summaries

Social and Emotional Development

Social and Emotional Development Defined

Social and emotional development is the building of critical life skills. These social and emotional skills include understanding and managing oneself, relating to others, and making responsible choices based on self and others. More specifically, these skills include being able to recognize and regulate emotions, empathize and care about others, make good decisions, behave ethically and responsibly, establish and maintain positive relationships, and avoid negative behaviors.[1,2] Social and emotional skills are essential to succeed in family, school, workplaces, and community.[3]

Social and Emotional Competencies and Skills

Social and emotional skills can be grouped into three categories: Self, Others, and Choices Based on Self and Others.

Self	Others	Choices Based on Self and Others

The Collaborative for Academic, Social, and Emotional Learning (CASEL) defines five social and emotional competencies. Within each of the five competencies is a collection of skills that can be developed and strengthened throughout the lifespan.

Self

Competency: Self-Awareness

The ability to accurately recognize one's emotions, thoughts, values, and how they influence behavior. The ability to accurately assess one's strengths and limitations, with a well-grounded sense of confidence, optimism, and a "growth mindset."

Skills: identifying emotions, accurate self-perception, recognizing strengths, self-confidence, self-efficacy.

Competency: Self-Management

The ability to successfully regulate one's emotions, thoughts, and behaviors in different situations – effectively manage stress, control impulses, and motivate oneself. The ability to set and work toward personal and academic goals.

Skills: impulse control, stress management, self-discipline, self-motivation, goal-setting, organizational skills.

Others

Competency: Social-Awareness

The ability to take the perspective of and empathize with others, including those from diverse backgrounds and cultures. The ability to understand social and ethical norms for behavior and to recognize family, school, and community resources and supports.

Skills: perspective-taking, empathy, appreciating diversity, respect for others.

Competency: Relationship Skills

The ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups. The ability to communicate clearly, listen well, cooperate with others, resist inappropriate social pressure, negotiate conflict constructively, and seek and offer help when needed.

Skills: communication, social engagement, relationship-building, teamwork.

Choices Based on Self and Others

Competency: Responsible Decision Making

The ability to make constructive choices about personal behavior and social interactions based on ethical standards, safety concerns, and social norms. The realistic evaluation of consequences of various actions, and a consideration of the wellbeing of oneself and others.

Skills: identifying problems, analyzing situations, solving problems, evaluating, reflecting, ethical responsibility.

Adapted from Collaborative for Academic, Social, and Emotional Learning (www.CASEL.org).

There is strong empirical support for strengthening social and emotional skills as a strategic approach to improving outcomes across the lifespan.

Strengthening social and emotional skills are increasingly recognized as important to one's success in a variety of life outcomes.[4] Social and emotional skills are associated with improved behavioral outcomes such as fewer conduct problems,[5,6] lower levels of emotional distress,[5,6] and positive wellbeing.[6] Social and emotional skills are also associated with improved academic outcomes[5,6,7] and positive employment outcomes such as obtaining stable employment

and being employed full time.[8] Social and emotional skills are protective[9] and may buffer against a variety of negative outcomes later in life including being arrested by police, the need for public assistance, and substance misuse.[8]

Social and emotional development is embedded in the context of the larger social system that includes parents and other family, friends, teachers, coworkers, neighbors, and the community. It has been suggested that social and emotional skills are developed "in a complex system of contexts, interactions, and relationships."[3] Social and emotional skills can be taught, practiced, and strengthened in everyday interactions and situations. Programs and strategies to grow social and emotional skills have been implemented in a variety of settings including the home,[10] preschool,[11,12] K-12 school,[5,13] workplaces,[14] the military,[15] and through service learning opportunities supported at federal and state levels.[16,17,18]

Research has demonstrated the economic value of strengthening social and emotional skills. In a cost-benefit analysis of six programs designed to grow social and emotional competencies, Belfield et al. (2015) found that every $1 invested produced an $11 return.[19] The current research literature establishes the importance of strengthening social and emotional skills and provides a foundation for this strategic approach to improve outcomes across the lifespan.

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Social and Emotional Development Among Tribal Nations in Montana

This research summary focuses on social and emotional development from a cultural perspective to better understand the efficacy of this approach for improving behavioral outcomes of tribal nations in Montana. There are approximately 78,000 people of American Indian heritage within the state of Montana. They represent twelve American Indian tribal nations including Assiniboine, Blackfeet, Chippewa, Cree, Crow, Gros Ventre, Kootenai, Little Shell Chippewa, Northern Cheyenne, Pend d'Oreille, Salish, and Sioux.[1] Each of these tribal nations has its own unique culture.[1] Strengthening social and emotional skills requires attention to the cultural context in which these skills are taught, practiced, and modeled.[2] Social and emotional skill development improves behavioral outcomes across a wide variety of cultures and ethnic backgrounds.[3]

Healthy social and emotional development is essential to success;[4] social and emotional skills are needed to succeed in family, school, workplaces, and community.[5] It is well established that developing social and emotional skills is important for every child. Social and emotional development is the building of critical life skills. These social and emotional skills include managing oneself, relating to others, and making responsible choices based on self and others. More specifically, these skills include being able to recognize and regulate emotions, empathize and care about others, make good decisions, behave ethically and responsibly, establish and maintain positive relationships, and avoid negative behaviors.[6,7] Social and emotional skills are developed "in a complex system of contexts, interactions, and relationships."[4] This means that context and culture matter.

Social and emotional strategies need to be adapted to address cultural differences.[2] An example of this for American Indian cultures is including values, legends, and stories in teaching social and emotional skills. Another example is emphasizing pride in one's way of life.

Current Research

Social and emotional skill development works when it is culturally responsive.

One study is underway in Alaska to evaluate and better understand what is needed to improve social and emotional skills in culturally specific communities.[8] The Association of Alaska School Boards, American Institutes for Research, seven Alaskan school districts, and the First Alaskans Institute have partnered on a project called: Culturally Responsive and Embedded Social and Emotional Learning. One of the activities identified in this project includes translating the social and emotional skills identified by the Collaborative for Academic, Social, and Emotional Learning to align with cultural values specifically among Alaska Native youth.[7] For example, self-awareness is translated to "respect for self, knowledge of family tree, be strong in mind, body and spirit, humor, be proud of the native way of life."[9]

Social and emotional skill development improves behavioral outcomes across a wide variety of ethnic backgrounds.

Research studies have demonstrated social and emotional skills are associated with improved behavioral outcomes. For example, in a meta-analysis of universal school-based programs designed to improve social and emotional skills, it was found that compared to control groups, students demonstrated improved social and emotional skills, improved attitudes toward self and others, positive social behaviors (i.e., getting along with others), improved academic performance, had fewer conduct problems, and had lower levels of emotional distress.[10] This meta-analysis involved 270,034 students, and several of the interventions occurred in "schools serving a mixed student body in terms of ethnicity."[9]

Social and emotional skill development improves a wide variety of outcomes among youth from diverse ethnic and socio-economic backgrounds.

Similar results were found in a meta-analysis that extended the work of Durlak et al (2011) to understand the follow-up effects of universal school-based interventions focused on improving social and emotional skills.[11] This meta-analysis included 97,406 students, and the sample was "ethnically, socioeconomically, and regionally diverse."[10] Results showed that students who participated in these interventions

demonstrated positive outcomes in the seven outcomes collected (social and emotional skills; attitudes toward self, others, and school; positive social behaviors; academic performance; conduct problems; emotional distress; and substance use).[10]

Another aim of this meta-analysis was to examine whether interventions designed to promote social and emotional skills were "effective in promoting positive developmental trajectories across diverse and global populations."[10] Results showed that the benefits of the social and emotional interventions were similar regardless of the student's race, socioeconomic background, or school location; however, the researchers emphasized the need for cultural competence when social and emotional interventions were designed and delivered.[10]

Social and emotional skill development improves academic achievement among American Indian and Alaska Native students.

One specific study examining the relationship between social and emotional skills and academic achievement for American Indian and Alaska Native (AI/AN) youth found that social and emotional skills were strongly correlated with academic achievement for AI/AN students.[12] In this study, while all the social and emotional skills studied were correlated with academic achievement for American Indian and Alaska Native students, "personal responsibility and decision making were more strongly correlated with academic achievement for Native students relative to their non-Native peers."[11] The authors concluded that "culturally responsive strategies for promoting social-emotional competence among AI/AN students could be a strategy for reducing disparities in academic achievement and their consequences."[11]

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Social and Emotional Development as a Strategic Approach to Reduce Risk Factors and Bolster Protective Factors Associated With Underage Drinking

Understanding risk and protective factors for substance misuse is key to preventing underage drinking. Ideally, protective factors should outweigh risk factors, thus many prevention strategies to prevent substance misuse focus on strengthening protective factors to counteract the negative impact of risk factors.[1] This research summary focuses on social and emotional development as a strategic approach to reduce risk factors and bolster protective factors associated with underage drinking.

Risk factors are those that increase a person's risk of substance misuse.[1,2] Examples of these risk factors are: "inappropriate classroom behavior, such as aggression and impulsivity; academic failure; poor social coping skills; association with peers with problem behaviors including drug abuse; and misperceptions of the extent and acceptability of drug-abusing behaviors in school, peer, and community environments."[2] Protective factors are those that reduce the potential for substance misuse.[2] Protective factors such as success in academics, involvement in extracurricular activities, and acceptance of social norms against drug abuse are associated with reducing risk of substance misuse.[2]

Social and emotional development is the building of critical life skills. These social and emotional skills include understanding and managing oneself, relating to others, and making responsible choices based on self and others. More specifically, these skills include being able to recognize and regulate emotions, empathize and care about others, make good decisions, behave ethically and responsibly, establish and maintain positive relationships, and avoid negative behaviors.[3,4] Social and emotional skills are associated with improved behavioral outcomes such as fewer conduct problems,[5,6] lower levels of emotional distress,[5,6] and positive wellbeing.[6] Social and emotional skills are also associated with improved academic outcomes[5,6,7] as well as positive employment outcomes such as obtaining stable employment and being employed full time.[8]

Social and emotional skill development is an important protective factor and can offset the negative effects of exposure to risk factors.[9] More specifically, social and emotional skill development helps prevent many of the most pressing problems youth face including violence, bullying, suicide, and substance misuse.[10]

The four examples below show how social and emotional skills buffer risk factors for substance misuse (i.e., negative peer influence, social norms misperceptions, difficulty in school and academic failure, and managing negative emotion) and bolster protective factors.

Example 1

The Risk: Negative Peer Influence

Negative peer influence is a risk factor for underage drinking.[1] When with peers, youth are more likely to take risks, make risky decisions, and minimize how risky their decisions are, than when alone.[11] Negative peer influence is greater for youth than it is for adults.[11]

Social and emotional skills help youth cultivate positive social relationships with a variety of people.[12] These specific skills include saying no to peer pressure and successfully negotiating conflict.[12] These skills then buffer negative peer influence and reduce underage drinking.[13]

Example 2

The Risk: Social Norms Misperceptions

Youth develop beliefs about what is normal regarding drinking by watching their peers around them.[14] These beliefs are called norms and youth frequently have misperceptions of their social norms related to underage drinking. Young people tend to overestimate drinking by their peers.[15,16] These misperceptions may increase the likelihood that youth make unhealthy choices and drink alcohol themselves.[15,16]

The ability to understand social and ethical norms for behavior is an important social and emotional skill.[12] Understanding accurate social norms reduces underage drinking because when youth misperceive the drinking behaviors of their peers, they are more likely to drink themselves.[17, 18]

Example 3

The Risk: Difficulty in School and Academic Failure

Difficulty in school and academic failure are risk factors for underage drinking.[2] The development of social and emotional skills like self-discipline, self-motivation, goal-setting, and organizational skills improve academic success.[5,6,7] Furthermore, youth who are successful academically are more likely to be connected to school, which is a protective factor against underage drinking.[2]

Example 4

The Risk: Difficulty Managing Negative Emotions

Depressive feelings increase the likelihood of youth who do drink moving to a pattern of heavy drinking.[19] Further, drinking to manage negative emotions is common among youth who drink by themselves.[20]

Social and emotional skills include the ability to accurately recognize, regulate, and manage one's emotions.[12] Strengthening the ability to manage emotions can serve to mitigate the effects of emotional distress and ultimately reduce underage drinking.

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Reducing Underage Drinking by Strengthening Social and Emotional Skills

Strengthening the social and emotional skills of youth reduces risky behaviors like underage drinking[1] and substance misuse in adulthood.[2] While most Montana youth are making healthy choices about not drinking alcohol,[3] the risks and negative consequences for youth who do use alcohol can be devastating. About one-third of Montana high school students report drinking alcohol in the past 30 days, 11% report driving after drinking alcohol, and 23% report riding with a driver who had been drinking alcohol.[3] These behaviors put students at risk of experiencing negative and long-term consequences. Negative consequences of underage drinking may include poor school performance, risky sexual behavior, legal problems, and social problems.[4,5] Further, underage drinking puts youth at risk of substance misuse as adults.

People who start drinking before age 15 are six times more likely to become dependent on alcohol or abuse alcohol later in life than those who begin drinking at or after age 21 years.[4,6] Strengthening the social and emotional skills of youth reduces risky behaviors like underage drinking[1] and substance misuse in adulthood.[2] Social and emotional development is the building of critical life skills. These social and emotional skills include understanding and managing oneself, relating to others, and making responsible choices based on self and others. More specifically, these skills include being able to recognize and regulate emotions, empathize and care about others, make good decisions, behave ethically and responsibly, establish and maintain positive relationships, and avoid negative behaviors.[7,8]

Research showing the impact of social and emotional skills among youth populations is growing.[9,10] For example, a quasi-experimental, non-randomized, five-year longitudinal study was done to compare students who received a universal social and emotional training intervention with students who did not.[1] In the study, even though the social and emotional training intervention did not explicitly target substance use, there were statistically significant and favorable differences in substance use between students who received the social and emotional training and those that did not.[1] Another study examined whether kindergarten teachers' ratings of children's social and emotional skills predicted various youth and adult outcomes

including substance misuse.[2] Results found that while early social and emotional skills were not associated with alcohol dependence in early adulthood, they were correlated with binge drinking.[2]

Social and emotional skills can be taught to children, teens, and adults. They can be taught, practiced, and supported at home, in school, and in the workplace. Social and emotional skills are associated with improved behavioral outcomes such as fewer conduct problems,[11,12] lower levels of emotional distress,[11,12] and positive wellbeing.[12] Social and emotional skills are also associated with improved academic outcomes[11,12,13] and positive employment outcomes such as obtaining stable employment and being employed full time.[14] Strengthening social and emotional skills is likely to help youth reach their fullest potential[11] including the likelihood of reducing underage alcohol use[1] and the misuse of alcohol in adulthood.[2]

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Adverse Childhood Experiences, Substance Misuse, and Social and Emotional Development

This research summary provides information about adverse childhood experiences, the relationship between these experiences and substance misuse, and how strengthening the social and emotional skills of youth can lessen the negative impact of adverse childhood experiences and reduce the likelihood of substance misuse.

Adverse childhood experiences are negative experiences and stressful events in childhood, including trauma, abuse, and neglect that a child may have witnessed or directly experienced.[1] These experiences include emotional, physical, and sexual abuse; emotional and physical neglect; witnessing domestic violence; parental separation or divorce; and living with someone who was misusing substances, had a mental health disorder, or who had gone to prison. Adverse childhood experiences can impact a person's health and wellbeing throughout their lifespan, including problems with substance misuse.[1] Negative health and social outcomes associated with adverse childhood experiences have been well established. Efforts to prevent these negative outcomes are a focus of many prevention strategies that are in use today, and the literature supports the efficacy of strengthening the social and emotional skills of youth.[2,3]

Positive childhood experiences contribute to healthy development and wellbeing. Developing the social and emotional skills of youth increases their positive childhood experiences and helps to reduce the negative impacts of adverse childhood experiences.[4] Social and emotional development is the building of critical life skills. These social and emotional skills include understanding and managing oneself, relating to others, and making responsible choices based on self and others. More specifically, these skills include being able to recognize and regulate emotions, empathize and care about others, make good decisions, behave ethically and responsibly, establish and maintain positive relationships, and avoid negative behaviors.[5,6]

Building social and emotional skills of youth can help reduce the likelihood of future behavioral problems,[2,3] decrease the potential for emotional distress,[2,3] and improve overall well being.[3] Social and emotional skills are also associated with improved outcomes at school [2,3,7] and employment outcomes, such as the ability to get and keep stable, full-time employment.[8] There is also evidence that the stronger social and emotional skills youth have, the less likely they are to engage in underage drinking[9] and substance misuse.[8]

The following are three examples that illustrate the relationship between adverse childhood experiences and substance misuse, and how strengthening the social and emotional skills of youth can lower the impact of adverse childhood experiences and reduce the likelihood of using substances.

Experimentation With Alcohol at an Early Age

Research has found that youth who have adverse experiences are at greater risk of experimenting with alcohol at a younger age.[10,11] When people experiment with alcohol at an earlier age, this can increase their risk of developing alcohol-related problems later in life.[12,13]

Every adverse childhood experience has the potential to increase the risk of drinking alcohol.[12,13] Further, exposure to these adverse childhood experiences has been associated with an increase of initial alcohol use during early adolescence.[12] Helping youth develop positive coping skills to deal with negative and traumatic events is a strategy to prevent the early onset of drinking.[12] Strengthening the ability of youth to make constructive choices about their behavior, evaluate the consequences of their actions, and effectively manage stress,[14] equips youth with skills that minimize risk for early experimentation with alcohol.[9]

Drinking Alcohol to Cope With Problems

Research suggests that people who have experienced adverse childhood experiences are more likely to drink alcohol to deal with problems or negative feelings about themselves or their lives, rather than for pleasure or socially as people who have not experienced such experiences might.[13] Social and emotional skills such as managing stress and controlling emotions improve coping skills[14] and reduce the negative impact of adverse childhood experiences. Strong social and emotional skills can lessen the chance of using alcohol in ways that lead to substance use disorders.

Problem Drinking and Drug Use in Adulthood

Research shows that children who have had adverse childhood experiences have a higher likelihood of problem drinking in adulthood.[15,16] One study showed that adults who reported experiencing at least four adverse childhood experiences, when compared to those who had experienced none, were twice as likely to report drinking heavily on occasion and three times more likely to report having problems with alcohol as adults.[15] Another study showed that people who had adverse childhood experiences are more likely to struggle with a substance use disorder later in life.[16] When children experience multiple adverse experiences, it can increase their likelihood of substance misuse in adulthood.[16] Specifically, "for every unit increase in the number of types of violent crime/abuse experiences, a person's odds of developing dependence on alcohol, cocaine, and/or opioids were nearly doubled."[16]

Social and emotional skill development protects children, helps them counter the negative impacts of adverse childhood experiences, and reduces their exposure to risky behaviors.[17] These skills have been shown to significantly reduce substance misuse problems in adulthood.[8]

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Risk Factors and Supportive Strategies for Youth in Foster Care

Introduction

Over 680,000 children spent time in foster care in the United States in 2018.[1] Although the average stay in foster care is less than two years, these children have already experienced long periods of neglect, abuse, and a lack of a nurturing and stable environment resulting in long-term negative impacts. Most often, these children have already been exposed to adverse conditions before being placed in foster care. To be clear, children are placed outside of their home, not because of the child but because of the risk factors present in their existing household situation. Therefore, foster parents and parents whose children are returning from foster care to them, have an uphill task of not only providing a safe, supportive, and nurturing environment but also using strategies and skills to combat the negative impacts these adverse experiences have already had on the development of children in the foster care system.

Children in foster care experience disproportionately higher rates of a variety of negative outcomes both in the short and long term. These negative outcomes include high rates of physical, developmental, and mental health problems,[2] parental divorce or separation, parental death, parental incarceration, parental abuse, violence exposure, household member mental illness, household member substance abuse, and adverse childhood experiences, regardless of socioeconomic disadvantage (e.g., children in households with incomes below the poverty line) and across different family structures (e.g., children in single-mother families).[3] This paper starts with a summary of the foster care landscape and then delves into the negative outcomes related to the population of children who are placed in foster care. It concludes with prevention strategies to mitigate these negative outcomes and support healthy development and wellbeing for children while in foster care or when returned to their home.

Defining the population

Foster care or out-of-home care is a temporary service where adults provide for the care of a child or children whose birthparent is unable to care for them. The adults might be relatives of the child or children, or they might be unrelated foster parents. Foster care can also refer to placement settings such as group homes, residential care facilities, emergency shelters, and supervised independent living. Most children in foster care live in a family setting, with approximately 12% living in group homes or institutions. Foster care arrangements are temporary and can be informal or established through the courts or a social service agency. Common reasons children are removed from their homes are maltreatment, lack of care, or lack of supervision. The goal for a child in the foster care system is guided by what is in the child's best interest, which is usually reunification with the birth-family but may be changed to adoption. While foster care is temporary, adoption is permanent.

At any given time, there are approximately 440,000 children between the ages of zero and 20 in foster care. These children stay in foster care for an average of just under two years before being reunited with their families, adopted, or emancipated. Approximately 6% of children stay in foster care for five years or longer. In 2018, of the children exiting foster care, 49% of them were reunifying with their parents or primary guardians, 25% were being adopted, 11% were being placed with a legal guardian, and 7% were aging out without permanent families. These youth without permanent families (approximately 17,000 youth) experience significantly higher rates of homelessness, incarceration, and unemployment as adults.[4]

Although children can enter foster care at any age between zero and 20, the average age of children entering foster care is eight. Approximately 34% of children in foster care are between the ages of one and five years. A slight majority are males at 52%, and over half are children of color. This overrepresentation of certain racial groups, as well as overrepresentation of people in poverty, will be discussed in the next section.

Disparities

Income inequality and poverty: In a study examining the relationship between county-level income inequality and rates of child maltreatment in 3,142 counties in the U.S., researchers found a strong and significant relationship between income inequality and rates of child maltreatment. Income inequality was also related to a wide range of negative health and well-being outcomes in infants and children. Poverty was also significantly correlated with reports of abuse and neglect, findings of child maltreatment, and foster care placement. Children are more likely to be removed from poorer families. Approximately half (47%) of families who have their children removed from their homes have trouble paying for basic needs.[5] The toxic stress of poverty is linked to the risk of parenting difficulties such as chaotic household, inconsistent discipline, inability to respond to a child's emotional needs, and addressing potential risk factors that arise in the children.[5]

Racial and ethnic disparities: Poor families are disproportionately families of color, and there is a strong association between race and poverty for children entering the foster care system.[6] There are significant differences between the rate of contact with child protective services between children who are Black versus White. Children who are Black are more than twice as likely to be referred to child protective services as children who are White. This disproportionality persists in terms of the number of reports that are substantiated and the number of children who enter foster care, particularly before the age of five.[7] Children who are Native American are also disproportionally represented in the foster care system when compared to their representation in the general population. Asian and Hispanic children are underrepresented in the foster care system, though this could be due to underreporting or due to cultural protective factors.

It is difficult to identify what contributes to this disproportional over- or under-representation. Possible explanations include the disproportionate and disparate needs of children and families of color, particularly due to higher rates of poverty, racial bias and discrimination exhibited by individuals (e.g., caseworkers, mandated and other reporters), child welfare system factors (e.g., lack of resources for families of color, caseworker characteristics), and geographic context, such as the region, State, or neighborhood (e.g., quality jobs, economic equity, quality schools, public safety concerns) discriminatory laws and policies that maintain these inequities.

Sexual orientation: Several studies have found that LGBTQ young people are overrepresented in child welfare systems. This is despite the fact that they are likely to be underreported because they risk harassment and abuse if their LGBT identity is disclosed. In the regular US population, between 4 and 10% of people identify as LGBTQ, however more than twice the youth in child welfare systems identify as LGBTQ. According to one study, about 26% of LGBT youth are forced from their homes because of conflicts with their families of origin over sexual orientation or gender identity.[8] Physical violence is also a concern for LGBTQ youth. In another study, 30 percent of LGBT youth reported physical violence at the hands of a family member after coming out as LGBT.[9] Of LGBTQ youth experiencing homelessness, an estimated 43% are forced from their homes because of conflicts with their families about their sexual orientation of gender identity; 32% of homeless LGBTQ youth have experienced physical, emotional, or sexual abuse at home over their sexual orientation or gender identity. LGBTQ youth in foster care are twice as likely to report poor treatment and more likely to live in group homes and to have multiple more foster care placements. These data suggest that LGBTQ youth are at risk for overrepresentation in child welfare systems and are disproportionately likely to leave the foster care system without a permanent family.

Negative outcomes related to children in foster care

Mental health and suicide rates: Youth placed in foster care have increased mental health symptoms, for example, they are twice as likely as other children to have a learning disability; three times more likely to be diagnosed ADD or ADHD; six times more likely to have behavioral problems including oppositional defiance and impulse control disorders; and seven times more likely to suffer from depression. These differences in rates of mental health diagnoses remained even after the researchers adjusted for child characteristics, socioeconomic status, and household conditions.[10,11,12]

When comparing suicide rates between children in foster care and those not in foster care, a Canadian study[13] revealed higher rates of suicide, attempting suicide, hospital admission, and physician visits among children and adolescents who were in foster care. Interestingly, within the group of children placed in foster care, the rates of suicide and attempted suicide were higher right before placement and reduced after placement. This finding might suggest that it is not the placement in foster care, but the conditions that result in foster care placement that have the profound negative effect.

Adverse Childhood Experiences: Adverse childhood experiences (ACEs) are negative experiences and stressful events in childhood including trauma, abuse, and neglect that a child may have witnessed or directly experienced.[14] These experiences include emotional, physical, and sexual abuse; emotional and physical neglect; witnessing domestic violence; parental separation or divorce; and living with someone who was misusing substances, had a mental health disorder, or who had gone to prison. Adverse childhood experiences can impact a person's health and wellbeing through their lifespan, including problems with substance use. A child who has been exposed to adverse childhood experiences can be negatively impacted both socially and health-wise.

Data were gathered between 2011 and 2012 through the National Survey of Children's Health (NSCH) from a nationally representative sample of non-institutionalized children ages 0–17 in the United States.[15] The goal was to estimate the association between foster care placement and exposure to an array of ACEs. Results indicated that children placed in foster care or adopted from foster care, compared to their counterparts, were more likely to experience parental divorce or separation, parental death, parental incarceration, parental abuse, violence exposure, household member mental illness, and household member substance abuse. These children were also more likely to experience ACEs than children across different thresholds of socioeconomic disadvantage (e.g., children in households with incomes below the poverty line) and across different family structures (e.g., children in single-mother families). These results advance our understanding of how children in foster care, an already vulnerable population, are disproportionately exposed to ACEs. This exposure, given the link between ACEs and health, may have implications for children's health and wellbeing throughout the life course.

Unfortunately, exposure to adverse childhood experiences is linked to both short-term and long-term impacts. Examples of short-term impacts include poor health and physical illness, reduced social skills, depression, anxiety, higher levels of stress, inability to concentrate or focus, and being easily distracted. Long term impacts of ACES go well into adulthood and include health outcomes like higher rates of obesity, diabetes, heart disease, cancer, and strokes and increased engagement in risky behaviors such as drug and alcohol use, criminal activity, and an overall reduced life potential.

Children may also have their own characteristics and experiences that protect them and help them develop resilience despite exposure to ACEs. Resilience is positive adaptation within the context of significant adversity. In the face of adversity, neither resilience nor disease is a certain outcome.

Strategies and Interventions to Support Youth in Foster Care

Research on child development is helpful when understanding ways to mitigate the negative impact of being in a foster care system. However, the following strategies appear most frequently in the research as successful ways of reducing the adverse impacts of experiences that children may have had prior to foster care placement. These strategies also apply to parents whose children are returning to them. In this section, the term caregiver is being used to include parents, foster parents, relatives, guardians, or anyone involved in the care of a child.

1. ***Develop caregiver social and emotional skills***

   Children benefit from predictability, nurturance, support, and cognitive or insight-oriented interventions to make them feel safe, comfortable, and loved. In order to provide such an environment, particularly under stress, caregivers (whether parents, guardians, or foster parents) need to attend to themselves and grow their skills before they can adequately attend to others. Social and emotional development is a process where individuals learn skills to identify and manage their emotions, empathize and care about others, make good decisions, behave ethically and responsibly, establish and maintain positive relationships, and avoid negative behaviors.[16,17] Although social and emotional skill development is frequently associated with children, adults too can benefit from developing these skills in themselves.

   For more information on social and emotional skill development, see: https://www.parentingmontana.org/social-and-emotional-development/

2. *Understand child and adolescent brain development*

Child development is the process of changing physically, socially, emotionally, and cognitively from birth through adolescence. Understanding child development, particularly brain development, can help caregivers understand what might be going on for the child, as well as how to help. Children's brains can easily get overwhelmed and need the support of an adult to manage their reactions. Essentially, there are two primary parts of the human brain, the limbic system and the prefrontal cortex. The limbic system is responsible for, among other things, our emotions, quick decisions, social needs, and reward. The limbic system is a reactionary system. The prefrontal cortex is responsible for decision making, thinking through consequences, and controlling impulses. The limbic system processes all stimulus received and communicates with the prefrontal cortex through a relay system. During development from prenatal until mid-twenties, both the limbic system and prefrontal cortex go through massive growth, restructuring, and maturing to create more efficient systems.[18] The limbic system brain is done with this restructuring around the age of 15, but the prefrontal cortex is not done restructuring and maturing until the mid-twenties. Therefore, in times of stress or social pressure, the brain is dominated by reactivity, high emotions, impulsive responses, the need for reward, and meeting social needs and rational decision-making takes a back seat. [19] This disconnect between the limbic system brain and the prefrontal cortex brain is made worse by exposure to traumatic or adverse experiences. Traumatic events can disrupt healthy brain development and slow the development of the prefrontal cortex brain, thereby increasing the likelihood of engaging in problematic, impulsive, and risky behaviors.

If a child does not experience a nurturing relationship, stress hormones rise and negatively impact brain development.[20] The developing brain needs a non-threatening and predictable environment. Parents can help children engage their prefrontal cortex brain by managing their own responses and not escalating the situation, talking calmly, expressing a great deal of empathy, getting down to the eye level of the child, and helping the child re-establish a sense of control.

3. *Support social and emotional skill development in children*

As caregivers, we can support the social and emotional development of children in order to help children learn skills to identify and manage their emotions, empathize and care about others, make good decisions, behave ethically and responsibly, establish and maintain positive relationships, and avoid negative behaviors.[21,22] Helping children build social and emotional skills, helps reduce the likelihood of future behavioral problems,[23,24] decrease the potential for emotional distress, and improve their overall wellbeing.[25]

Social and emotional skills are developed through relationships, interactions, and ongoing social situations. As a caregiver, there are many ways to support a child's social and emotional skill development. Three strategies include: Building Awareness, Modeling the Skills, and Intentionally Practicing. These strategies are explained in Social and Emotional Development.

4. *Practice intentional parenting and intentional communication*

Although genes influence a child's developmental trajectory, one of the most important factors that impacts a child's development is the relationship the child has with a supportive adult.[26] Through this important relationship, children develop intrapersonal skills like being able to manage emotions, self-regulate, and make good decisions as well as interpersonal skills like being able to get along with others and communicate effectively. Healthy social and emotional development occurs within the context of a nurturing relationship from infancy into adulthood.

Intentional parenting is an approach to developing safe, stable, and nurturing parent-child relationships. Through intentional parenting, parents grow strong social and emotional skills in their children. The intentional parenting approach relies on brain science to provide you ways to stay present and involved with your child. The approach provides consistent structure and guidelines within which your child can find their own way. Intentional parenting uses intentional communication to tackle hard problems in a way that strengthens the parent-child relationship.

For more information on intentional parenting and intentional communication, see: Intentional Ways to Grow a Healthy Parenting Relationship and Intentional Communication.

5. ***Attend to guidance and disciple for skill building***

Guidance and disciple for skill building is frequently fraught with anguish and confusion. There are multiple philosophies regarding discipline, however, understanding that the way a brain develops doesn't always support thinking through consequences is essential to successful guidance and discipline for skill building. Misbehaviors are therefore teaching opportunities to support healthy brain development and ameliorate some of the negative impacts of adverse experiences on the brain. This style of discipline, using discipline as teaching opportunities for skill development, is further explained in Discipline for Skill Building.

6. ***Be trauma informed***

Being trauma informed means having a lens that has a broader explanation for why children might act a certain way, particularly when they have been exposed to traumatic or stressful events.[27] Experiencing traumatic events, whether divorce, fighting in the household, or separation from a parent, has an impact on the developing brain resulting in an overdeveloped limbic or reactionary system and an underdeveloped frontal cortex or thinking system. Being trauma informed does not mean excusing misbehaviors, it means understanding that the misbehavior needs empathy and connection first before the behavior can be addressed or corrected. Being trauma informed also helps caregivers not take misbehaviors personally or as personal attacks, but rather as reactions within a really limited menu of options from which a traumatized brain must choose. This understanding can help the caregiver manage the misbehavior in a way that strengthens the relationship with the child rather than damages it.[28]

7. ***Develop strong and healthy social supports***

Strong social support is correlated with numerous positive outcomes including buffering the negative impacts of stress and trauma, overall health and wellbeing, resilience, and psychological health.[29] Social supports are needed not only for the children, but especially for the caregivers, so that children are surrounded by nurturing and supportive adults. These include friends and relatives, as well as other parents who might be involved in, or touched by, the foster care system. Social media outlets have groups dedicated to parents providing homes for children in foster care. The Annie E. Casey Foundation has a list of resources that can be found at https://www.aecf.org/blog/resources-for-foster-parents/.

8. Attend to cultural sensitivity

Caregivers may be faced with caring for children whose backgrounds are different from theirs.[30] The differences may include religion, race, culture, class, sexuality, and relationship to gender. Training in cultural sensitivity can support a caregiver in developing a safe, nurturing, and welcoming environment for the child and can help bring awareness to any implicit or explicit biases a caregiver might have that could contribute to prejudice, discrimination, or stereotyping. For training resources, see https://www.childwelfare.gov/topics/systemwide/cultural/outofhome/foster-adopt/.

Conclusion

Although children in foster care experience disproportionately higher rates of a variety of negative outcomes both in the short and long term, there are strategies that can be employed by those involved in the foster care system to mitigate these negative effects. This paper started with a summary of the foster care landscape, with special acknowledgement of disparities in foster care placement. Negative outcomes related to the population of children who are placed in foster care were explored including impact on mental health and suicide rates and the exponentially higher incidence of adverse childhood experiences. This paper concluded with strategies to mitigate these negative outcomes and support healthy development and wellbeing, while a child is in foster care and when returned to their home. These strategies included developing social and emotional skills both in the caregiver and child; using intentional parenting, communication, and guidance and discipline for skill building; developing strong social supports; understanding brain development; and being trauma informed and culturally sensitive.

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Grandparents Raising Grandchildren: Circumstances, Impact, and Actions for Success

Typically, grandparents are involved in the lives of their grandchildren in ways other than the daily primary caregiving. Afternoons playing in the park, watching and supporting activities like soccer games or piano recitals, occasional visits, phone calls, and babysitting are common ways grandparents connect and interact with their grandchildren. However, there is a growing trend in the United States of grandparents becoming the primary caregivers for their grandchildren. The U.S. Census of 2000 revealed that over 2.4 million grandparents held custodial responsibility of their grandchildren. That number increased 7% to 2.7 million in the latest census data and is likely to increase as this trend continues.[1] In Montana, there are more than 13,000 children living with and being cared for by their grandparents.[2]

Grandparents recognize several benefits associated with raising their grandchildren such as the chance to be an important part of their grandchildren's lives, the ability to watch them grow, and the opportunity to continue family traditions.[3,4] However, in addition to the positive effects of grandparents becoming the primary caregivers for their grandchildren, there are also many challenges. Research suggests that grandparents raising grandchildren are more likely to experience emotional problems[5,6] and physical health problems.[7,8] Many grandparents are retired and live on a fixed income, thus financial problems are often cited as a challenge for grandparents raising grandchildren.[3] These grandparents often have to engage with complicated systems like the court system, child welfare system, and law enforcement, which can be difficult to navigate.[4] Social challenges including inadequate support and feelings of isolation are also identified by grandparents.[4,9] Primary caregiving responsibilities can significantly limit the freedoms of which grandparents may have previously been accustomed, and they may sacrifice their own personal interests for those of their grandchildren.[4] Additionally, the grandchildren that grandparents care for are at a greater risk for emotional and behavioral problems because of their exposure to adverse experiences.[4,10]

This research summary provides information about grandparents raising grandchildren. Specifically, this summary explores who the grandparents raising their grandchildren are, and the circumstances surrounding grandparents who become primary caregivers to their grandchildren. This summary also explores research on the emotional, physical, financial, social, and legal impacts associated with these caregiving responsibilities. Finally, opportunities to lessen the negative impacts associated with grandparents assuming the primary caregiving responsibilities of their grandchildren are also discussed.

Grandparent Caregivers to Grandchildren

Grandparents have an important role in the lives of their grandchildren. Traditionally, grandparents have played an assistant role to parents raising their children; however, it is becoming increasingly common for grandparents to become primary caregivers for their grandchildren.[1,3]

There are many different reasons why grandparents are raising their grandchildren. While every situation is unique, divorce, death of parents, incarceration, military deployments, parents' work or school-related responsibilities, abuse, abandonment, substance misuse, and mental health problems are common reasons grandparents become the primary caregivers to their grandchildren. Some research suggests that those who need out-of-home placement or kinship care are overrepresented by single mothers and low-income families who "arrived at their status due to substance abuse, teen pregnancy, AIDS, and incarceration in the middle generation."[11]

The arrangement of grandparents assuming primary responsibility for their grandchildren may arise informally, that is, without a formal agreement or court ruling. Grandparents may see the parents struggling to care for their grandchildren and offer to take responsibility. In other situations, Child Protective Services and court rulings formally facilitate the process. Child Protective Services and court rulings may find a child's birthparent is unable to care for them and decide that an out-of-home placement with another family member or foster family is required. When a child is placed with a family member, this is called "kinship" care.[12]

Grandparents are often identified as a preferable placement for children in the child welfare system opposed to being put into the foster care system. The Federal Family First Prevention Services Act (Family First Act), enacted in February 2019, includes a focus on family foster care and providing resources to parents including kinship caregivers of children.[13] Research suggests that children in their grandparents' care function better than children placed in foster care.[14]

Children living full time with their grandparents often feel positively about their grandparents being their primary caregivers.[15] In a qualitative analysis focused on understanding the experience of grandchildren living with their grandparents, grandchildren identified feelings of safety and security, love, care, and belonging.[15] Additionally, many children living with their grandparents want to maintain contact with their parents and other family members and cite this as an advantage of living with grandparents.[15]

Most grandparents providing custodial care to their grandchildren are under the age of 65 (72%), female (77%), and married (54%).[6] The trends in demographics of grandparents raising grandchildren tend to be heterogeneous when it comes to race with 51% Caucasian, 38% African American, and 13% Hispanic.[6] The caregiving arrangements generally last longer than 6 months suggesting that raising grandchildren isn't a temporary situation for most grandparents,[16] and these arrangements often arise suddenly in response to an urgent need or adverse event.[9]

Impacts Associated With Grandparents Raising Grandchildren and Opportunities to Lessen the Negative Impacts

Research suggests there are emotional, physical, social, financial, and legal impacts associated with grandparents raising their grandchildren. In this section, these impacts are explored for grandparents and, when applicable, grandchildren as well. Opportunities to lessen the negative impacts associated with grandparents assuming the primary caregiving responsibilities of their grandchildren are also discussed.

Emotional Impact

Grandparents often feel a wide range of emotions when they become the primary caregivers to their grandchildren. The happy, proud, and rewarding feelings of being with family and a new constant companion are easy to acknowledge. Grandparents may experience feelings of pride, love, joy, and relief for taking in their grandchildren from a less than ideal situation.[1] However, grandparents may also experience feelings of fear, guilt, and resentment. These feelings are normal. In one study using the Symptom Checklist-90-Revised Inventory, a common tool for assessing mental health, 44% of grandparents scored in the 90th percentile, which is considered high enough to need mental health intervention.[17]

The circumstances leading to the need for grandparents to raise their grandchildren may evoke feelings of guilt, shame, resentment, anger, and upset as they process feelings about their own child not being able to care for their grandchildren because of incarceration, substance misuse, or an untreated mental health disorder. Guilt and shame are common emotions in these situations.[6] "Grandparents may question their own inadequacy: What have they done wrong to have children who cannot care for their own children, and are they competent enough to deal with raising children again?"[18] In a qualitative study to understand the experience of grandparents raising their grandchildren, Shampson and Hertlein found that managing feelings of disappointment with their own child's choices and feelings that they had failed while raising their child were common.[4]

Further, in assuming their new primary caregiving role, it is common for grandparents to experience resentment feeling as though they are forced into a situation to have to become parents again.[4] Children require a substantial commitment of time and energy and as a result, grandparents have less freedom resulting from the need to reorganize their lifestyle, shift priorities, and adjust to a new normal. Higher levels of stress are more likely among grandparent caregivers.[5]

For children, adjusting to having their grandparents as their primary caregivers can be trying and often a very difficult and highly stressful time as well. The circumstances surrounding an out-of-home placement can be a traumatic experience for children. Children who are placed into the custodial care of grandparents are at a greater risk for emotional and behavioral problems.[17] Prior to living with grandparents, many children experience great adversity.[15]

Adverse childhood experiences can impact a person's health and wellbeing throughout their lifespan, including problems with substance misuse. A child who has been exposed to adverse childhood experiences can be negatively impacted both socially and health-wise. These stresses normally stem from the trauma that put them into the care of their grandparent(s) in the first place. Even if the trauma is of no fault of the grandparent, "because of their negative experiences with their parents, children being raised in grandparent-headed families often display developmental, physical, behavioral, academic, and emotional problems."[19] Common examples of this are depression, anxiety, hyperactivity or inattention, health problems, learning disabilities, poor school performance, aggression, feelings of loss, anger, rejection, guilt, and attachment disorders.[19]

Other studies report that children raised by low-income grandparents fare worse in school engagement than children in low-income parent care due to feeling distracted because of their life adjustment and desire to be with their parent(s).[20] Experiences of loss, rejection, and abandonment are common among children requiring an out-of-home placement.

To support grandparents and their grandchildren, it is important to encourage the utilization of resources, especially as both grandparents and grandchildren adjust to their new roles. Social support, mental health practitioners, and community groups have all been proven to help grandparents and grandchildren adjust to their new roles.[21]

Resources like counseling and support groups can provide an outlet for grandparents to process their new role, seek guidance about challenges they are experiencing, process their feelings as a result of the big changes in their lives, and receive education that can help them support their grandchildren. For example, mental health practitioners can provide education to grandparents about what it means to be trauma informed.

Being trauma informed means having a lens with a broader explanation for why children might act a certain way, particularly when they have been exposed to traumatic or stressful events.[22] Experiencing traumatic events like divorce, fighting in the household, or separation from a parent, has an impact on the developing brain that results in an overdeveloped limbic or reactionary system and an underdeveloped frontal cortex or thinking system. Being trauma informed does not mean excusing misbehaviors; it means understanding that the misbehavior of the child needs empathy and connection first before the behavior can be addressed or corrected. Being trauma informed also helps caregivers avoid taking misbehaviors personally or as personal attacks but rather as reactions within a really limited menu of options from which a traumatized brain has to choose. This understanding can help grandparents manage the behaviors of their grandchildren in ways that strengthen the relationship with the child rather than damage it.[23]

Mental health practitioners and support groups can also provide guidance and tips to create a safe, structured, and consistent environment for their grandchildren. Creating a safe, structured, and consistent environment is protective for children's mental, emotional, and behavioral development.[24] Grandparents can create a safe, structured, consistent environment for their grandchildren through their daily practices. Bedtimes, mealtimes, and playtimes are good opportunities for providing that structure. Providing consistency with routines and rituals offers support for a child to thrive. Daily routines and structure can also help grandparents settle into a new schedule and foster a sense of calm during an emotionally turbulent time.

Accessing resources like counseling and support groups can help grandchildren as well. Mental health practitioners and support groups can be a safe place for children to talk about their feelings about living with grandparents while navigating new rules and new environments. These resources can also be helpful to support children in talking about their feelings toward their parents and the experiences they had prior to living with their grandparents.

Physical Health Impact

The implications of mental health on physical health are well documented in many different contexts. By virtue of being of older age, grandparents inherently have lower health markers than other age groups, and with the added stress and physical demands of being the primary caregiver to a child, there are additional health concerns for grandparents. In one study, grandparents caring for their grandchildren reported significantly lower satisfaction with their health and poorer health status than grandparents not caring for their grandchildren.[7] In contrast, some grandparents report a "rejuvenation" by the constant companionship of much younger people, but these reports are more anecdotal and are based on how people feel instead of definable health markers.[12] The activity level of grandparents normally increases with the addition of a child to the household, but if the added stress is not managed well then health can deteriorate. Most grandchildren are extremely grateful for their grandparents raising them; however, age and health limitations are normally listed as being challenges to the relationship.[25]

While physical health is often a challenge of grandparents, the grandchildren they are raising may also experience health problems. Research suggests that there are physical health impacts both in the short term and long term for children who have adverse childhood experiences. Examples of short-term impacts include poor health and physical illness, reduced social skills, depression, anxiety, higher levels of stress, inability to concentrate or focus, and being easily distracted. Long term impacts of adverse childhood experiences go well into adulthood and include health outcomes like higher rates of obesity, diabetes, heart disease, cancer, and strokes.

Medical and mental health professionals can help ease the short-term and long-term health impacts. Encouraging grandparents to access resources for themselves and their grandchildren can bolster health outcomes.

Social Impact

Grandparents may experience social isolation as a result of raising grandchildren.[3]

Grandparents may feel like they must deal with their current challenges alone. They may be reluctant to reach out for support for fear their peers wouldn't be able to relate to their current situation. Instead of attending a social event with their friends, grandparents raising their grandchildren may find themselves choosing different social events to accommodate their grandchildren.[4] In a qualitative research study, it was identified that attending activities and social events for their grandchildren can feel isolating and leave grandparents feeling "out of touch." [4] One grandfather stated, "I look around and I am the oldest guy there. I wonder what the hell am I doing here? Then I remind myself it is okay, I have done this before."[4] Another study revealed that grandparents experience "dissonance, or role-identity conflict" between their traditional grandparent role and their new grandparent as parent role.[3]

Research also suggests that there are social impacts for children being raised by grandparents.[15] One study reveals that approximately half of the grandchildren in the study "expressed shame and secrecy about their situation, but this was generally related to the reasons why their real parents were unable to care for them rather than specifically because they were living with grandparents.".[15] Other social impacts revealed in this study included children identifying with moving to a new house and/or school and the resulting loss of friends, feelings of humiliation as a result of discussing their parent's problems with others, "several children perceived that others treated them differently or judged them because of their unusual living arrangements, and a number of the younger children referred to being teased by their peers."[15]

Finding support systems for both the grandchild and grandparent(s) is important for managing the physical health, mental health, finances, and stress of raising children. Strong social support is correlated with numerous positive outcomes including buffering the negative impacts of stress and trauma, overall health and wellbeing, resilience, and psychological health.[26] Family members, support groups, counsellors, and medical and mental health professionals can provide support that can help relieve the burdens associated with parenting. Studies suggest that finding adequate "social support may lay the groundwork for better health over time among grandparent caregivers, and that worse health in concert with less social support may predispose such persons to more depression over time."[27]

Financial and Legal Impact

Many grandparents live on a fixed or limited income, making the financial responsibilities of caregiving difficult. They have additional expenses related to caring for their grandchildren without additional income. 19% of grandparent caregivers live below the poverty line, which is $21,720 a year for a two-person household according to the U.S. Department of Health & Human Services.[6] Further, grandparent caregivers generally receive fewer benefits than foster parents in the foster care system, which puts a larger economic burden on grandparents.[28]

Many grandparents find themselves needing legal advice when it comes to deciding what is best concerning their grandchildren. However, legal assistance can be expensive and add to the financial stress grandparents may have as a result of raising their grandchildren. Hiring attorneys, paying legal fees, and time spent preparing for court proceedings to formally take custody of grandchildren can be an unanticipated costly burden.

Legal assistance is often identified as a major need of kinship care. "Informal" caregiving is a common practice that can lead to problems regarding "accessing medical care and enrolling children in school and creates uncertainty for both grandparents and grandchildren."[17] Adoption, custody, and defining the custodial responsibility of the grandparent(s) legally is important for obtaining benefits from government organizations. 33% of children in grandparent-headed homes do not have insurance, which is primarily because of a lack of formal legal basis for obtaining insurance on a dependent.[17] Further, without legal custody or guardianship, there are situations where an unfit birthparent can take back custody of a child causing uncertainty for grandparents and for children.

Community groups, religious groups, and government and non-governmental organizations exist nationwide to provide support specifically to grandparents or kinship raising children. They provide social gatherings, events, financial support, legal expertise, and advice on best practices for raising grandchildren.[6] These services can help alleviate the stress of raising a child in this modern era.

Conclusions

Grandparents raising their grandchildren is an increasing phenomenon, thus it is important to understand the nature of grandparent caregivers, what the circumstances in which grandparents become primary caregivers to their grandchildren are, and the impacts associated with these caregiving responsibilities. The experience of grandparents raising their grandchildren can be rewarding and challenging simultaneously, and there are implications for both grandparents and grandchildren. In understanding the unique challenges, opportunities to lessen the negative impacts can be identified, implemented, and expanded to help both grandparents and their grandchildren thrive.

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Prescription Medications

This research summary provides a brief overview of prescription medications often misused by teens, their availability, their short-term and long-term effects, and the motivations and misperceptions teens have for using these substances.

Prescription medications "require a prescription from a doctor or dentist".[1] This research summary focuses specifically on the nonmedical use or misuse of prescription medications. The terms "nonmedical use" and "misuse" are used interchangeably and are defined as using a prescribed medication

- without a prescription written for yourself,
- in a way other than as directed by a physician (e.g., mixing with alcohol or other drugs), and
- for the feeling the drug causes (to get "high").[2]

How Are Prescription Medications Misused?

When a person uses someone else's prescription medication or uses their own prescription medication in a way that is not intended by their doctor or dentist, they are misusing the substance. Prescription medications can be misused by ingesting them orally (in their original form), crushing them into a powder and snorting through the nose, or dissolving them into a liquid and injecting intravenously.[2]

Misusing prescription medication can cause severe respiratory depression and place a person at risk of death.[3] Signs of opioid overdose include:

- Their face is extremely pale and/or feels clammy to the touch
- Their body goes limp
- Their fingernails or lips have a purple or blue color
- They start vomiting or making gurgling noises
- They cannot be awakened or are unable to speak
- Their breathing or heartbeat slows or stops."[3]

Because opioid overdose is life-threatening, immediate emergency medical attention is needed. Bystanders should call 911, begin CPR (if the person has stopped breathing or if breathing is very weak), and use naloxone to reverse opioid overdoes.[3] Naloxone is a medication that reverses overdose by temporarily reversing respiratory depression and is available as injectable or nasal spray.[2] It is available at many pharmacies in Montana; no prescription is needed, and it is often free. More information on overdose signs and naloxone is available at www.naloxone.mt.gov.

Misusing prescriptions may lead to the use of heroin and other drugs.[4,5] For example, those who misuse prescription medications, especially young people, may switch to heroin because heroin may be easier to obtain and at a lower price than prescription medications.[5,6] In one study of young adults, 83% of those who used nonmedical prescription opioids transitioned to heroin use generally within the first 4 years of misusing a prescription opioid for the first time.[4] Of the people who had transitioned to heroin, 64% transitioned to heroin injection within a year of first using heroin.[4] Results from this study also found that 92% of youth that had misused opioids had also misused benzodiazepines.[4] These results suggest that misusing prescription medications in the teenage years may lead to using drugs in ways that are increasingly risky (injecting them) and using other drugs.[4] Similarly, other research has found correlations between misuse of prescription medications and the use of other illicit drugs such as methamphetamine.[7] Additionally, illicit drugs are sometimes laced with fentanyl, a type of opioid that is dangerous and is associated with high risk of overdose.

What Are Commonly Misused Prescription Medications and Their Effects?

There are several studies exploring the nonmedical use of prescription drugs among teens. This paper discusses three common prescription drug classes that are often misused among teens: pain relievers, stimulants, and central nervous system depressants, which include both tranquilizers and sedatives.

Prescription Pain Relievers (Opioids)

Prescription pain relievers or opioids are often prescribed to reduce pain.[8] Opioids have a chemical makeup like the endorphins that our bodies make naturally.[9] Opioids include prescription medications such as oxycodone, morphine, codeine, methadone, hydrocodone, fentanyl, hydromorphone, meperidine, and diphenoxylate.[9] Common brand name prescription pain medications include Vicodin, OxyContin, and Percocet. Street names for these opioids include: Vikes, Oxy, and Percs.[2]

In an analysis of data from the Youth Risk Behavior Survey between 2009 – 2019, one in seven U.S. high school students reported misuse of prescription opioids at least once in their lifetime, and one in 14 students reported current prescription opioid misuse.[10] In Montana one in eight (13%) high school students reported having ever taken a prescription pain medication that was not prescribed to them or used it differently than how it was prescribed.[11]

Short-term effects of prescription opioids include pain relief, relaxation, euphoria, sleepiness, constipation, nausea, and slowed breathing.[2,9] Commonly identified reasons for misusing prescription pain medications are often aligned with the therapeutic indications for the substance such as to relieve physical pain, but other motivations such as getting high, feeling good, and relieving tension may also be motivating the nonmedical use of prescription medications.[8,12]

Severe withdrawal symptoms such as sleep problems, diarrhea and vomiting, cold flashes, and pain can occur when a person stops using prescription opioids.[9] The symptoms of withdrawal can be extremely difficult to endure and can make it hard for a person to stop using opioids.[9] Using prescription opioids for a longer period can lead a person to develop tolerance, which means that the person needs to use more of the drug or use the drug more frequently to get the desired effects.[9] Tolerance can lead to dependence and the development of an opioid use disorder.[9] Fortunately, there are a variety of treatments to help people stop using prescription opioids including behavioral therapies and medications such as buprenorphine, methadone,

Prescription Stimulants

Prescription stimulants are usually prescribed "to treat attention-deficit/hyperactivity disorder (ADHD), to reduce or control weight, or to promote wakefulness because of sleepiness associated with conditions such as narcolepsy or sleep apnea".[8] Prescription stimulants include medications such as Adderall, Ritalin, Methedrine, and Methylphenidate.[8,12] Bennies, black beauties, and uppers are common street names for Adderall.[13] Diet coke, kiddie coke, study buddies, and R-Pop are common names for Methylphenidate (Concerta and Ritalin).[14]

Prescription stimulants can have short-term effects such as increased body temperature, heart rate, attention, wakefulness, and energy, and can cause feelings of paranoia.[1] Common motives for using prescription stimulates include recreational use (to get high), experimentation, and academic performance (to aid in studying and increase alertness).[15] Like prescription opioids, the long-term use of prescription stimulants can lead to tolerance and the development of a substance use disorder.[2]

Central Nervous System Depressants (Tranquilizers and Sedatives)

Commonly misused central nervous system depressants include tranquilizers and sedatives. Prescription tranquilizers are commonly prescribed for anxiety and to treat muscle spasms.[8] Benzodiazepines include Xanax, Valium, Ativan, and Klonopin, which are used to treat anxiety.[8,12] Common street names for benzodiazepines include names like benzos, nerve pills, and tranks.[13] Soma and Flexeril are muscle relaxants used to treat muscle spasms.[8,12] Prescription sedatives are usually prescribed for sleep disorders such as insomnia.[8] Prescription sedatives include Ambien, Lunesta, and Sonata[1]. Street names that are common for prescription sedatives include tic-tacs, forget-me pills, looney bar, and zombie flip.[14]

Short-term effects of central nervous system depressants include slowed breathing, sleepiness, disorientation, lack of coordination, light-headedness, dizziness, and slurred speech.[1,16] In the longer term, taking central nervous system depressants can result in dependence and withdrawal if a person stops using them. Some of the withdrawal symptoms include seizures, shakiness, anxiety, insomnia, severe cravings, and agitation.[16] If a person has developed dependence on a central nervous system depressant, they should not stop taking the medication without medical help as withdrawal from these drugs can be severe and potentially life-threatening.[16]

Prescription Availability and Teen Misperceptions

Prescription medications are widely available in the U.S. In 2018 alone, more than 49,000,000 million people (15% of the population) filled at least one prescription for an opioid in the U.S..[17] This number is concerning as the misuse of prescription medications usually occurs after a legitimate prescription is used.[18,19] For example, in one study, using a prescribed opioid medicine before high school graduation was associated with a 33% increase in the risk of future opioid misuse after high school.[20] Reducing availability is an important strategy for reducing teen nonmedical use of prescription medications. The good news is that in Montana, the overall opioid prescription rate between 2014-2019 decreased by 14%.[21]

Wide availability of prescription medications can make obtaining prescription medications easier for teens. It is common for teens to get prescription medications from their friends and relatives.[22] It is also common to get prescription medications from a physician or dentist.[22] In one study, it was found that over one-third of teens who reported the nonmedical use of prescription medication used leftover medications from their own previous prescriptions.[19] It is much less common to obtain prescription medications by stealing them or buying them from a drug dealer or someone they don't know.[22]

Wide availability may be contributing to misperceptions teens have about using prescription medications. Some teens underestimate the dangers of misusing prescription medications and may believe that the nonmedical use of prescription medications is safer than using other drugs.[3,23] However, research shows the nonmedical use of prescription medications is associated with multiple negative health outcomes and risky behaviors including use of other drugs and alcohol, suicidal ideation, violence, and increased risky sexual behaviors.[10,12,24] The misuse of prescription medication can alter normal adolescent brain development, lead to the development of a substance use disorder, lower academic performance, and increase the likelihood of dropping out of school.[10,12,24]

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Cannabis

This research summary provides a brief overview of cannabis, its effects, and its impact on teens in the short term and long term as well as information about cannabis regulations in Montana. This research summary primarily focuses on the nonmedical use of cannabis.

Cannabis is "a generic term used to denote the several psychoactive preparations of the cannabis plant".[1] Marijuana is the most common cannabis preparation and is "an herbal form of cannabis prepared from the dried flowering tops and leaves" of the Cannabis sativa plant.[1] The Cannabis sativa plant contains many different compounds called cannabinoids. While over 100 cannabinoids have been identified in the Cannabis sativa plant, the two main cannabinoids are cannabidiol (CBD) and delta-9-tetrahydrocannabinol (THC).[1] CBD is a non-psychoactive cannabinoid, which means it does not produce mind- or mood-altering effects.[2] THC is the psychoactive cannabinoid primarily responsible for the effects a person experiences from using cannabis.[2] Both CBD and THC are extracted from the Cannabis sativa plant[3]. Marijuana contains substantial amounts of THC.[2]

Throughout this research summary, the term cannabis will be used instead of marijuana or other common terms used to describe marijuana including weed, pot, grass, dope, reefer, herb, bud, and Mary Jane. Cannabis has been "adopted as the standard terminology within science and scholarly communities".[4]

How Is Cannabis Used?

Cannabis can be smoked, vaporized, brewed, and mixed in foods such as cookies, gummies, or brownies. When cannabis is rolled into a cigarette and smoked, it is called a joint; when it is smoked or inhaled in a pipe, it is called a bowl; and when it is smoked or inhaled in a water pipe, it is called a bong.[4,5] Electronic vaporizers (called e-vaporizers or vapes) are also used.[5] Smoking cannabis continues to be the most common way to ingest the drug because smoking or vaporizing releases the greatest amount of THC into the bloodstream, and the effects are felt within a few minutes.[1] When smoked or vaporized, the effects of cannabis usually peak at approximately 15-30 minutes and start to decrease within 2-3 hours.[1] When cannabis is consumed in foods (called edibles), the effects are delayed as the drug goes through the digestive system and usually take 30 minutes to 1 hour.[6] When ingesting cannabis in foods, the effects can last for many hours.[6]

What Are the Effects of Cannabis?

The effects a person experiences from using cannabis vary. Cannabis effects depend on a variety of factors including how cannabis is administered, the person's history of cannabis use, the context in which the person is using cannabis, and the person's expectations.[1] Cannabis effects also depend on the potency of the cannabis. Cannabis potency refers to the amount of THC it contains,[5] which has increased over the years.[7] From 1995 to 2019, the percentage of THC in cannabis samples seized by the Drug Enforcement Agency (DEA) increased steadily from 3.96% in 1995 to 14.35% in 2019.[7]

Experiencing euphoria and a sense of calm and relaxation are common expectations of using cannabis, but some people experience anxiety or other negative effects like nervousness and acute psychotic symptoms.[6] Other short-term effects of using cannabis include loss of coordination,[1] impaired cognitive functioning,[8,9] slower reaction times, and muscle relaxation.[2] A person may also experience increased heart rate and blood pressure, increased appetite, and dry mouth.[4] These short-term effects typically last a few hours.

Long-term health impacts, especially when a person uses cannabis regularly and over an extended period of time, include adverse effects on mental health such as anxiety and depression,[10,11] cognitive impairment including attention and memory problems,[8] and respiratory issues like chronic bronchitis and coughing.[12] Further, research suggests that those who use cannabis are at an increased risk of developing a substance use disorder.[11]

Cannabis Use and Teens

The adverse effects of cannabis use among teens have been established.[13] **Rapid brain development in the teen years may make teens more vulnerable to the effects of cannabis use**[14] **and lead to negative outcomes later in life.**[15,16] Given the research suggesting a wide range of negative health outcomes and potential harm associated with teens using cannabis, it is recommended that teens do not use cannabis.[17]

Cannabis use among teens can negatively impact learning, memory, and concentration, which can lead to decreases in school performance[13] **and adverse effects on educational attainment.**[16,18] For example, one study found that teens who were "daily users of cannabis before age 17 years had odds of high school completion and degree attainment that were 63% and 62% lower, respectively, than those who had never used cannabis".[16] Another study found that younger age of first cannabis use was associated with decreased rates of high school completion,

The impact of cannabis use on school performance has also been found among students in Montana. According to the Alcohol and Other Drug Related Behaviors and Academic Achievement Report in 2019, "Montana students in 9th-12th grade who used cannabis made up 45% of students with poor grades, as opposed to 14% of students with mostly A's".[20]

Cannabis use has also been linked to negative psychiatric effects.[13,21,22] One study found that daily users of cannabis before age 17 years old had odds of suicide attempts that were seven times higher than those who had never used cannabis.[16] Gukasyan and Strain (2020) found depression was more prevalent among adolescents (ages 12-17) who had a history of cannabis use compared to those who had never used cannabis.[23] Another study found that use of cannabis among adolescents was positively associated with various psychiatric problems including depressive symptoms, symptoms of ADHD, conduct problems, anhedonia, and impulsivity.[24]

Cannabis use has also been linked to other substance use and the development of substance use disorders.[1,25] In Montana, students who used cannabis were "twelve times more likely to report using alcohol within the past 30 days and seven times more likely to report using other drugs within the past 30 days.[20] Thus, sometimes cannabis is referred to as a "gateway" drug; however, the merits of such claims are debated in the literature.[2] Regardless, cannabis use in the teen years can increase one's propensity to develop a substance use disorder later in life, although researchers note that this is a complex relationship that is influenced by a variety of individual factors.[16,26] Teens who "begin using marijuana before age 18 are four to seven times more likely than adults to develop a marijuana use disorder".[25] Further, early onset of marijuana use has been linked to reduced relationship satisfaction and life satisfaction.[15]

Cannabis use increases motor vehicle crash risk.[27,28,29] Research has consistently shown a statistically significant relationship between recent cannabis use and increased risk of traffic crashes.[27,28,29,30,31] For example, in a study examining recent cannabis use and collision risk, researchers found that cannabis use alone was associated with a fourfold increased odds of a collision.[31] Hartman and Huestis (2013) found that recent use of cannabis was "associated with substantial driving impairment, particularly in occasional smokers".[28]

Perceptions of risks regarding cannabis use and driving may be influencing this behavior. For example, in a qualitative research study to explore perceptions among people who drive after cannabis use, it was found that many participants identified driving under the influence of cannabis was less risky than driving under the influence of alcohol or other drugs.[32] Further, some participants did not believe that cannabis use impaired their driving ability or increased collision risk.[32] A few participants believed that cannabis use improved their overall driving ability.[32] In another study, participants tended to express beliefs that driving under the influence of cannabis was a low-risk behavior, but that it could be dependent on an individual's level of tolerance and response to the drug.[33] In this study, those who perceived driving after using cannabis as less risky were more likely to engage in the behavior.[33]

Perceived risk of consuming cannabis and perceived use among peers are likely to influence cannabis use behavior.[34] In Montana, "1 in 2 students did not believe there is any harm in using cannabis weekly".[20] Among teens, the perception of risk associated with using cannabis may be declining.[35] In a study of adolescents' perceptions of risks and benefits of cannabis, researchers found that teens may be ambivalent about the dangers associated with cannabis use and overestimate the benefits.[36] Adolescents' perceptions of the risks and benefits of cannabis use are important as these perceptions may influence behavior.[34,37] For example, in a study of adolescents in 32 European countries, a higher perception of risk associated with cannabis use was associated with decreased cannabis use.[34] Similarly, in a study of over 700 adolescents, researchers found higher perceptions of health and social risks related to cannabis use were associated with greater odds of not using cannabis.[37]

Perception of cannabis use among peers may also influence cannabis use behavior,[34,37,38] **and teens may be overestimating cannabis use among their peers.**[37] In one study, those who reported that their friends used cannabis had 27% greater odds of using cannabis themselves.[37] The influence of perception of cannabis use among peers has been identified in multiple studies.[34,38] Closing misperception gaps may be an important strategy for preventing cannabis use.[37]

Cannabis Regulations

There have been significant changes in acceptance, availability, and access to cannabis in the United States in recent years.[4] Changes include the decriminalization of cannabis and the legalization of medical and recreational cannabis use.[4] Notably, different states have implemented these cannabis policies to varying degrees. At the time of this research summary, 36 states and four territories allow for the medical use of cannabis products,[39] and 18 states, two territories, and the District of Columbia have legalized cannabis for recreational use.[40]

In Montana, both medical and adult-use cannabis are legal. In 2004, Initiative 148 legalized medical marijuana.[41] As of January 1, 2021, it is legal in Montana for adults 21 years of age and older to possess and use up to one ounce of cannabis and to cultivate up to two mature cannabis plants and two seedlings for private use in a private residence (with some restrictions).[41] Starting on January 1, 2022, counties that supported Initiative 190 will have adult-use cannabis sales available; however, in counties that opposed Initiative 190, adult-use cannabis sales will remain prohibited.[41]

These recent state changes differ from the federal laws currently in place. To date, the federal government does not recognize the medical use of cannabis (other than the pharmaceutical-grade cannabinoids (i.e., Marinol)[4] and continues under the Controlled Substance Act to classify certain parts of the Cannabis sativa plant as a controlled Schedule 1 drug because it is considered to have a "high potential for abuse, no currently accepted medical use in treatment in the United States, and a lack of accepted safety for use under medical supervision".[3]

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Methamphetamine

This research summary provides a brief overview of methamphetamine, its effects, and the short-term and long-term impact of methamphetamine use. This research summary also provides information about methamphetamine use in Montana.

Methamphetamine is a stimulant that is manufactured with over-the-counter ingredients such as pseudoephedrine, a common ingredient in cold medicines, and other hazardous chemicals such as "acetone, anhydrous ammonia (fertilizer), ether, red phosphorus, and lithium".[1] Methamphetamine can be manufactured in the form of a white or yellowish powder or can be made into a white or clear looking rock that looks like shards of glass.[2] Common names for methamphetamines include crystal, ice, meth, speed, black beauties, crank, glass, and tweak.[2,3]

How Is Methamphetamine Used?

Methamphetamine can be smoked, injected with a needle, snorted through the nose, or ingested orally. When smoked, methamphetamine reaches the brain within 6-8 seconds, and when injected with a needle, methamphetamine reaches the brain within 10-15 seconds.[4] Smoking or injecting methamphetamine causes the most immediate and intense stimulating effects. These effects are often referred to as a "rush."

While smoking and injecting methamphetamine produce the quickest and most intense euphoric experience, snorting the drug and ingesting it orally are also common. When snorted through the nose, methamphetamine reaches the brain within 3-5 minutes, and when ingested orally, it can take longer (about 3 hours) to reach peak effect because the drug is absorbed through the intestines.[4] The effects produced from snorting or ingesting methamphetamine are less intense, but longer lasting.[5] The short-term effects of using methamphetamine can last up to 12 hours.[4]

What Are the Effects of Methamphetamine?

Methamphetamine increases levels of the neurotransmitters dopamine, norepinephrine, and serotonin found in the brain.[5,6] These neurotransmitters are known as "feel good" neurotransmitters and are responsible for many essential functions in the body. For example, dopamine is involved in a person's control of their body movements, emotional regulation, motivation, and the reinforcement and regulation of the brain's reward system.[2,7] Norepinephrine is involved in functions such as arousal, memory, the fight/flight response, and mood.[8] Serotonin plays a key role in functions such as a person's circadian rhythm, which impacts the sleep/wake cycle, appetite, and sexual behavior.[7,9]

The short-term stimulating effects of methamphetamine on the body include increased respiration, heartrate, blood pressure, and energy.[12] Increased sexual arousal is also a common short-term physical effect of methamphetamine use.[5] Cognitive and mental health effects include increased alertness and attention, feelings of euphoria and wellbeing, and increased sense of self-esteem.[12] Aggression and violent behavior have also been linked to methamphetamine use.[7,11,15]

The pleasurable experience or "rush" of using methamphetamine is followed by negative effects and symptoms of withdrawal including depression, anxiety, fatigue, intense craving to use the drug again, irritability, poor concentration, hypersomnia, and paranoia.[5,10] This is often referred to as a "crash." To avoid these unpleasant effects of withdrawal, people may be motivated to use the drug again. The cycle of drug use followed by abstinence is often referred to as a "run" or a "binge".[5] Repeated cycles of methamphetamine use can result in tolerance where a person needs to use more of the substance or use more frequently to reach the desired effect. Repeated use and the highly addictive properties of methamphetamine can increase one's risk of developing a substance use disorder.[4]

Methamphetamine use can also have long-term impacts on a person's physical health, mental health, and cognitive functioning.[2,4,5,11] Long-term physical health problems include weight loss, damage to the cardiovascular system, pulmonary problems, addiction, malnutrition, sleep difficulties, and dental problems.[4,12] Methamphetamine use also increases the risk of infectious diseases like HIV and hepatitis B and C.[4,12]

Mental health impacts associated with long-term methamphetamine use include problems such as anxiety, difficulty regulating mood, paranoia, hallucinations, and psychosis.[9,13] For example, in one study, McKetin et al. (2006) found that the prevalence of psychosis among a sample of those who used methamphetamine was 11 times higher than among the general population.[14] In another study that sought to measure the health and social consequences of methamphetamine use among young adults, many respondents reported experiencing depression, hallucinations, and paranoia.[11] Suicidal ideation and suicide attempts are also associated with methamphetamine use.[15]

A large body of research done in laboratory animals has documented cognitive deficits and consequences associated with methamphetamine use.[16] In a meta-analysis assessing cognition in people who use methamphetamine, Scott et al. (2007) suggested cognitive deficits associated with methamphetamine use include "problems with episodic memory, executive functions, complex information processing speed, psychomotor skills, attention/working memory, language, and visuoconstruction (i.e., the ability to organize spatial information)".[5] Problems associated with impaired decision making have also been documented.[7] For example, Verdejo-Garcia et al. (2006) found that people who have developed a substance use disorder often make decisions that produce an immediate reward despite subsequent negative consequences.[17] There is also research to suggest that impairment in cognitive functioning persists even when a person has stopped using methamphetamine.[9] Research measuring cognitive performance and impairment from methamphetamine use is complex, and a variety of factors including frequency of use, amount, purity, and route of administration may influence outcomes.

Methamphetamine Use in Montana

According to the National Survey on Drug Use and Health (2019), approximately 12,900 Montanans aged 12 years and older used methamphetamine in the last year.[18] "Since 2015, methamphetamine use in the past year was significantly higher in the western United States (U.S.) than the rest of the country".[19] The physical, social, and financial costs of methamphetamine use are problematic and concerning for Montana.

- Crimes related to methamphetamine have increase by 100% since 2014.[20]
- $39 million was charged by hospitals across Montana to treat people for stimulant-related admissions and emergency department visits in 2018.[21]
- 1,295 people were admitted to treatment centers across Montana for methamphetamine in 2018-2019 as either their primary, secondary, or tertiary drug of choice.[22]

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