











**BAD-GIRL APPEAL**

In today's world, might we also have 'bad-girl appeal,' a la Thelma and Louise, tempting innocent young men? Could we also have same-sex couples tempted by the same appeal? Screenwriters, novelists, and advertising agencies seem not to have yet caught this drift. Do we not now live in a world in which female "players" are not only possible, but likely? As if to welcome the new era of equal-opportunity badness, Amazon.com marketed a silver-studded, black leather "Bad Girl Purse" in time for Christmas in 2014.

In fact, in a Google search (November, 2014) "bad-girl appeal" outhit "bad-boy appeal" 155,000 to 104,000, with major contributions from the likes of Miley Cyrus. Daily Mail even posted a list of "Top 10 Celebrity Bad Girls" (Modern Men, 2011). Angelina Jolie tops this list:

1. Angelina Jolie
2. Megan Fox
3. Charlotte Church
4. Sienna Miller
5. Lily Allen
6. Christina Aguilera
7. Lindsey Lohan
8. Britney Spears
9. Paris Hilton
10. Nicole Richie

As evidence of bad girl appeal, some mention the "Queen Bee at the top of the high-school pecking order, the most popular girl in school, enforcing her will through manipulation and cruelty" (O'Malley, 2012). Emma Meade writes (2009) that horror fiction, long "a masculine genre, saturated with submissive, weak females" depicting women dying violent deaths at the hands of a stronger male has recently cultivated "female characters repossess[ing] their power and authority, equaling the strength and cunning of their male counterparts," citing the example of Buffy the Vampire Slayer "with the central heroine having greater physical prowess than anyone else, male or female, in the world."

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Bruce E. Johansen

SEE ALSO: Antisocial behavior; Defiance; Desire; Resistance; Sexuality.

**Bandura, Albert**

BORN: December 4, 1925

IDENTITY: Canadian-born professor and psychological scientist

BIRTHPLACE: Mundare, Alberta, Canada

TYPE OF PSYCHOLOGY: Cognition; Motivation; Social psychology

*Bandura became internationally recognized for his study of how beliefs are formed and how they influence behavior and motivation.*

Albert Bandura attended rural elementary and high schools staffed by resourceful and encouraging teachers, and he attended college at the University of British Columbia, where he earned his bachelor's degree in psychology in 1949. Intrigued by the work of Kenneth Spence, he went to the University of Iowa to pursue his graduate degrees in psychology, studying under Arthur Benton. He received an MA in 1951 and a year later earned a Ph.D., focusing his attention on learning theory. Following graduation, he took a postdoctoral position in Kansas at the Wichita Guidance Center.

In 1953, Bandura began teaching at Stanford University in Northern California, becoming a full professor in 1964 and serving as chair of the psychology department in 1976 and 1977. He was named David

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Starr Jordan Professor of Social Sciences in Psychology. Throughout his teaching career, he wrote many books; his most notable contributions are *Aggression: Social Learning Analysis* (1973), *Social Learning Theory* (1977), *Social Foundations of Thought and Action: A Social Cognitive Theory* (1985), and *Self-Efficacy: The Exercise of Control* (1997). He was the recipient of numerous honorary degrees, president of the American Psychological Association and Western Psychological Association, and honorary president of the Canadian Psychological Association.

Bandura's work on social cognitive theory is at the core of his prominence. In this theory, cognition plays a central role in the regulation of and motivation for behavior. Its key concepts include vicarious learning, symbolic thought, outcome expectancies, self-efficacy, self-reflection, and self-regulation. His arguments suggest that learning comes from more than trial and error. His emphasis on the importance of cognition as a motivational force to behavior was a major step forward for psychological theory and practice.

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Nancy A. Piotrowski

SEE ALSO: Aggression; Aggression: Reduction and control; Anger; Child abuse; Codependency; Depression; Domestic violence; Elder abuse; Fear; Feminist psychotherapy; Law and psychology; Learned helplessness; Post-traumatic stress disorder; Rape and sexual assault; Sexual variants and paraphilias; Support groups; Violence and sexuality in the media; Women's mental health.

**Battered woman syndrome**

DATE: 1970s forward

TYPE OF PSYCHOLOGY: Psychotherapy; Social psychology

*Battered person syndrome, which affects many more women than men and is also called battered woman syndrome, describes the common emotional, interpersonal, and behavioral patterns that develop in individuals who are abused by their intimate partners and has been argued to be a subcategory of post-traumatic stress disorder (PTSD). It is usually treated through empowering psychotherapy and community resources. When an individual kills an abuser, the syndrome has been invoked as part of legal self-defense arguments.*

**INTRODUCTION**

As the women's movement raised social awareness of domestic violence in the 1970s, Lenore Walker, an American psychologist, began interviewing women who had been physically, sexually, and emotionally abused by their husbands and boyfriends. Contrary to the notion that battered women are masochistic, her interviewees abhorred the abuse and wished to be safe. Walker formulated the concept of battered woman syndrome, also called battered person syndrome, to describe a constellation of reactions to domestic violence, especially traumatic responses, lowered self-esteem, and learned helplessness.

**DIAGNOSTIC FEATURES**

Walker and others argue that battered woman syndrome is a subtype of post-traumatic stress disorder (PTSD), in that it stems from an unusually dangerous, life-threatening stressor rather than personality, and that it involves traumatic stress symptoms, including cognitive intrusions (such as flashbacks), avoidant or depressive behaviors (such as emotional numbness), and arousal or anxiety symptoms (such as hypervigilance). American psychologist Angela Browne describes further correspondence between battered woman syndrome and PTSD, including recurrent recollections of some abusive events, memory loss for others, psychological or social detachment, and constricted or explosive emotions. Complex PTSD, as formulated by American psychiatrist Judith Herman, further recognizes the multifaceted pattern of personality, relationship, and identity changes in the survivor.

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The low energy and decreased self-care that come with depression, and associated coping mechanisms such as substance use, may impede a woman's ability to seek safety. Walker's research participants often developed learned helplessness when efforts to avoid abuse led to increased violence. However, American psychologist Edward Gondolf and others have found that battered women are more resourceful and persistent in their self-protection and help-seeking than Walker's sample suggested.

Walker's cycle of violence consists of a tension-building stage, an acute battering stage, and a loving contrition stage. The battered woman often becomes acutely aware of the warning signs of the first stage that signal imminent danger in the second stage. Canadian psychologists Donald Dutton and Susan Painter have found that while this cycle is not universal, the intermittence of battering often leads to traumatic bonding, in which the woman finds love, self-esteem, and even protection from the same person who alternately abuses and woos her.

**INCIDENCE, PREVALENCE, AND RISK FACTORS**

A task force of the American Psychological Association estimated in 1994 that four million women in the United States are victims of domestic violence each year, and one in three women will be assaulted by a partner sometime in their lives. Research in the 1990s found that between 31 percent and 89 percent of battered women meet the criteria for PTSD. The National Center for Injury Prevention and Control's 2010 National Intimate Partner and Sexual Violence Survey (2011) found that 25 percent of women and about 14 percent of men have been severely physically assaulted by an intimate partner; 81 percent of women and 35 percent of men who were violently assaulted by an intimate partner, raped, or stalked reported being severely affected by post-traumatic stress disorder symptoms, injuries, or other impacts. Few individual predictors for becoming a victim of or being vulnerable to battered person syndrome have been confirmed. Among those suggested are witnessing or experiencing violence in one's family of origin, leaving home at an early age, and holding traditional, nonegalitarian gender roles.

**TREATMENT**

Psychological treatments are usually most effective when integrated with community services that aim to eliminate the economic, legal, and social obstacles to women's safety by offering temporary shelter, support groups,

and financial, job, and legal assistance. Partner violence often comes to light in the context of couples therapy, and then only with appropriate assessment questions. Because of the power differential and coercion present when a partner is violent, batterer treatment should precede consideration of couples therapy.

Therapy for the survivor usually begins with danger assessment and safety planning, exploration of the abuse history, and screening for PTSD and other psychological reactions. In the American Psychiatric Association's (APA) *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM-5), PTSD is included in a new chapter on trauma- or stress-related disorders. It is vital that therapy empower the client to make her own decisions, to avoid re-creating the powerlessness felt under the abuser's control. The therapist helps the woman recognize her strengths while providing an empathic, non-judgmental space for her to tell her story and evaluate the patterns of abuse. Individual or group treatment may be recommended, and symptom management techniques or medication may be introduced. When the woman feels safer, treatment may move into a healing stage in which emotions, self-blame, body issues, childhood abuse, and power and intimacy issues are more fully addressed.

**ROLE OF BATTERED WOMAN SYNDROME IN COURT**

In cases in which a battered woman kills her abuser, battered woman syndrome has become admissible in many courts as part of the defense of provocation or self-defense. Expert testimony is used to combat misconceptions and provide information about battering, so that the jury can interpret the woman's perception that defensive action was necessary, much as in other self-defense arguments. The admissibility of expert testimony about battered woman syndrome has been challenged on the grounds that the experience and the symptom patterns of battered woman syndrome are not universal or adequately researched. However, evidence regarding battered woman syndrome has been admitted in the majority of cases in which it has been introduced in the United States.

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Mary L. Wandrei

SEE ALSO: Aggression; Aggression: Reduction and control; Anger; Child abuse; Codependency; Depression; Domestic violence; Elder abuse; Fear; Feminist psychotherapy; Law and psychology; Learned helplessness; Post-traumatic stress disorder; Rape and sexual assault; Sexual variants and paraphilias; Support groups; Violence and sexuality in the media; Women's mental health.

## Beck, Aaron T.

BORN: July 18, 1921  
IDENTITY: American psychiatrist  
BIRTHPLACE: Providence, Rhode Island  
TYPE OF PSYCHOLOGY: Cognition; Psychological methodologies; Psychopathology

*Beck developed a cognitive therapy for depression and several tests to assess depression.*

From the time that he was a child, Aaron T. Beck had a keen interest in psychiatry. His parents encouraged his learning and interest in science. While attending Brown University, he served as an associate editor of the *Brown Daily Herald* and earned many honors and awards for his writing and oratorical skills.

After graduating magna cum laude from Brown in 1942, Beck entered Yale Medical School, eventually serving a residency in pathology at the Rhode Island Hospital. Although still interested in psychiatry, Beck became attracted to neurology and served a residency at the Cushing Veterans Administration Hospital in Framingham, Massachusetts. During this residency, he became interested in psychoanalysis and cognition, and he earned a doctorate in psychiatry from Yale University in 1946. He gained substantial experience in conducting long-term psychotherapy while serving for two years as a fellow at the Austin Riggs Center in Stockbridge, Massachusetts. During the Korean War, Beck served as the assistant chief of neuropsychiatry at the Valley Forge General Hospital.

In 1954, Beck joined the department of psychiatry at the University of Pennsylvania and graduated from the Philadelphia Psychoanalytic Institute in 1956. Initially, he explored the psychoanalytic theories of depression, but, finding no confirmation of these theories, he developed the cognitive therapy approach, including several well-known tests to assess depression, such as the Beck Depression Inventory and the Scale for Suicide Ideation. In 1959, he began to investigate the psychopathology of depression, suicide, anxiety disorders, panic disorders, alcoholism, and drug abuse. He also researched personality disorders and cognitive therapy for these disorders.

Beck served on many review panels for the National Institute of Mental Health and on the editorial boards of several journals, and he lectured throughout the world. He served as a consultant for psychiatric hospitals and managed-care organizations, and he set up inpatient and outpatient programs organized according to the cognitive therapy model. A prolific writer, Beck published hundreds of articles and many books, including *Depression: Clinical, Experimental, and Theoretical Aspects* (1967), *Cognitive Therapy and the Emotional Disorders* (1979), *Cognitive Therapy and Depression* (1980, coauthor), *Cognitive Therapy of Personality Disorders* (1990), and

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*Prisoners of Hate: the Cognitive Basis of Anger, Hostility, and Violence* (1999).

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*Alvin K. Benson*

SEE ALSO: Beck Depression Inventory (BDI); Children's Depression Inventory (CDI); Children's mental health; Cognitive behavior therapy; Cognitive psychology; Cognitive therapy; Depression; Personality rating scales; Suicide; Teenage suicide; Teenagers' mental health.

## Beck depression inventory (BDI)

DATE: 1972 forward

TYPE OF PSYCHOLOGY: Cognition; Emotion; Motivation; Psychopathology; Psychotherapy

*The Beck Depression Inventory is a self-rating scale for screening depression that measures the severity of depression. It can be used to assess progress as treatment for depression proceeds.*

**KEY CONCEPTS**

- Depression
- Depression screening
- Depressive disorders
- Mental health
- Suicide

**INTRODUCTION**

The Beck Depression Inventory (BDI) is an assessment used to measure the presence and severity of depression.

It was developed in 1972 by psychiatrist Aaron T. Beck, who earned his PhD in psychiatry from Yale University in 1946. He became interested in psychoanalysis and cognition during his residency in neurology. Beck was the assistant chief of neuropsychology at Valley Forge General Hospital during the Korean War. He graduated from the Philadelphia Psychoanalytic Institute in 1956 and began research to validate psychoanalytic theories. However, his research did not support his hypotheses, so he began to develop cognitive therapy for depression. He developed several depression screening tests, including the Beck Depression Inventory.

**THE NATURE OF DEPRESSION**

Depression is a mental state characterized by extreme feelings of sadness, dejection, and lack of self-esteem. Depression affects men and women, young and old, of all races and socioeconomic statuses. According to statistics from the Substance Abuse and Mental Health Services Administration (SAMHSA) combined data from the 2008 to 2012 National Surveys on Drug Use and Health, approximately 15.2 million adults in the United States experience a major depressive episode (MDE) each year. Of the respondents surveyed from 2008 to 2012, 38.3 percent of adults who had an MDE within the past year did not talk to a professional about it. Of those who did seek professional help, 48 percent talked to a health professional such as a general practitioner or family doctor, while 10.7 percent talked to a health professional and an alternative service professional, and 2.9 percent talked to an alternative service professional only. In 2012, the World Health Organization reported that more than 350 million people of all ages experienced depression, with 1 million suicide deaths reported annually. In 2001, the World Health Organization (WHO) asserted that by the year 2020, depression would be the second greatest cause of premature death in the world.

Depression is a common and costly mental health problem, seen frequently in primary-care settings. Between 5 and 13 percent of those seen in a physician's office have a major depressive disorder. Depression is more prevalent in the young, female, single, divorced, separated, and seriously ill and those with a history of depression.

The National Institute of Mental Health reports that in 2002 the annual total direct and indirect costs of serious mental illness, including depression, were about \$317 billion; in July 2013 the *New York Times* estimated that these annual costs approached \$500 billion. According to

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a study published in May 2010 by the *Journal of General Internal Medicine*, 25 percent of people in the United States with major depression are not diagnosed with the condition, and fewer than 50 percent receive treatment for it. Therefore, it has been proposed that routine depression screening may be instrumental in early identification and improved treatment of depressive disorders. Side effects from medications, medical conditions such as infection, endocrine disorders, vitamin deficiencies, and alcohol or drug abuse can cause symptoms of depression. The possibility of physical causes of depressive symptoms can be ruled out through a physical examination, medical history, and blood tests. If a physical cause for depression is excluded, a psychological evaluation, called a depression screening, should be performed. This screening includes a history of when symptoms started, the length of time they have been present, the severity of symptoms, whether such symptoms have been experienced previously, the methods of treatment, and whether any family members have had a depressive disorder and, if so, what methods were used to treat them.

The *Diagnostic and Statistical Manual of Mental Disorders: DSM-5* (5th ed., 2013) is the standard for diagnosing depression. DSM-5 criteria for a major depressive episode, require a depressed mood or loss of interest or pleasure, in addition to five or more of the following symptoms during a single two-week period that are a change from previous functioning: lack of energy, thoughts of death or suicide, sleep disturbances, changes in appetite, feelings of guilt and worthlessness, poor concentration, and difficulty making decisions. Depression screening questionnaires assist in predicting an individual's risk of depression.

**SELF-RATING WITH THE BDI**

The BDI is a self-rating scale that measures the severity of depression and can be used to assess the progress of treatment. It consists of twenty-one items and is designed for multiple administrations. Modified, shorter forms of the BDI have been designed to allow primary care providers to screen for depression. Each symptom of depression is scored on a scale of 0 for minimal to 3 for severe. Questions address sadness, hopelessness, past failure, guilt, punishment, self-dislike, self-blame, suicidal thoughts, crying, agitation, loss of interest in activities, indecisiveness, worthlessness, loss of energy, insomnia, irritability, decreased appetite, diminished concentration, fatigue, and lack of interest in sex. A score less than 15 indicates mild depression, scores from 15

to 30 indicate moderate depression, and a score greater than 30 indicates severe depression.

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Sharon Wallace Stark

SEE ALSO: California Psychological Inventory (CPI); Children's Depression Inventory (CDI); Clinical interviewing, testing, and observation; Depression; Diagnosis; Minnesota Multiphasic Personality Inventory (MMPI); Personality interviewing strategies; Personality: Psychophysiological measures; Personality rating scales; State-Trait Anxiety Inventory (STAI); Thematic Apperception Test (TAT).

## Bed-wetting

TYPE OF PSYCHOLOGY: Psychopathology

*Bed-wetting, technically known as nocturnal enuresis, is a disorder characterized by the frequent failure to maintain urinary control by a certain age. It most frequently occurs in young children, although it may continue through adulthood.*

### KEY CONCEPTS

- Arginine Vasopression
- Diurnal enuresis
- Functional bladder capacity
- Functional enuresis
- Nocturnal enuresis
- Organic enuresis
- Primary type
- Secondary type
- Urine alarm

### INTRODUCTION

Enuresis is a disorder characterized by an individual's repeated inability to maintain urinary control after having reached a chronological or developmental age of five years. Although enuresis may continue into adulthood, it most frequently occurs in young children. According to the American Academy of Pediatrics in 2013, 20 percent of five-year-olds, 10 percent of seven-year-olds, and five percent of ten-year-olds may still wet the bed. Of these, only approximately 2 to 3 percent will still have problems with bed-wetting as adults. Bed-wetting affects twice as many boys as girls, according to Matthew Hoffman, MD, for WebMd in 2008. It should be noted that bed-wetting by children under five years of age and occasional bed-wetting by older children are common and usually not cause for concern.

Enuresis is a disorder that has probably existed since the beginning of humankind. In spite of the fact that since the 1960s considerable scientific research has been conducted examining enuresis, many misconceptions continue to exist. For example, many believe that children's bed-wetting is a result of laziness and not wanting to take the time to use the bathroom. This is not the case; most enuretic children desperately want to stop their bed-wetting.

Another misconception is that children will "out-grow" their bed-wetting. In fact, the yearly spontaneous remission rate for enuretic children, a measure of how

many children stop wetting their beds without treatment during a year's time, is only about 15 percent according to the National Kidney and Urologic Diseases Information Clearinghouse in 2012. On average, it takes more than three years for enuretic children to stop wetting the bed on their own. During this time, the enuretic child may develop poor self-esteem and feelings of failure and isolation.

Misconceptions also continue regarding the effectiveness of different treatments for enuresis. For example, many parents believe that the bed-wetting will cease if they sufficiently shame or punish their child. This is not an effective approach; it exerts a negative influence on a child's self-concept and may actually worsen the problem. A more humane but also ineffective treatment technique is the restriction of fluids given to the child prior to bedtime. The bladder will continue to empty even when fluids are withheld for long periods of time.

One of the reasons for these continued fallacies is the secrecy that often accompanies the disorder. Because of embarrassment, the parents of enuretic children are often unwilling to ask others, including professionals, for assistance in dealing with an enuretic child. When the parents of an enuretic child do seek guidance, they are often given advice that is ineffective in treating the problem. For this reason, better efforts are needed to educate parents and professionals who work with enuretics. The basic message that should be delivered to parents is that enuresis is a treatable problem and that they should not be reluctant to take their child to a qualified professional for evaluation and treatment.

### TYPES AND SUBTYPES

Because there are different types of enuresis, several distinctions should be made in discussing the disorder. The first distinction involves the cause of the disorder. If enuresis is the result of physical causes, such as a urinary tract infection or diabetes, it is referred to as organic enuresis. Although estimates vary, a low percentage of enuretic cases overall are thought to be the result of physical causes. According to the *Merck Manual* (2012), about 30 percent of nocturnal enuresis cases are caused by organic disorders. The majority of the cases of enuresis are referred to as functional enuresis because no physical cause can be identified. Even though most cases are functional, a medical examination always should be conducted before treatment to make certain that the enuresis is not the result of a physical problem.

Another important distinction to make in discussing enuresis involves the time at which it occurs. Nocturnal enuresis, or bed-wetting, refers to lack of urinary control when an individual is sleeping. Diurnal enuresis refers to lack of urinary control during an individual's waking hours. Nocturnal enuresis occurs much more frequently than diurnal enuresis; the *Merck Manual* (2012) reports that by age five, more than 90 percent of children have achieved daytime continence, while nighttime bed-wetting affects 30 percent of four-year-olds 10 percent of seven-year-olds, three percent of twelve-year-olds, and 1 percent of eighteen-year-olds. A combined type consisting of both nocturnal and diurnal enuresis is rare. Diurnal enuresis is more often the result of physiological causes, such as urinary tract infections.

A final useful distinction is that between primary and secondary enuresis. Primary enuretics are individuals who have never demonstrated bladder control. Secondary enuretics are individuals who, after a substantial period of urinary control (at least six months), become enuretic again. A large percentage of all nocturnal enuretics have never gained proper urinary control. Although professional differences of opinion exist, most researchers believe that the causes of primary and secondary enuresis are usually the same and that children with both types respond equally well to treatment. To avoid possible confusion, the remainder of this entry will focus on the most common type of enuresis in children: functional primary nocturnal enuresis.

### POSSIBLE CAUSES

Over the years, numerous explanations have been given for the occurrence of nocturnal enuresis. These explanations can be grouped into three areas: emotional, biological, or learning. An emotional explanation for the occurrence of enuresis involves the idea that the enuretic is suffering from an emotional disorder that causes him or her to lose urinary control. Examples of these proposed emotional disturbances include anxiety disorders, poor impulse control, and passive-aggressive tendencies. Recent research indicates, however, that few enuretic children have emotional problems that cause their enuresis. In fact, among enuretic individuals who do have an emotional disturbance, it may be that their enuresis actually causes their emotional problems. In this regard, it is widely accepted that the occurrence of enuresis lowers children's self-esteem and increases family conflict.

Biological factors are a second suggested cause of enuresis. Included in these factors are genetic components,

sleep disorders, small functional bladder capacity, maturational lag, and a deficiency of antidiuretic hormone. The evidence for a possible genetic component arises from research that suggests a strong link between parental enuresis and enuresis in offspring. Von Gontard, Schaumburg, Hollmann, et al. reported in the *Journal of Urology* (2001) that if one parent was enuretic as a child, 44 percent of his or her offspring were diagnosed as enuretic. When both parents had a history of enuresis, 77 percent of their offspring were enuretic as well. If neither parent was enuretic as a child, only 15 percent of their children were diagnosed with enuresis.

The relationship between sleep and enuresis is unclear. Early studies provided mixed results on the relationship between arousability and enuresis. A study by S. S. Gellis published in *Pediatric Notes* (1994) found that enuretic children awoke during only 8.5 percent of arousal attempts, whereas nonenuretic children awoke during 39.6 percent of arousal attempts. These differences in arousability may indicate that enuretic children sleep more deeply than nonenuretic children, a conclusion with which many parents of enuretic children would agree. Enuresis is not more likely to occur during one stage of sleep than another and rarely occurs during rapid eye movement (REM), or dream, sleep. If dreams do occur that involve urination, it is more likely that the dream was caused by urinating as opposed to the urinating being a product of the dream.

Functional bladder capacity (FBC) refers to the voiding capacity of the bladder. True bladder capacity (TBC) refers to the physical structure of the bladder. Research consistently suggests that the functional bladder capacity of enuretic children is less than that of their nonenuretic siblings and peers. Although their true bladder capacities are about the same, enuretic children urinate more frequently and produce less urinary volume than their nonenuretic siblings and peers.

There is strong evidence that delays in maturation may be related to enuresis. For instance, an inverse relationship exists between birth weight and enuresis; as birth weight decreases, the likelihood of developing enuresis increases. Children with lower developmental scores at one and three years of age are also more likely to develop enuresis than children with higher developmental scores. The fact that enuresis occurs more frequently in boys than in girls also points to delays in maturation being related to enuresis because boys tend to develop more slowly than girls.

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Arginine vasopressin is an antidiuretic hormone produced by the pituitary gland. The theory behind an antidiuretic hormone as a cause for enuresis is that insufficient amounts are produced during the day, which leads to increased urine production at night. Although a small body of research has shown that a subset of enuretic children do not exhibit normal daytime secretion of antidiuretic hormone, there is no physiological reason that the lack of antidiuretic hormone would prevent a child from awakening with the sensation of a full bladder.

The final explanation for enuresis is that the child has failed to acquire the skills necessary to maintain continence at night. These skills include attending to the sensation of a full bladder while asleep and either contracting the pelvic floor muscles to prevent the flow of urine or awakening to void in the toilet. The most effective treatments for enuresis are based on this etiology.

**TREATMENT**

Early treatments for enuresis, dating back some three thousand years, included such things as giving the child juniper berries, cypress, and beer, or having the child consume ground hedgehog. Currently, drug and behavioral therapies are the two treatments that have been used and studied to the greatest extent.

One of the most common treatments for enuresis is drug therapy. Historically, imipramine, an antidepressant, has been the drug of choice. Imipramine helps to reduce enuretic episodes in 85 percent of cases within the first two weeks, although the exact mechanism is unclear. Despite this initial success, only about 10 to 50 percent of enuretic children stop wetting completely while on imipramine, according to the National Kidney Foundation (2013). More important, there is a high relapse rate when the drug is discontinued according to *American Family Physician* (2003). Significant side effects are associated with the use of imipramine, including sleep disturbance, lethargy, and gastrointestinal distress.

More recently, the drug of choice for treating enuresis has been desmopressin acetate (DDAVP) a synthetic version of the antidiuretic hormone arginine vasopressin, that is administered intranasally. It reduces enuretic episodes by concentrating urine, which results in decreased urine output from the kidneys to the bladder. Despite immediate effects of desmopressin, only about 25 percent of children achieve short-term complete dryness and with relapse rates of 80 to 100 percent after discontinuing the drug, according to C. Carolyn Thiedke for *American Family Physician* (2003). The major advantage

of desmopressin over imipramine is that it has fewer side effects.

The most effective treatment for enuresis is the urine alarm. The alarm is attached to the child's underwear and is activated when moisture comes in contact with the sensors. When the alarm is activated, the child awakens, which momentarily halts the flow of urine and allows him or her the opportunity to get out of bed and void in the toilet. After voiding, children check their underwear, pajamas, and bedsheets for wetness. If there is any need for any of these elements to be changed, the child does so before returning to bed. If underwear is changed, the sensors are reattached. During the initial stages of treatment, parents may need to assist their child with awakening until he or she becomes conditioned to the sound of the alarm. It is also not unusual for a child to void completely before awakening to the sound of the alarm during the first weeks of treatment. The amount voided before awakening should decrease as treatment progresses. Use of the urine alarm alone has been shown to result in a 75 percent success rate, with a 41 percent relapse rate, according to Thiedke (2003).

When the urine alarm is used, some type of positive reinforcement system is also utilized. Positive reinforcement programs will not cure enuresis, but they help to promote motivation and compliance with treatment. One example of an often-used positive reinforcement program is the dot-to-dot or grab-bag system. In this system, the child identifies a mutually agreed on prize with his or her parents, who then draw a picture of the prize with dots circling the picture. Every third or fourth dot is larger than the others. For each night the child remains dry, two dots are connected. When a large dot is reached, the child obtains access to a grab bag containing small prizes such as gum, coins, games with a parent, or special privileges. The big prize is earned when the child completely connects the dots that encircle its picture.

The success rate of the urine alarm can be further increased and the relapse rate decreased when ancillary components are used with the alarm. Some of these components include retention control training (sometimes called "hold it and wait"), Kegel exercises (sometimes called "stop and go"), and responsibility training. In retention control training, which is designed to increase functional bladder capacity, the child drinks extra fluids and is instructed to delay urination for as long as possible. Kegel exercises involve initiating and terminating the flow of urine at least once per day. Kegels strengthen the pelvic floor muscles that terminate urination.

Previous Edition

Responsibility training involves removing diapers or pull-ups at night and assigning age-appropriate duties associated with the urinary accidents.

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*R. Christopher Qualls; updated by T. Stuart Watson*

SEE ALSO: Behavior therapy; Childhood disorders; Children's mental health; Conditioning; Development; Psychotherapy; Children; Self-esteem; Sensation and perception; Sleep.

## Behavior therapy

TYPE OF PSYCHOLOGY: Learning; Psychotherapy

*Behavior therapy consists of a wide array of therapeutic techniques that directly change abnormal behaviors by modifying the conditions that maintain them. Behavior therapy is further distinguished by four defining themes: scientific, action-oriented, present-focused, and learning emphasis.*

**KEY CONCEPTS**

- Behavior modification
- Behavioral assessment
- Behavioral medicine
- Behaviorism
- Cognitive behavioral therapy
- Maintaining conditions
- Target behavior

**INTRODUCTION**

Behavior therapy is a major field of psychotherapy comprised of a wide array of therapeutic techniques (or specific behavior therapies) that directly change problem behaviors by altering the conditions that presently maintain them. At the core of behavior therapy are four defining themes.

First and foremost, behavior therapy is scientific in its commitment to precision and empirical validation. Behaviors to be changed, goals for therapy, and procedures used to assess and change the problem behaviors are defined precisely. The validity or effectiveness of assessment and therapy procedures is evaluated through controlled studies that can be independently replicated by other researchers.

Second, behavior therapy is action-oriented, in that clients engage in specific behaviors to alleviate their problems rather than just talk about them (as in traditional, verbal psychotherapies). Generally, there is a collaboration between the therapist and the client throughout therapy, and sometimes key people in a client's life (such as a parent or a spouse) are recruited to assist in the treatment. With the guidance of the behavior therapist, clients may actively plan, implement, and evaluate their therapy in their home environments.

Third, the focus of therapy is in the present, rather than in the past. The reason is simple: Clients' problems always occur in the present, and only present conditions can directly affect present behaviors. Although clients'