Quantum Units Education

Affordable. Dependable. Accredited.

www.quantumunitsed.com

# How Mood Disorders Impact Children

Millions of children worldwide experience mood disorders and they can have a profound impact on young people's academic performance and social interactions, as well as their overall well-being. Recognizing the signs of mood disorders in children allows for early identification and intervention, which significantly improves outcomes. Additionally, such awareness facilitates access to appropriate mental health services and treatments. This, in turn, can lead to improved mental health outcomes, reduced symptoms, and enhanced quality of life for affected children. Behavioral health professionals must have the necessary knowledge and skills to help young people who are experiencing issues related to mood disorders.

## Introduction



Mood disorders are a group of mental health problems that cause serious changes in the child's mood and emotional states. Mood disorders cause thoughts and feelings that are intense, persistent, and difficult to manage. They often go undiagnosed as children present with different symptoms than adults.

Children and adolescents with depression often have impairments in functioning in multiple areas, including decreased school performance, poor social interactions, early pregnancy, frequent physical illness, and substance abuse. Depression can negatively affect the development of the child. Major depressive disorder in youth is strongly associated with depression in adulthood, other mental health diagnoses, and an increased risk for suicidal thoughts and behaviors. Youth die by suicide at a rate of 2.5 deaths per 100,000 persons (younger youth - age 12 and younger) and 16.1 deaths per 100,000 persons (older youth - age 13 and older) (USPSTF, 2022).

Selph and McDonagh (2019) identify the following risk factors for depression (many of these are overlapping risk factors for all mood disorders) in children and adolescents:

**Biological**

- Being overweight
- Chronic illness
- Early puberty
- Family history of depression
- Female
- High-functioning autism
- LGBTQ identifies
- Polymorphism in the serotonin, dopamine, or monoamine oxidase genes



**Psychological**

- Body dissatisfaction and early dieting
- Sweetened beverage consumption
- Dysfunctional emotional regulation
- Internet gaming disorder or video game addiction
- Less attachment to parents and peers or problems with peers
- Low self-esteem and lack of self-kindness
- Negative thinking and recall styles
- Other mental health and behavioral problems (including previous depression, cannabis use, and tobacco use)
- Problematic use of social media

- Worry related to school grades and standardized tests

**Environmental**

- Academic difficulties
- Being victimized or bullied or witnessing violence
- Physical, sexual, or emotional abuse or neglect
- Exposure to natural disasters
- Few opportunities for physical activity and sports, low physical activity (greater than 2 hours/day of leisure-time screen use)
- Foreign-born or perceived discrimination
- Loss of a loved one
- Low socioeconomic status
- Prenatal rejection or low parental involvement
- Poor family functioning or caretaker depression



Mood disorders that are seen in children include major depressive disorder, persistent depressive disorder, bipolar disorder, and disruptive mood dysregulation disorder.

## Major Depressive Disorder

This type of depression can be severe, where the child has difficulty managing everyday life. The signs of major depressive disorder may include insomnia or hypersomnia, difficulty concentrating, weight loss or gain, loss of interest in

previously enjoyable activities such as school or sports, irritability, or feeling sad or worthless. Major depression is different from grief in that with grief (such as the loss of a loved one) the predominant symptom is an overwhelming sense of loss or emptiness. In contrast, with major depressive disorder, the depressed mood prevents the person from anticipating any future enjoyable events (Selph & McDonagh, 2019).

Depression symptoms include feelings of sadness, guilt, or worthlessness. Children with major depressive disorder can also experience slightly different symptoms from adults, including irritability, moodiness, lack of interest in friends and previously enjoyed activities, and frequent instances of being bored. They may also experience weight loss or gain, sleeping too little or too much, and have thoughts about death and dying. Children's grades may drop, and they may have difficulty concentrating (NYU Langone, 2023).



Depression can be caused by a combination of biological, genetic, psychological, and environmental factors. While depression may be prevalent in some families, it can also occur in people with no family history of the disorder. Stressful situations may trigger a depressive episode, such as moving, changing schools, relationship problems, or the death of a loved one. Depressive episodes can also occur without an identifiable trigger (NYU Langone, 2023).

Children of any age can experience depression, but it is more common in teenagers than in younger children. In elementary school-age children, it affects an equal number of boys and girls before puberty. In adolescence, it impacts twice as many girls as boys. Depression in children has increased significantly in the last few years, and 7 to 14 percent of children will experience a major depressive episode before they turn 15. However, treatment implications are hopeful as approximately 80 percent of people with major depression who seek treatment improve, usually within weeks (NYU Langone, 2023; Boston Children's Hospital, 2023).

It is important for depression to be treated as soon as it is suspected and diagnosed. Untreated depression can lead to school failure, risky behaviors, difficulties with relationships and jobs in older adolescence and adulthood, and attempted or successful suicide (Boston Children's Hospital, 2023).

### *Signs & Symptoms*

While each child is unique and may experience different depression symptoms, the most frequently experienced symptoms include:

- persistent feelings of sadness
- having low self-esteem
- feeling hopeless or helpless
- excessive guilt
- feeling inadequate
- difficulty with relationships
- loss of interest in activities that were  once enjoyed
- sleeping too little or too much
- decreased energy
- changes in appetite or weight
- trouble making decisions
- difficulty concentrating
- frequent physical complaints including headaches, stomach aches, or fatigue
- irritability, hostility, and aggression

- hypersensitivity to failure or rejection
- running away or threatening to run away from home
- suicidal thoughts or attempts (Boston Children's Hospital, 2023).

### *Risk Factors*

Risk factors linked to depression include genetic and environmental factors. The most common risk factors tied to major depressive disorder include:

- family history of depression
- excessive stress
- parents' divorce
- loss of a parent, caregiver, or a loved one
- abuse or neglect
- trauma (physical and/or emotional)
- loss of a relationship, such as losing a boyfriend/girlfriend or moving away
- chronic illnesses, such as diabetes
- other psychiatric disorders
- failure to accomplish tasks such as learning to read or keeping up with peers in other activities
- other developmental, learning, or conduct disorders (Boston Children's Hospital, 2023).

### *Diagnosis*

Major Depressive Disorder is diagnosed by a mental health provider through interviews with the child and the parent/caregiver and possibly through the use of screening tools such as the PHQ-9 (see Appendix A).

For children to receive a diagnosis of major depressive disorder, they must meet the following DSM-V criteria:

Have five or more of the following criteria, with at least one being #1 or #2:

1. Depressed or irritable mood, indicated by subjective report or observation by others.
2. Loss of interest or pleasure in almost all activities, indicated by subjective report or observation by others.
3. Significant unintentional weight loss/gain (more than 5 percent in a month) or decrease/increase in appetite (children fail to make expected weight gains).
4. Sleep disturbance (insomnia or hypersomnia).
5. Psychomotor changes (agitation or retardation) are severe enough to be observable by others.
6. Tiredness, fatigue, low energy, or decreased efficiency with which routine tasks are completed.
7. A sense of worthlessness or excessive, inappropriate, or delusional guilt (not merely self-reproach or guilt about being sick).
8. Impaired ability to think, concentrate, or make decisions, indicated by subjective report or observation by others.
9. Recurrent thoughts of death (not just fear of dying), suicidal ideation, or suicide attempts.

In addition:

- The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- The child's symptoms do not meet the criteria or are not better accounted for by bipolar disorder, schizophrenia spectrum, or other psychotic disorders, and symptoms are not due to the effects of substance use.
- The symptoms are not better accounted for by bereavement (i.e., after the loss of a loved one, the symptoms persist for longer than two months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation) (American Psychiatric Association, 2013).



## *Treatment*

### Psychotherapy

Cognitive Behavioral Therapy is the gold standard of evidence-based therapies to treat depression in children. Grist et al. (2019) reviewed multiple studies and found for the best results, CBT should be delivered in face-to-face sessions. While internet and computer-based CBT was more effective than control groups on wait lists receiving no treatment, it had lower success rates than in-person CBT. Internet- and computer-based CBT had slightly better results for adolescents than for children.

### Medication

Fluoxetine (Prozac) and escitalopram (Lexapro) are the only two U.S. Food and Drug Administration-approved medications to treat children and adolescents with major depressive disorder. Fluoxetine is approved for children aged eight years and older, and escitalopram is approved for children aged 12 years and older. Concerns exist about the potential for increased suicide risk with the use of

fluoxetine and escitalopram. Clinical trials found an increase in suicidal thoughts and behaviors when the antidepressant was compared to a placebo (4% vs. 2%). Therefore, children and adolescents taking antidepressants should be monitored for suicide ideations. The frequency of monitoring should be based on the individual's risk, and may include weekly monitoring at the beginning of treatment and then a transition to monthly monitoring as the child shows improvement on antidepressants (Selph & McDonagh, 2019).

## Persistent Depressive Disorder

This type of depression is less severe but chronic. Children can usually manage their everyday life, but not at their best level, and they may often feel down. In persistent depressive disorder, a child has a depressed mood for more days than not for at least one year (Selph & McDonagh, 2019).



Children with persistent depressive disorder symptoms experience a consistent depressed or irritable mood that has lasted for at least one year. Symptoms are similar to a major depressive episode but are less severe and fewer. While persistent depressive disorder is less severe than major depression, it lasts for a longer period of time and may be accompanied by extreme feelings on occasion.

Because of the lower intensity and long duration of symptoms, many children and their caregivers don’t realize that symptoms are an indication of a mental health condition.  Since the symptoms may have been consistent over the years, they may be seen as a normal part of the developmental process.  However, if left undiagnosed and untreated, this type of disorder can lead to more serious mental health and behavioral problems (NYU Langone, 2023; Boston Children’s Hospital, 2023).

If persistent depressive disorder goes untreated, long term implications include a higher likelihood of developing major depressive disorder or a personality disorder, and/or having substance misuse issues as adults. People who develop

persistent depressive disorder prior to age 21 tend to have poorer prognoses compared to those who develop the disorder in adulthood. Early identification and treatment are key to reducing the long-term impact of the disorder on the child (Boston Children's Hospital, 2023).

### *Signs & Symptoms*

Changes in mood and behaviors that may indicate a child is experiencing persistent depressive disorder include the following symptoms when experienced over an extended period of time:

- feeling sad, worried, or hopeless
- unprovoked irritability, hostility, or aggression
- withdrawal from family and friends (including staying in one's room with the door closed and not taking calls or seeing friends)
- expressing low self-esteem or making negative comparisons ("I'm stupid compared to my friends and classmates," "I'm so much uglier than all my friends")
- sudden change in weight or appetite
- sleeping too often or not often enough
- lowered school performance
- complaining of headaches, stomachaches, or other physical symptoms with no identifiable medical cause (Boston Children's Hospital, 2023).



### *Risk Factors*

While the exact cause of persistent depressive disorder is unknown, the following are a number of identified risk factors:

- family history of depressive disorder

- temperamental factors: negative affectivity
- environmental stressors such as:
    - death of a parent, relative, or friend
    - abuse or neglect
    - other mental health problems, such as anxiety
    - divorce or illness in the family
    - dealing with a chronic medical illness
    - chronic social or academic difficulties

### *Diagnosis*

Persistent depressive disorder is typically diagnosed through a mental health evaluation or interview with the child and parents/caregivers. There may also be conversations with school personnel who interact with the child regularly (Boston Children's Hospital, 2023). During the evaluation process, the provider assesses if the child meets the DSM-V criteria for a persistent depressive disorder diagnosis. This includes:



- Depressed mood or irritable mood for most of the day, for more days than not, as indicated by subjective account or observation by others, for at least one year.
- Presence while depressed of two or more of the following:
    - Insomnia or hypersomnia
    - Poor appetite or overeating
    - Low energy or fatigue
    - Low self-esteem

    - Feelings of hopelessness
    - Poor concentration or difficulty making decisions
- During the one-year period of the disturbance, the child has never been without symptoms from the above two criteria for more than two months at a time.
- The symptoms cause clinically significant impairment or distress in important areas of functioning.
- The child's symptoms do not meet the criteria or are not better accounted for by major depressive disorder, bipolar disorder, or psychotic disorder, and symptoms are not due to the effects of substance use (American Psychiatric Association, 2013).



### *Treatment*

Persistent depressive disorder treatment most often involves a combination of psychotherapy and medication, as the use of antidepressant medication along with therapeutic interventions has shown to be the most effective intervention.

**Psychotherapy**

Evidence-based psychotherapeutic interventions for persistent depressive disorder include cognitive behavioral therapy and interpersonal therapy. Issues that are often addressed through CBT include:

- identifying and talking about feelings
- stopping persistent negative thoughts
- finding activities that are soothing and comforting
- discovering and appreciating good things about oneself
- building hope for the future

Interpersonal therapy focuses more on issues such as:

- working through difficult relationships and situations
- identifying stressors and figuring out how to avoid or handle them
- improving how individuals view their environment

If there is a situation in the family environment that is contributing to the child's depressed mood, family therapy may be an appropriate treatment (Boston Children's Hospital, 2023).

**Medications**

The antidepressant medications most commonly used for children and adolescents are selective serotonin reuptake inhibitors (SSRIs). Every person responds differently to medication, and it may take some trial and error to find what works best. Considerations should be given to family history, side effects, medication compliance, and success of medication treating the targeted symptoms. Children need to be monitored closely by their care team when antidepressant medications are being initiated or doses are being increased (Boston Children's Hospital, 2023).



## Bipolar Disorder

Bipolar disorder involves cyclical swings between depression and mania. Depression symptoms include irritability, persistent sadness, frequent crying, low energy, fatigue, and poor concentration. The child may experience changes in sleeping and eating habits. They may have thoughts of death or suicide. Manic symptoms include feelings of grandiosity, extreme exuberance, excessive silliness, and severe and chronic irritability.

Bipolar disorder is typically diagnosed in children when they experience a manic episode. This may include experiencing dramatic mood changes and extreme levels of happiness or excitement. They may talk excessively, loudly, rapidly, or change topics of conversation abruptly and frequently. The child may experience other symptoms of unrealistically high self-esteem, ambition, and activity, increased energy, decreased sleep, loss of touch with reality, and risky behaviors (NYU Langone, 2023).

With bipolar disorder, people experience changes in mood and behavior that, at times, are extreme. While individuals are most often diagnosed with bipolar in adolescence and adulthood, symptoms can emerge in childhood. Bipolar disorder symptoms are different from the typical mood ups and downs most children experience. Bipolar mood changes are significantly more extreme, often lack a trigger event, and coincide with changes in sleep, energy levels, and the ability to think clearly. During a manic episode, the child may feel very happy and be much more energetic and active than usual. During a depressive episode, the child may feel very sad and be much less active than usual (NIMH, 2023).



Bipolar disorder can make it difficult to perform well in school or interact well with friends and family members. Some children with bipolar disorder try to hurt themselves or attempt suicide. Diagnosing bipolar disorder can be complicated as many signs and symptoms overlap with other disorders that are common in children, such as attention-deficit/hyperactivity disorder (ADHD), conduct problems, major depression, and anxiety disorders. An exhaustive evaluation by a mental health professional for accurate diagnosing of bipolar disorder is needed, as early diagnosis and consistent treatment can lead to improved outcomes and long-term well-being (NIMH, 2023).

### *Signs & Symptoms*

The criteria for diagnosing children with bipolar disorder are the same as those used for diagnosing adults. Changes in mood can fluctuate between depression,

which can include extreme sadness, low energy levels, loss of pleasure, and suicidal ideation, and hypomania or mania, which can involve periods of elevated mood, irritability, a decreased need for sleep, increases in goal-oriented behaviors and inflated self-esteem. There are three subcategories of bipolar disorder. Bipolar I involves cycles of major depression episodes and full mania with impairment. Bipolar II involves major depression alternating with briefer and less-impairing periods of hypomania. The third subcategory of bipolar disorder involves symptoms that are shorter in duration when experiencing manic or depressive episodes, or the episodes are one to two symptoms short of meeting the full episodic symptom criteria (Abrams, 2020).

Bipolar disorder mood episodes involve intense emotions and changes in sleep habits, activity levels, thoughts, and behaviors. Children with bipolar disorder may experience depressive episodes, manic episodes, or mixed episodes. Mood episodes can last for several days to weeks; during that time, symptoms are experienced every day for most of the day. Mood episodes are very different from the child's normal behavior and the behaviors of other healthy children.



Symptoms of a manic episode may include:

- Intense happiness or silliness for an extended period of time
- A very short temper or extremely irritable
- Rapid speech which jumps around to different topics
- Difficulty sleeping without feeling tired
- Difficulty staying focused and racing thoughts
- Increased interest or activity in pleasurable but risky activities
- Poor judgment, including risky or reckless behavior
- Inflated sense of ability, knowledge, and power

Symptoms of a depressive episode may include:

- Frequent sadness with no identifiable trigger
- Increased irritability, anger, and hostility
- Frequent complaints of physical ailments such as headaches or stomach aches
- Increased amount of sleep
- Difficulty concentrating
- Feelings of hopelessness and worthlessness
- Difficulty communicating or maintaining relationships
- Eating too little or too much
- Lack of energy and no interest in previously enjoyable activities
- Thoughts about death or suicide (NIMH, 2023).



One challenge in diagnosing bipolar disorder in children is that the disorder can look different in children. Children may experience more rapid cycling moods and more mixed episodes where they experience both depression and mania simultaneously. Another challenge in assessing and diagnosing bipolar disorder in children is that some of the symptoms can look like an extreme version of normal child behaviors (Abrams, 2020).

### *Risk Factors*

Individuals' chances of having bipolar are higher if they have a close family member with the illness. While there appears to be some genetic factors involved with bipolar disorder, just because a family member has the disorder, it does not mean other family members will also have it. There are many genes involved, not just one single one. Research suggests that those with a genetic risk of having

bipolar are more likely to develop it after experiencing a trauma or other stressful life event. Some studies have found there are differences in brain functioning and structure between people who have bipolar disorder and those who do not (NIMH, 2023).

### *Diagnosis*

Bipolar disorder is diagnosed through screening tools, family and child interviews, symptom reports and observations, and through the use of screening tools such as The Child Bipolar Questionnaire (see Appendix B).

During the evaluation process, the provider assesses if the child meets the DSM-V criteria for a bipolar disorder diagnosis. This includes the following:

A. Criteria have been met for at least one manic episode (see manic criteria below). The manic episode may have been preceded by and may be followed by hypomanic or major depressive episodes (this is the same criteria as listed above under Major Depressive Disorder).

B. The occurrence of the manic and major depressive episode(s) is not better explained by schizoaffective disorder, schizophreniform disorder, delusional disorder, or other specified or unspecified schizophrenia spectrum and other psychotic disorders.



Note: Major depressive episodes are common in bipolar I disorder but are not required for the diagnosis of bipolar I disorder.

Note: Hypomanic episodes are common in bipolar I disorder but are not required for the diagnosis of bipolar I disorder.

*Specify:*

- With anxious distress
- With mixed features

- With rapid cycling
- With melancholic features
- With atypical features
- With mood-congruent psychotic features
- With mood-incongruent psychotic features
- With catatonia
- With peripartum onset
- With seasonal pattern

*Specify:* Remission status if full criteria are not currently met for a manic, hypomanic, or major depressive episode (American Psychiatric Association, 2013).

Manic episode criteria include:



A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently goal-directed behavior or energy, lasting at least one week and present most of the day, nearly every day (or any duration if hospitalization is necessary).

B. During the period of mood disturbance and increased energy or activity, three (or more) of the following symptoms have persisted (four if the mood is only irritable) are present to a significant degree and represent a noticeable change from usual behavior:

    - Inflated self-esteem or grandiosity
    - Decreased need for sleep (e.g., feels rested after only 3 hours of sleep)
    - More talkative than usual or pressure to keep talking
    - Flight of ideas or subjective experience that thoughts are racing

- Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli), as reported or observed.
- Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation
- Excessive involvement in activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments).

C. The mood disturbance is sufficiently severe to cause marked impairment in social or occupational functioning or to necessitate hospitalization to prevent harm to self or others, or there are psychotic features.

D. The episode is not attributable to the direct physiological effects of a substance (e.g., a drug of abuse, a medication, or other treatment) or another medical condition.



Note: A full manic episode that emerges during antidepressant treatment (e.g., medication, electroconvulsive therapy) but persists at a fully syndromal level beyond the physiological effect of that treatment is sufficient evidence for a manic episode and, therefore, a bipolar I diagnosis (American Psychiatric Association, 2013).

### *Treatment*

An important part of bipolar disorder treatment is maintaining consistent care even when a mood episode is not being experienced. Over time, with consistent treatment, improvements in daily functioning and well-being can be made. As stated previously, the best practice for treating pediatric bipolar is with a combination of psychotherapy and medication.

**Psychotherapy**

Psychotherapy can help children and their families manage their bipolar disorder symptoms. Therapy may address symptom management skills, tips for maintaining routines, improving emotional regulations, and developing social interaction skills. Therapy can also provide support, guidance, and education to children and their family members (NIMH, 2023).

*Cognitive Behavioral Therapy*

CBT can also help children learn to identify triggers to their depressive and manic episodes, which may include such things as stress and lack of sleep, and to use specific thinking and behavioral strategies to improve their coping (NYULangone, 2023).

*Dialectical Behavioral Therapy*

Beyond the skills and coping techniques taught in dialectical behavior therapy, it has also been shown to reduce suicidal ideation in those with bipolar disorder (Abrams, 2020).



RAINBOW is a specific strategy for children ages 7-13 and their families. It is a 12-session program focused on education about bipolar disorder, skill building to help children regulate their emotions, and coping and parenting strategies for caregivers, including the importance of creating and maintaining routines. It incorporates cognitive-behavioral therapy, interpersonal psychotherapy, and mindfulness-based approaches (Abrams, 2020).

*Interpersonal Psychotherapy*

The goal of interpersonal psychotherapy is to reduce bipolar disorder symptoms by increasing  children's social support and improving their ability to manage their relationships with others. Treatment happens in different phases; in the first phase, therapists help children link their mood to changes in interpersonal situations. In the second phase, professionals help the individuals identify triggers to their depressed and manic episodes. In the third phase, now that the trigger is

identified, therapists help children develop skills that improve their ability to interact with others (NYULangone, 2023).

**Medication**

There are numerous medications to treat bipolar disorder symptoms, and since everyone responds to medication differently, individuals may need to try several different medications to find the one that works best for them. Depending on the complexity of the symptoms, children with bipolar disorder may need to be on multiple medications to address their needs (NIMH, 2023). Medications used to treat bipolar disorder in both adults and children are mood stabilizers and antipsychotic drugs. Medications help stabilize the clients' moods so they can effectively participate in psychotherapy, where they can learn symptom management skills and coping strategies.



Parents often share concerns about their child being on medications, particularly antipsychotics, that can cause metabolic issues, leading to weight gain and an increased risk for Type 2 diabetes. In addition, prescribers express concerns that those with bipolar disorder may not be taking their medications as prescribed. In one study, adolescents taking psychotropic drugs to treat bipolar disorder were only taking their medications as prescribed 50% of the time, but they and their parents reported 90% compliance. These discrepancies are concerning and limit the effectiveness of the medications treating the symptoms they are supposed to be targeting (Abrams, 2020).

## Disruptive Mood Dysregulation Disorder

With disruptive mood dysregulation disorder (DMDD), children experience chronic irritability, anger, and frequent and intense temper tantrums. These anger outbursts go beyond the typical, age-appropriate, or situation-appropriate response, being out of proportion to the situation. These outbursts occur three or more times a week on average and have been happening for over a year. In

between outbursts, the child is consistently angry or irritable. These behaviors cause significant problems at home and school and impact peer relationships. These children often have high rates of healthcare use, hospitalization, and school suspension, and they are more likely to develop other mood disorders.

Disruptive mood dysregulation disorder is a newer diagnosis that was developed in response to children experiencing chronic and severe irritability. It was introduced in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5) in 2013. Previously, these children may have been incorrectly diagnosed with bipolar disorder even though they did not meet the full criteria. This disorder occurs more frequently in boys than in girls (NYU Langone, 2023; NIMH, 2023; Bruno et al., 2019).

The American Psychiatric Association classified DMDD as a depressive disorder and has indicated that it affects 2–5% of children and adolescents in the general population (Boudjerida et al., 2022).



### *Signs & Symptoms*

Symptoms children with disruptive mood dysregulation disorder experience include:

- Severe temper outbursts, both behavioral and verbal, three or more times per week, on average
- Outbursts and tantrums that have been ongoing for a minimum of 12 months
- Irritable or angry moods are chronic, occurring most days and lasting nearly all-day
- Difficulties functioning in more than one setting due to irritability, such as at home, at school, or with peers

Children with DMDD are typically diagnosed between the ages of 6 and 10. A child must have experienced ongoing symptoms for 12 or more months to be diagnosed with DMDD(NIMH, 2023).

### *Risk Factors*

Due to disruptive mood dysregulation disorder being a newer diagnosis, it is unclear how widespread it is in the general population. At this time, it is unclear what the causes of DMDD are. Researchers continue to explore risk factors, including neurological development for this disorder (NIMH, 2023).

### *Diagnosis*

Persistent depressive disorder is typically diagnosed through a mental health evaluation or interview with the child and parents/caregivers. There may also be conversations with school personnel who interact with the child regularly.



During the evaluation process, the provider assesses if the child meets the DSM-V criteria for a persistent depressive disorder diagnosis. This includes:

A. Severe recurrent temper outbursts manifested verbally (e.g., verbal rages) and or behaviorally (e.g., physical aggression) that are grossly out of proportion in intensity or duration to the situation or provocation

B. Outbursts are inconsistent with the developmental level

C. The temper outbursts occur, on average, three or more times per week

D. The mood between temper outbursts is persistently irritable or angry most of the day, nearly every day, and is observed by others

E. Criteria A–D have been present for 12 or more months without a symptom-free interval of three or more consecutive months

F. Symptoms are present in at least two of three settings (at home, at school, with peers) and are severe in at least one setting

G. The diagnosis should not be made for the first time before age six or after 18

H. The age of onset is before ten years of age

I. There has never been a distinct period lasting more than one day during which the full symptom criteria, except duration, for a manic or hypomanic episode have been met

   Note: Developmentally appropriate mood elevation, such as that which occurs in the context of a highly positive event or its anticipation, should not be considered a symptom of mania or hypomania

J. The behaviors do not occur exclusively during an episode of major depressive disorder and are not better explained by another mental disorder (e.g., autism spectrum disorder, PTSD, separation anxiety disorder)

   Note: This diagnosis cannot coexist with oppositional defiant disorder, intermittent explosive disorder, or bipolar disorder, though it can coexist with others, including major depressive disorder, ADHD, conduct disorder, and substance use disorders (SUDs). Individuals whose symptoms meet the criteria for both DMDD and oppositional defiant disorder (ODD) should only be given the diagnosis of DMDD. If an individual has ever experienced a manic or hypomanic episode, the diagnosis of DMDD should not be assigned.

K. Symptoms are not due to the physiological effects of a substance or a medical or neurological condition (American Psychiatric Association, 2013).



### *Treatment*

DMDD-specific treatments are limited as it is a newer diagnosis, and research is ongoing to establish best practices for treatment. Currently, treatment is similar to other diagnoses that include disruptive behaviors and irritable moods, such as

anxiety disorders, oppositional defiant disorder, and attention-deficit/hyperactivity disorder. Generally, treatment will include psychotherapy for the child with the involvement of the parents and consideration for medication if necessary.

**Psychotherapy**

Psychotherapy treatments that may be most beneficial for treating DMDD include the following:

Cognitive behavioral therapy (CBT) focuses on the relationship between behaviors, thoughts, and feelings. It can be an effective treatment for anger and disruptive behaviors. CBT for anger and disruptive behaviors targets changing maladaptive thoughts and teaching children to increase their frustration tolerance without having an outburst. CBT focuses on teaching coping skills for controlling one's anger, ways to identify distorted perceptions, and strategies to re-label thoughts that contribute to outbursts.



In dialectical behavior therapy for children (DBT-C), children learn skills to regulate their emotions and avoid extreme or prolonged outbursts. In DBT-C, the provider teaches children skills that can help with regulating their emotions and moods.

In parent training, parents or caregivers learn more effective ways to respond to irritable behavior. This may involve learning to anticipate events that might lead to a child’s temper outbursts and being proactive to avert them. Training also emphasizes the importance of consistent and predictable responses to a child’s outbursts and providing rewards for positive behavior (NIMH, 2023).

**Medication**

Currently, no medication is approved by the U.S. Food and Drug Administration (FDA) for treating children with DMDD. However, healthcare providers may prescribe medication to relieve the DMDD symptoms being experienced. Medications may have side effects, and parents should monitor children closely

and discuss any concerns they may have with the prescriber. Medications that may be considered to treat symptoms of DMDD include stimulants that are frequently used to treat ADHD. Research shows that stimulant medications may decrease irritability in children.

Antidepressants are occasionally used to treat irritability and mood problems children with DMDD may experience. A concern with prescribing antidepressants is that in some children, it may increase suicidal thoughts and behaviors, so caregivers and providers should monitor them closely.

Atypical antipsychotic medications are used to treat children with irritability, severe outbursts, or aggression. The FDA has approved these medications to treat irritability associated with autism, and they are occasionally used to treat DMDD as well. Due to the side effects associated with these types of medications, they should only be considered when other treatments have been unsuccessful (NIMH, 2023).



## Trauma

One major risk factor for developing early-onset mood disorders is childhood trauma. Numerous studies have found that individuals with histories of childhood trauma are approximately three times more likely to have psychiatric illnesses during adulthood than people without trauma histories (Lucero et al., 2022).

Research has found that childhood maltreatment increases the risk of developing mental health disorders and substance use disorders. It is also linked to an earlier age of onset, a more severe clinical course, and poorer responses to treatment, both with psychotherapy and medications. Trauma experienced early on in life is also associated with an increased risk of medical disorders, including cardiac disorders, stroke, type 2 diabetes, asthma, and some types of cancers. Those who have experienced child abuse and neglect have a lower life expectancy (Lippard & Nemeroff, 2020).

Adverse Childhood Experiences (ACEs) are potentially traumatic events that occur in childhood, and they include experiencing abuse, neglect, violence, witnessing violence at home, and having a family member attempt suicide or die by suicide. They also include adverse experiences in the child's environment that can impact their sense of stability, bonding, and safety, including being raised in a home with substance use, mental health difficulties, or instability due to parents' separation or incarceration of a parent, sibling, or another member of the household. It is important to note that ACEs may overlap with trauma but are not necessarily traumatic. Some of the experiences considered adverse events are not considered life-threatening as defined by the DSM-5. However, they have long-term negative emotional and physical health impacts (Mancini, 2021)

## Impacts of Mood Disorders



Mood disorders are recognized as illnesses that lead to poor emotional, social, and cognitive functioning and overall quality of life impairments. Those with mood disorders present with deficits in social skills, strained interpersonal relationships, exhausted empathic reactions, low self-esteem, and a lack of positive future-directed thinking. Social and emotional dysfunction in children with mood disorders can cause increased social rejection sensitivity and disinterest in full avoidance of social interactions. This isolation further increases symptoms of mood disorders (Lucero et al., 2022)

### Impacts on Families

Depending on the severity of the child’s mood disorder and how well it is managed, it can have a significant impact on families. When mood changes are mild, family members may experience some distress but may be able to tolerate the changes overall. The distress may ease with education about mental illness and learning ways to cope with the demands their family member’s mental illness

places on the family group. Having a family member with severe symptoms can be very stressful, especially if the family does not have coping skills to deal with the stress level. Having a family member with a mood disorder can be exhausting. Family members may experience a range of emotions as they process their family member's mood disorder diagnosis. There is no right or wrong way to feel, but support must be in place so the emotions can be handled in a healthy way.

Having a family member with a mood disorder may impact families in a number of ways, including:

- Disruption in regular routines
- Emotional distress, such as guilt, worry, and grief
- Strained marital or family relationships
- Financial stresses due to a reduced income or excessive spending
- Having to deal with unusual or dangerous behavior
- Changes in family roles
- Difficulty in maintaining relationships outside the family
- Health problems as a result of stress (heretohelp.bc.ca, 2023).



It is normal for families to worry about their loved ones, such as when they are experiencing a manic episode that may cause them to act in a dangerous or risky way. Families can create a plan on how they will manage during these difficult times. Having a crisis plan can help support everyone and create expectations around each family member's role. Families can ensure they are communicating their fears and concerns with each other. For example, younger children in the family may fear they will also have a mood disorder, and older children may fear they will have to care for their sibling with a mood disorder in the event their parents are no longer able to provide care.

Strategies to help families include:

- Educate themselves about the illness
- Support the family member with the mood disorder in managing the illness
- Believe in the individuals with a disorder, especially in times when they may not believe in themselves
- Continue to love them even when you want to give up (heretohelp.bc.ca, 2023)

## Impacts on Peer Relationships

Children with mood disorders experience social impairment, and those with greater depressive symptoms are more likely to avoid social interactions. Symptoms of depression in early childhood are linked with negative peer experiences, including peer rejection, exclusion, and victimization. Research shows a link between social withdrawal in childhood and significant internalized problems and social difficulties in adolescence and adulthood. Furthermore, children with mood disorders tend to experience negative responses from peers, and they are more likely to be disliked, excluded, and victimized by peers. As they get older, children with mood disorders tend to have fewer friends, those friendships tend to be of lower quality, and the friends tend to also have mental health difficulties. Negative peer experiences carry an increased risk for a host of later social, emotional, and academic difficulties. This can create a negative cycle where social withdrawal and negative interaction with peers increase depression symptoms, which leads to further isolation (Coplan & Ooi, 2023).



## Impacts on Academics

Mental health problems can affect a student's energy level, concentration, dependability, mental ability, and optimism, hindering performance. Research

suggests that depression is associated with lower grade point averages and that co-occurring depression and anxiety can increase this association. Depression has also been linked to dropping out of school (SPRC, 2020).

## Impacts on Parents and Caregivers

Caring for a child with a mood disorder can be stressful for parents, caregivers, and family members. Coping with mood episodes, angry outbursts, risky behavior, and possible self-harm and suicide attempts is challenging and emotionally exhausting. It is important for caregivers to take care of themselves as well. Having a therapist or a support group to lean on for guidance and learning stress management skills can be very beneficial. NAMI is one such program that runs support groups for family members of those with serious mental illness (NIMH, 2023).



It can be very difficult being a parent and caregiver to a child with a mood disorder. It's heartbreaking to watch one's loved one struggle with difficult symptoms. Parents may feel helpless, overwhelmed, confused, hopeless, angry, sad, exhausted, fearful, guilty, shameful, or isolated. All of these are frequently experienced feelings of caregivers to children with mood disorders. Mental health providers may wish to address these issues with parents and caregivers as they may be ashamed to broach some of the more difficult feelings for fear of judgment. Parents can also be encouraged that with proper treatment, their child can live a meaningful and fulfilling life. Steps parents may take to care for themselves while supporting their child with a mood disorder may include:

- Participating in a support group - there are numerous in-person and online support groups for caregivers of children with mental health disorders.
- Educating themselves on their child's disorder - this can be done through reading books and articles on the specific diagnosis, attending workshops, or watching online videos.

- Establishing a treatment team for their child, including a mental health provider, pediatrician, and psychiatrist.
- Participating in family therapy as indicated or in their child's individual therapy as requested.
- Having honest, age-appropriate conversations with their child about their mental health.
- Having a clear understanding of their child's baseline so that when moods or behaviors shift, interventions can be implemented immediately.
- Asking about suicidal feelings or plans . This can be a difficult subject to talk about but it is important to be direct and to understand that asking about suicide is not going to put the idea in their child's head (dbsalliance.org, 2023).



## Suicide

Suicidal thoughts and actions are a concern for many individuals with depression and mood disorders. The following are warning signs of suicidal thoughts, and immediate care should be sought if children:

- begin giving away treasured possessions
- refer to "not being around" in the future
- express a wish to "disappear" or "sleep forever"
- express a desire to die
- mention a plan to die (Boston Children's Hospital, 2023).

Families with children at risk for suicide should establish a safety and crisis plan with their child's treatment team. Information that may be included in a safety plan are such things as locking up items that may be used to self-harm when

seeking crisis care versus hospital care, how the child will ask for help in times of need, and if there are other children in the household what is the plan for care for them when their sibling is experiencing a crisis (dbsalliance.org, 2023).

## Parental Burnout

Parenting a child with a mood disorder can be exhausting, and parents should be educated about parental burnout. Avoiding parental burnout requires a conscious effort. Specifically, it requires consistent self-care, establishing a strong support network, having a trustworthy therapeutic team for the child, and reminding oneself of the love one has for the child who is struggling. The following are some ideas on how parents can reinforce their love and care for their children during challenging moments:



- Make a list of the child's strengths
- Recall fun times
- Smile when the child walks into the room
- Practice small acts of kindness
- Assess and grow empathy
- Complete small acts of physical affection (shoulder squeeze, tussle hair)
- Allow the feelings; no judgment
- Find the positive moments
- Connect with others
- Monitor reactions to behaviors
- Don't take acting out behaviors personally (Attaway, 2023).

## Protective Factors

Protective factors help children build positive relationships with family, friends, teachers, and community members. They support children in developing high self-esteem, problem-solving skills, and coping skills. Some of the key protective factors for children are experienced in the home environment and through family relationships. Parents who provide structure, stability, and clear expectations create a secure and safe space. Building open, honest, and non-judgmental communication between parents and children encourages young people to approach their parents when they are struggling with a problem rather than seek advice from other less positive influences.

Positive relationships at school with teachers, counselors, and other trusted adults can be protective factors in a child's life. Children can experience meaningful relationships through the family's religious community, cultural groups, or other community involvement groups.



Having positive, healthy peer relationships is another protective factor. Parents can encourage their children to spend time with friends and build communities in which they feel they belong.

Other protective factors include:

- Trustworthy friends and neighbors who let children be themselves
- Participation in school activities, like clubs, team sports, or the arts where they can build new skills and develop self-confidence
- Mentorship programs, career academies, and part-time jobs where teens can learn new responsibilities in a safe space
- Positive self-talk and self-praise help children recognize their own self-worth
- A healthy diet, exercising regularly, and getting enough sleep helps children be at their best physically so they can handle emotional challenges.

- Healthy ways to manage stress include staying active, talking to friends, or participating in other positive activities (Cooper, 2023).

## Parental Roles

Parental involvement is key in any child's treatment and overall well-being. Parents are crucial in helping their children buffer everyday stress, teaching them to manage their feelings effectively, and providing a stable and secure environment. Research has consistently shown a correlation between parental mental health and children's well-being, suggesting that caregivers' mental health is important to protect children's well-being (Spiteri, 2021).

Parents can play a pivotal role in their children's mental health at home by engaging them in school work and chores and encouraging them to exercise daily (Spiteri, 2021). In recent times, there has been a significant decline in the number of school-age children who have 60 minutes of physical activity daily (24.2% down to 19.9%) (Lebrun-Harris et al., 2022). Physical activity is known to help reduce symptoms of anxiety and depression and contribute to general wellness.



Even prior to the pandemic, decreases were seen in parents or caregivers reporting they had excellent or good mental health (69.8% in 2016, down to 66.3% in 2020). There was also a decrease in parents who reported they were doing very well with the demands of raising children (67.2% in 2016, down to 59.9% in 2020). Two additional concerning statistics were the rise in the number of children who had lived with someone with mental illness (7.8% in 2016 increased to 8.3% in 2020) and who experienced ethnic or racial discrimination (3.7% in 2016 to 5.4% in 2020) (Lebrun-Harris et al., 2022).

Parents experienced high stress, fear, anxiety, emotional distress, and financial difficulties during the pandemic. Addressing a caregiver's mental health and well-being is two-fold. First, there is a reciprocity between parent and child mental health. Second, caregivers’ capacity to support and protect their children

ultimately depends on their own coping abilities and well-being. Therefore, mental health providers should assess caregivers' mental health and make referrals as they see necessary to give their young clients the best outcomes possible (Fong & Iarocci, 2020).

## School Roles

Abramson (2022) discusses the school's role in addressing children's mental health. Federal funding has been provided to schools to support students' mental health. As a result, many schools are building mental health into the curriculum and training teachers in prevention strategies to support students' psychological health. Unfortunately, hiring full-time staff is not sustainable due to temporary federal aid. Below are three ways schools can address the mental health of their students.



### *Bringing Mental Health into the Classroom*

Some districts are having their school psychologists train teachers in social and emotional skills to help students deal with stress and anxiety at the moment they are experiencing it in the classroom. Equipping students with coping skills that can be used in the classroom can reduce the strain on school psychologists while improving the student's ability to learn. Teachers are also immediately available to students, whereas school psychologists may not be available in the moment when a student needs to implement a new coping skill.

Some teachers are building mental health lessons into their curriculum on their own, while other schools have their psychologists work with teachers to incorporate post-pandemic-relevant topics like anxiety, trauma, and warning signs of suicide into their classes. Other schools invest in formal social and emotional health training programs. For example, Yale University's RULER program teaches the five emotional intelligence skills of recognizing, understanding, labeling, expressing, and regulating. Results in schools that have implemented the RULER

program have seen positive results not just among students but also among teachers and administrators (Yale, 2022).

### *Teachers to Address Trauma*

In addition to teachers having more students with mental health and behavioral issues, more students have trauma. Many teachers do not feel equipped to address trauma effectively. One study found that only 15% of teachers felt comfortable dealing with grief and trauma linked to the pandemic. Helping teachers identify trauma is essential as student actions are frequently mislabeled as conduct issues instead of trauma responses, and struggling students do not receive the support they need. In cases where trauma reactions are occurring, students can be referred for additional behavioral health support instead of punitive interventions. Curriculum and training that guides educators in how to recognize, support, and refer students with trauma is available. For example, the Coalition for Psychology in Schools and Education has developed Mental Health Primers to help teachers identify behaviors that are symptomatic of mental health issues, with the goal of directing teachers to appropriate resources for their students (Abramson, 2022).



## Wellness/Healthy Lifestyle

Research continues to show the benefits physical activity, nutrition, and sleep can have on improving mental health. Physical activity has both neurobiological and psychosocial effects that particularly help improve depression (in some studies as significantly as antidepressants and CBT) and moderately reduce anxiety. Neurobiologically, physical activity modifies the stress response, promotes brain development, and regulates serotonin, dopamine, norepinephrine, and endorphins. Psychosocial benefits include promoting social connection and autonomy, skillset mastery, building confidence through achievement, and learning distress tolerance.

New research supports the link between healthy eating and improved mental health. One study found poor diets linked to lower left hippocampal volume, and ongoing research explores how the gut biome impacts mental health. Areas to target that have shown positive improvements in mental health include increased intake of fruits and vegetables, whole grains, seafood, nuts, and legumes; moderate consumption of dairy products; low intake of red and processed meat; and minimal intake of processed foods. Food insecurity can play a part in this, and mental health providers should consider this when evaluating and making nutrition recommendations.

Quality sleep has several positive outcomes for children, including improvements in attention, academic performance, memory, cognition, behavior, emotional regulation, enhanced self-esteem, and levels of optimism. In contrast, inadequate sleep has been linked to increased self-criticism, risk-taking behaviors, and increased risk of suicidality and other mental health disorders. On average, adequate sleep amounts are considered to be nine or more hours for children aged 6-12 and 8 or more hours for adolescents aged 13-18, with younger children under the age of six requiring even more sleep time. Nearly 60% of middle schoolers and 75% of high school students do not get adequate sleep. Factors that contribute to poor sleep include electronic media exposure, caffeine consumption, early school start times, chronic medical conditions, neurologically based sleep disorders, and pressures to achieve good grades, participate in extracurricular activities, and maintain an active social life (Hosker et al., 2019).



## Building Resilience

Resilience is a multisystemic dynamic process of successful adaptation or recovery in the context of risk or a threat. There are two main components of resilience: risk or threats to the person or system (e.g., maltreatment, natural disasters, mental illness in parents) and criteria by which successful adaptation or recovery

is evaluated (e.g., physical health or subjective well-being). Multisystem resilience factors include:

- Sensitive caregiving, close relationships, social support
- Sense of belonging, cohesion;
- Self-regulation, family management, group or organization leadership
- Agency, beliefs in system efficacy, active coping
- Problem-solving and planning
- Hope, optimism, confidence in a better future
- Mastery motivation, motivation to adapt
- Purpose and a sense of meaning
- Positive views of self, family, or group
- Positive habits, routines, rituals, traditions, and celebrations (Mesman et al., 2021).



Resilience is associated with the ability to combat depression, anxiety, and trauma symptoms in youth. When screening at-risk populations and assessing situations that may negatively impact young people, building resiliency should be incorporated into prevention and intervention strategies.

One tool that has been established to promote resilience and increase well-being in children and adolescents is the use of smartphone apps. One example of this is GrowIt!, which is a gamified app that monitors emotions, thoughts, and behaviors in daily life using the experience sampling method. The app offers daily challenges using cognitive behavior therapy-based elements to prompt adaptive coping skills (Mesman et al., 2021).

# Ethical Considerations

One critical consideration for providers is the ethical implications that must be addressed when  treating minor clients. Different states have varied laws and expectations around the care of minors, and it is the provider's responsibility to be aware of these regulations and follow them. When there are discrepancies or questions, providers should seek support from their peers, supervisors, and/or licensing board's ethics committees.

## Autonomy of Minors

In most states, parents oversee health care decision-making for their children. However, some states allow children to make decisions regarding their health if they are legally emancipated, or if they are a certain age and the care relates to mental health, reproductive health, or substance use treatment. These laws vary considerably by state, and providers must be aware of these discrepancies. Conflicts may arise when parents and children have conflicting views on the course of treatment. This can be further complicated if it is based on religious beliefs or cultural values.



## Assent and Consent

Assent is the willingness to follow the treatment recommendations. While the client may not possess the legal decision capacity regarding treatment, they still must agree to the recommendations if treatment is to be effective. Consent is the legal capacity to make a decision regarding the treatment recommendations. When working with children, providers should seek treatment consent from the legal guardian and assent from the child they are treating.

### Confidentiality

Mental health providers are obligated to protect their client's privacy and not communicate information to other persons or entities without the clients' permission. The limitations of confidentiality should be explained to children in an age-appropriate way. Confidentiality is in place to allow the client to share information without fear of disclosure by the provider. This safe space is essential to develop a therapeutic relationship. However, confidentiality can be challenged when treating children, and there should be a clear agreement between the provider, the child, and the parent as to what information will remain confidential and what information will be shared. Breaching confidentiality is acceptable for the safety of the client or others. There may be other legal and public health situations that may also justify a breach of confidentiality (Disla de Jesus et al., 2022).

One aspect that needs to be considered when discussing children's mental health is that COVID-19 has had a disproportionate effect on disadvantaged and marginalized families. The pandemic has highlighted the disparities for youth linked to discrimination, racism, pre-existing inequities, poorer access to care, increased exposure to risk, underrecognizing of illness, poor-quality treatment, limited economic resources, and crowded living conditions. In addition, youth from marginalized and minority groups are more likely to experience grief and loss of family members to COVID-19, secondary to the overrepresentation of the virus in communities that have been historically marginalized. Therefore, how minority populations are psychologically affected by COVID-19 and access to mental health care must be thoughtfully considered (Benton et al., 2021).



## Conclusion

Mood disorders impact millions of children worldwide and vary in their severity and impact. Early identification of mood disorders in children allows for timely

interventions that can improve long-term outcomes. Mood disorders can have serious long-term outcomes for children, including but not limited to decreased school performance, poor social interactions, early pregnancy, frequent physical illness, substance abuse, and suicide. Mood disorders in children often go undiagnosed as the symptoms can be different than those experienced by adults with mood disorders.

Treatment most frequently focuses on a combination of psychotherapy and medications. Growing research supports the use of technology to support children's coping skills between therapy sessions. Research also shows that building resilience and protective factors can support children and their families in having increased positive outcomes.

# References


Abrams, Z. (2020, October 1). Treating bipolar disorder in kids and teens. *Monitor on Psychology*, *51*(7). Retrieved November 2023. https://www.apa.org/monitor/2020/10/ce-corner-bipolar

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

Attaway, J. (2023). Preventing Parent Burnout. Retrieved November 2023. https://childmind.org/article/preventing-parent-burnout/

Benton, T.D., Boyd, R.C., Njoroge, W.F. (2021). Addressing the Global Crisis of Child and Adolescent Mental Health. *JAMA Pediatr.* 2021;175(11):1108–1110. Retrieved, October 2022. doi:10.1001/jamapediatrics.2021.2479

Boston Children's Hospital. (2023). Dysthymia. Retrieved November 2023. https://www.childrenshospital.org/conditions/dysthymia#overview

Boston Children's Hospital. (2023). Depression. Retrieved November 2023. https://www.childrenshospital.org/conditions/depression

Boudjerida, A., Labelle, R., Bergeron, L., Berthiaume, C., Guilé, J. M., & Breton, J. J. (2022). Development and Initial Validation of the Disruptive Mood Dysregulation Disorder Questionnaire Among Adolescents From Clinic Settings. *Frontiers in Psychiatry*, *13*, 617991.

Bruno, A., Celebre, L., Torre, G., Pandolfo, G., Mento, C., Cedro, C., Zoccali, R.A., Muscatello, M.R.A. (2019). Focus on Disruptive Mood Dysregulation Disorder: A review of the literature. Psychiatry Research. doi: 10.1016/j.psychres.2019.05.043.

Cooper, L. (2023). Protective Factors Help Your Child's Emotional Well-Being. Retrieved November 2023. https://www.onoursleeves.org/mental-

wellness-tools-guides/helping-kids-stay-positive/protective-factors-help-your-childs-emotional-well-being

Coplan, R., Ooi, L. (2023). Young Children's Peer Relations: Links with Early Developing Anxiety and Depression. Retrieved November 2023. https://www.child-encyclopedia.com/pdf/expert/anxiety-and-depression/according-experts/young-childrens-peer-relations-links-early-developing

Dbsalliance.org. (2023). Parents and Caregivers. Depression and Bipolar Support Alliance. Retrieved November 2023. https://www.dbsalliance.org/support/for-friends-family/for-parents/

Disla de Jesus, V., Liem, A., Borra, D., Appel, J.M. (2022). Who's the Boss? Ethical Dilemmas in the Treatment of Children and Adolescents. Focus (Am Psychiatr Publ). 20(2):215-219. doi: 10.1176/appi.focus.20210037.

Fong, V.C., Iarocci, G. (2020). Child and Family Outcomes Following Pandemics: A Systematic Review and Recommendations on COVID-19 Policies, *Journal of Pediatric Psychology*, Volume 45, Issue 10, Pages 1124–1143, https://doi.org/10.1093/jpepsy/jsaa092

Grist, R., Croker, A., Denne, M. *et al.* Technology Delivered Interventions for Depression and Anxiety in Children and Adolescents: A Systematic Review and Meta-analysis. *Clin Child Fam Psychol Rev* 22, 147–171 (2019). https://doi.org/10.1007/s10567-018-0271-8

Heretohelp.bc.ca (2023). Bipolar Disorder: Effects on the Family. Retrieved November 2023. https://www.heretohelp.bc.ca/infosheet/bipolar-disorder-effects-on-the-family#:~:text=Bipolar%20disorder%20can%20impact%20families,reduced%20income%20or%20excessive%20spending

Hosker, D. K., Elkins, R. M., & Potter, M. P. (2019). Promoting mental health and wellness in youth through physical activity, nutrition, and sleep. *Child and Adolescent Psychiatric Clinics*, *28*(2), 171-193.

Lebrun-Harris, L.A., Ghandour, R.M., Kogan, M.D., Warren, M.D. (2022). Five-Year Trends in US Children's Health and Well-being, 2016-2020. *JAMA Pediatrics*. 176(7):e220056. doi:10.1001/jamapediatrics.2022.0056

Lippard, E. T., & Nemeroff, C. B. (2020). The devastating clinical consequences of child abuse and neglect: increased disease vulnerability and poor treatment response in mood disorders. *American journal of psychiatry*, *177*(1), 20-36.

Lucero, M.M,, Satz, S., Miceli, R., Swartz, H.A., Manelis, A. (2022). The effects of mood disorders and childhood trauma on fear of positive and negative evaluation. Acta Psychol (Amst).227:103603. doi: 10.1016/ j.actpsy.2022.103603.

Mancini, M. A., & Mancini, M. A. (2021). Trauma-Informed Behavioral Health Practice. *Integrated Behavioral Health Practice*, 191-236.

Mesman, E., Vreeker, A., & Hillegers, M. (2021). Resilience and mental health in children and adolescents: An update of the recent literature and future directions. *Current Opinion in Psychiatry*, *34*(6), 586-592. https://doi.org/ 10.1097/YCO.0000000000000741

NIMH (2023). Bipolar Disorder in Children and Teens. National Institute of Mental Health. Retrieved November 2023. https://www.nimh.nih.gov/health/ publications/bipolar-disorder-in-children-and-teens

NIMH (2023). Disruptive Mood Dysregulation Disorder. National Institute of Mental Health. Retrieved November 2023. https://www.nimh.nih.gov/ health/topics/disruptive-mood-dysregulation-disorder-dmdd/disruptive-mood-dysregulation-disorder

NYY Langone (2023). Mood Disorders in Children. Retrieved November 2023. https://nyulangone.org/conditions/mood-disorders-in-children

Selph, S.S. and Mcdonagh, M.S. (2019). Depression in Children and Adolescents: Evaluation and Treatment. American Family Physician. 100(10):609-617.

Spiteri, J. (2021). The impact of the COVID-19 pandemic on children's mental health and wellbeing, and beyond: A scoping review. *Journal of Childhood, Education & Society*, *2*(2), 126-138.

SPRC (2020) Consequences of Student Mental Health Issues. Retrieved November 2023. https://sprc.org/settings/colleges-and-universities/consequences-of-student-mental-health-issues/#:~:text=Mental%20health%20problems%20can%20affect%20a%20student's%20energy%20level%2C%20concentration,%2C%20and%20optimism%2C%20hindering%20performance.&text=Research%20suggests%20that%20depression%20is,anxiety%20can%20increase%20this%20association.

USPSTF (2022). Depression and Suicide Risk in Children and Adolescents: Screening. Retrieved November 2023. https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/screening-depression-suicide-risk-children-adolescents

Yale Center for Emotional Intelligence. (2022). RULER. Retrieved October 2022. https://medicine.yale.edu/childstudy/services/community-and-schools-programs/center-for-emotional-intelligence/

# Appendix A: PHQ-A

## PHQ-9 modified for Adolescents (PHQ-A)—Adapted

Severity Measure for Depression—Child Age 11–17

**Name:**_____ **Age:** _____ **Sex: Male ❑ Female ❑**
**Date:**_____

**Instructions:** How often have you been bothered by each of the following symptoms during the past **7 days**? For each symptom put an "**X**" in the box beneath the answer that best describes how you have been feeling.

| | | | | | | Clinician Use |
|---|---|---|---|---|---|---|
| | | | | | | Item score |
| | | (0) Not at all | (1) Several days | (2) More than half the days | (3) Nearly every day | |
| 1. | Feeling down, depressed, irritable, or hopeless? | | | | | |
| 2. | Little interest or pleasure in doing things? | | | | | |
| 3. | Trouble falling asleep, staying asleep, or sleeping too much? | | | | | |
| 4. | Poor appetite, weight loss, or overeating? | | | | | |
| 5. | Feeling tired, or having little energy? | | | | | |
| 6. | Feeling bad about yourself—or feeling that you are a failure, or that you have let yourself or your family down? | | | | | |
| 7. | Trouble concentrating on things like school work, reading, or watching TV? | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 8. | Moving or speaking so slowly that other people could have noticed?<br><br>Or the opposite—being so fidgety or restless that you were moving around a lot more than usual? | | | | | |
| 9. | Thoughts that you would be better off dead, or of hurting yourself in some way? | | | | | |
| | | | | | **Total/Partial Raw Score:** | |
| | | | | | **Prorated Total Raw Score: (if 1-2 items left unanswered)** | |

Modified from the PHQ-A (J. Johnson, 2002) for research and evaluation purposes

**Instructions to Clinicians**

The Severity Measure for Depression—Child Age 11–17 (adapted from PHQ-9 modified for Adolescents [PHQ-A]) is a 9- item measure that assesses the severity of depressive disorders and episodes (or clinically significant symptoms of depressive disorders and episodes) in children ages 11–17. The measure is completed by the child prior to a visit with the clinician. Each item asks the child to rate the severity of his or her depression symptoms **during the past 7 days**.



**Scoring and Interpretation**

Each item on the measure is rated on a 4-point scale (0=Not at all; 1=Several days; 2=More than half the days; and 3=Nearly every day). The total score can range from 0 to 27, with higher scores indicating greater severity of depression. The clinician is asked to review the score of each item on the measure during the clinical interview and indicate the raw score in the section provided for "Clinician Use." The raw scores on the 9 items should be summed to obtain a total raw score and should be interpreted using the table below:

**Interpretation Table of Total Raw Score**

| Total Raw Score | Severity of depressive disorder or episode |
|---|---|
| 0-4 | None |
| 5-9 | Mild |
| 10-14 | Moderate |
| 15-19 | Moderately severe |
| 20-27 | Severe |

**Note:** If 3 or more items are left unanswered, the total raw score on the measure should not be used. Therefore, the child should be encouraged to complete all of the items on the measure. If 1 or 2 items are left unanswered, you are asked to calculate a prorated score. The prorated score is calculated by summing the scores of items that were answered to get a partial raw score. Multiply the partial raw score by the total number of items on the PHQ-9 modified for Adolescents (PHQ-A)—Modified (i.e., 9) and divide the value by the number of items that were actually answered (i.e., 7 or 8). The formula to prorate the partial raw score to the Total Raw Score is:

$$\frac{\text{(Raw sum x 9)}}{\text{Number of items that were actually answered}}$$

If the result is a fraction, round to the nearest whole number.

**Frequency of Use**

To track changes in the severity of the child's depression over time, the measure may be completed at regular intervals as clinically indicated, depending on the stability of the child's symptoms and treatment status. Consistently high scores on a particular domain may indicate significant and problematic areas for the child that might warrant further assessment, treatment, and follow-up. Your clinical judgment should guide your decision.

# Appendix B: CBQ

## The Child Bipolar Questionnaire - Version 2.0

Demitri F. Papolos, M.D. (2002)

Retrieved November 2023 from The Juvenile Bipolar Research Foundation

https://www.bpchildresearch.org/cbq/index.html

**Frequency**

| | | | |
|---|---|---|---|
| Never or hardly ever | Sometimes | Often | Very often or almost constantly |
| 1 | 2 | 3 | 4 |



**Symptom/Behavior Frequency Scoring**

1) displays excessive distress when separated from family

2) exhibits excessive anxiety or worry

3) has difficulty arising in the AM

4) is hyperactive and easily excited in the PM

5) has difficulty settling at night

6) has difficulty getting to sleep

7) sleeps fitfully and/or awakens in the middle of the night

8) has night terrors and/or nightmares

9) wets bed

10) craves sweet-tasting foods

11) is easily distracted by extraneous stimuli

12) is easily distracted during repetitive chores & lessons

13) demonstrates inability to concentrate at school

14) attempts to avoid homework assignments

15) able to focus intently on subjects of interest and yet at times is easily distractible

16) has poor handwriting

17) has difficulty organizing tasks

18) has difficulty making transitions

19) has difficulty estimating time

20) has auditory processing or short-term memory deficit

21) is extremely sensitive to textures of clothes, labels, and tightness of fit of socks or shoes

22) exhibits extreme sensitivity to sound and noise

23) complains of body temperature extremes or feeling hot despite neutral ambient temperature

24) is easily excitable

25) has periods of high, frenetic energy and motor activation

26) has many ideas at once

27) interrupts or intrudes on others

28) has periods of excessive and rapid speech

29) has exaggerated ideas about self or abilities

30) tells tall tales; embellishes or exaggerates

31) displays abrupt, rapid mood swings

32) has irritable mood states

33) has elated or silly, goofy, giddy mood states

34) displays precocious sexual curiosity

35) exhibits inappropriate sexual behaviors, e.g. openly touches self or others' private parts

36) takes excessive risks

37) complains of being bored

38) has periods of low energy and/or withdraws or isolates self

39) has decreased initiative

40) experiences periods of self doubt and poor self-esteem

41) feels easily criticized and/or rejected

42) feels easily humiliated or shamed

43) fidgets with hands or feet

44) is intolerant of delays

45) relentlessly pursues own needs and is demanding of others

46) is willful and refuses to be subordinated by others

47) argues with adults

48) is bossy towards others

49) defies or refuses to comply with rules

50) blames others for his/her mistakes

51) is easily angered in response to limit setting

52) lies to avoid consequences of his/her actions

53) has protracted, explosive temper tantrums

54) has difficulty maintaining friendships

55) displays aggressive behavior towards others

56) has destroyed property intentionally

57) curses viciously, uses foul language in anger

58) makes moderate threats to others or self

59) makes clear threats of violence to others or self

60) has made clear threats of suicide

61) is fascinated with gore, blood, or violent imagery

62) has acknowledged experiencing auditory and/or visual hallucinations

63) hoards or avidly seeks to collect objects or food

64) has concern with dirt, germs, or contamination

65) is very intuitive and/or very creative



**Scoring:** Responses with a frequency of 1-2 are scored as a 0, and responses with a 3-4 are scored as 1.

Within the questionnaire, there is a subscale of 35 of the 65 CBQ items called the Core Bipolar Symptoms Subscale. Determination of a “probable” diagnosis of childhood-onset bipolar disorder is based on positive endorsement of >40/65 general items at frequencies > 2, or alternatively at least 20/33 core bipolar symptoms subscale. Subscale items appear in grey highlight.

# Appendix C: DMDD Questionnaire

Boudjerida, A., Labelle, R., Bergeron, L., Berthiaume, C., Guilé, J. M., & Breton, J. J. (2022). Development and Initial Validation of the Disruptive Mood Dysregulation Disorder Questionnaire Among Adolescents From Clinic Settings. *Frontiers in Psychiatry*, *13*, 617991.

File No: _____ Interviewer Name: _____
Interview Date: ___/___/___

Age: _____

Gender: _____

T1: _____ T2:_____



Interviewer: Specify to the adolescent that the questions are about the **past 12 months.**

Codes: No (0) Yes (1) Not applicable (X)

1. Have you had temper outbursts where you have been verbally abusive **or**

A1 performed physical aggression toward property or people?

_____

**If yes (>2 times), as questions 2 to 10**

**If no or 1 time, apply code X to questions 2 to 10**

2. Do you feel like you were over-reacting to the situation or provocation that

A2 triggered your temper outburst?

_____

3. Do you experience temper outbursts three times a week or more?

C

_____



4. Almost every day, do you feel between your temper outbursts: irritable? _____

D1

angry? _____

Sad? _____

**If no to question 4, apply code X to Q5 and go to question 6**

5. Do people around you, such as your parents, your teachers, or other teenagers

D2 notice that you feel irritable, angry, or sad?

_____

| |
|---|
| 6. Have your temper outbursts been lasting for at least one year?<br>E1<br>_____ |
| **Inverted item: No (1), Yes (0)**<br>7. Within the past year, was there a period of at least three months when you did<br>E2 not experience any temper outburst?<br>_____ |
| 8. Do your temper outburst happen: at home? _____<br>F1 at school? _____<br>With your friends? _____ |
| 9. Did your temper outbursts start before age 10?<br>H<br>_____ |
| 10. Do your temper outburst get you in trouble: at home? _____<br>F2 at school? _____<br>With your friends? _____ |



The DMDD Questionnaire was developed in French and English by Drs. Jean-Jacques Breton, Lisa Bergeron, and Real Labelle (2011). For research or clinical information, contact Dr. R. Labelle, Email: labelle.real@uqam.ca.

# Appendix D: ACE

## Adverse Childhood Experiences (ACE) Questionnaire

Retrieved November 2023 from https://www.theannainstitute.org/Finding%20Your%20ACE%20Score.pdf

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household **often** …

Swear at you, insult you, put you down, or humiliate you?

**or**

Act in a way that made you afraid that you might be physically hurt?

Yes No If yes enter 1 _____

2. Did a parent or other adult in the household **often** …

Push, grab, slap, or throw something at you?

**or**

**Ever** hit you so hard that you had marks or were injured?

Yes No If yes enter 1 _____

3. Did an adult or person at least 5 years older than you **ever**…

Touch or fondle you or have you touched their body in a sexual way?

**or**

Try to or actually have oral, anal, or vaginal sex with you?

Yes No If yes enter 1 _____

4. Did you **often** feel that …

No one in your family loved you or thought you were important or special?

**or**

Your family didn't look out for each other, feel close to each other, or support each other?

Yes No If yes enter 1 _____



5. Did you **often** feel that …

You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?

**or**

Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

Yes No If yes enter 1 _____

6. Were your parents **ever** separated or divorced?

Yes No If yes enter 1 _____

7. Was your mother or stepmother: **Often** pushed, grabbed, slapped, or had something thrown at her?

**or**

**Sometimes** or often kicked, bitten, hit with a fist, or hit with something hard?

**or**

**Ever** repeatedly hit over at least a few minutes or threatened with a gun or knife?

Yes No If yes enter 1 _____



8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

Yes No If yes enter 1 _____

9. Was a household member depressed or mentally ill or did a household member attempt suicide?

Yes No

If yes enter 1 _____

10. Did a household member go to prison?

Yes No If yes enter 1 _____

**Now add up your "Yes" answers: _____ This is your ACE Score.**

An ACE Score of 0 suggests that you reported no exposure to childhood trauma. An ACE Score of 10 suggests that you reported exposure to childhood trauma. The higher your ACE Score, the greater your risk for developing one or more physical or mental health problems.

# Quantum Units Education

Affordable. Dependable. Accredited.

www.quantumunitsed.com