

### Chapter 1 : Stress symptoms: Effects on your body and behavior - Mayo Clinic

*Biologists reintroduced final causes under the euphemism "ultimate mechanisms," referring to the efficient and material causes of a behavior as "proximate mechanisms." Two systems that share similar final causes may have quite dissimilar substrates.*

In some cases, they may act aggressively in response to: If they have a mental health condition, it can also contribute to aggressive behavior. How Is Aggressive Behavior Treated? To work through aggressive behavior, you need to identify its underlying causes. It may help to talk to someone about experiences that make you feel aggressive. In some cases, you can learn how to avoid frustrating situations by making changes to your lifestyle or career. You can also develop strategies for coping with frustrating situations. For example, you can learn how to communicate more openly and honestly, without becoming aggressive. Your doctor may recommend psychotherapy to help treat aggressive behavior. For example, cognitive behavioral therapy CBT can help you learn how to control your behavior. It can help you develop coping mechanisms. It can also help you understand the consequences of your actions. Talk therapy is another option. It can help you understand the causes of your aggression. It can also help you work through negative feelings. In some cases, your doctor may prescribe medications to treat your aggressive behavior. For example, they may prescribe antiepileptic drugs AEDs , such as phenytoin and carbamazepine. They may also encourage you to take omega-3 fatty acid supplements. Your treatment plan will vary, depending on the underlying causes of your aggressive behavior. Speak with your doctor to learn more about your condition and treatment options. What Is the Outlook for Aggressive Behavior? However, there are treatment options available for aggressive behavior. Aggressive behavior rarely happens without a reason. Identifying the root causes of aggressive behavior can help you avoid situations that trigger it. Speak with your doctor to learn how to identify and treat the underlying causes of your aggressive behavior. Unfortunately, there is not an easy answer to this one. Generally, abusive behaviors occur with little to no provocation. However, if aggressiveness is seen within the confines of what one would expect in a situation where aggression may be normal, that can be an excellent indicator. For instance, if somebody is being physically threatened by someone else, it makes sense that the individual would respond aggressively. Also, the frequency of the aggressive behavior needs to be considered. If aggression is consistently and frequently being displayed toward an intimate partner with minimal to no provocation, then it is most likely abuse, as opposed to a normal emotional reaction. All content is strictly informational and should not be considered medical advice. Medically reviewed by Timothy J.

**Chapter 2 : Asocial Behavior: What Is It and What Are Its Causes?**

*Its scope is intended to span the full range of interests from classical problems in the philosophy of mind and philosophical psychology through issues in cognitive psychology and sociobiology (concerning the mental capabilities of other species) to ideas related to artificial intelligence and computer science.*

See other articles in PMC that cite the published article. Abstract Comprehension of a phenomenon involves identifying its origin, structure, substrate, and function, and representing these factors in some formal system. Aristotle provided a clear specification of these kinds of explanation, which he called efficient causes triggers, formal causes models, material causes substrates or mechanisms, and final causes functions. The critical empirical issue is early versus late reduction of information to disposition. Automata theory provides a grammar for models of conditioning and information processing in which that constraint can be represented. This essay provides a framework for discussing explanation, association, and computation; it leaves learning as an unexamined primitive. Philosophers such as Hume, Mill, and Mackie have clarified the criteria for identifying various efficient causal relations. Efficient causes identify the early parts of a sequence that are essential for the later parts; they tell us what initiates a change of state. Material causes are substrates. These are the most common kinds of causal explanation in use today, exemplified by most of neuroscience and brain-imaging research. Once the machinery has been identified, many people consider the phenomenon explained. Exclusive focus on machinery is known as reductionism. This was a difficult position for Newton to adopt, for as a mechanical philosopher he abhorred occult and thus ad hoc accounts. Newton would gladly have equipped his theory with hooks and eyes—“material causes”—but could devise none sufficient to hold the planets in their orbits. Formal causes are logical maps. Such equations describe the course of change from one state to another; in concert with initial conditions efficient causes, they describe the complete trajectory of change. No matter how successful formal models are, they are not machines: Mathematical equations describe the trajectories of baseballs and planets, but those bodies do not solve equations to project their moves. The formal models of the contributors to this Special Section are mute concerning efficient cause, substrate, and function. It is possible to speculate about underlying mechanisms, and to generate formal models of them; but without direct data on those mechanisms, the models are unverifiable conjectures and typically subject to change as fads come and go—they are occult. Most of modern physics can be written in terms of functions that optimize certain variables, such as energy. All laws stated in terms of such optima concern final causes. Common examples are light rays following paths that minimize transit times, animals behaving in ways that maximize genetic representation in succeeding generations, and humans behaving in ways that maximize the benefits for a population. Final causes were given a bad name teleology because they were treated as errant formal, material, or efficient causes. A reason giraffes have long necks is to let them browse high foliage; this final cause does not displace formal variation and natural selection and material genetic explanations; nor is it an efficient cause Lamarckianism. But none of those other causal explanations make sense without specification of the final cause. Analyses of evolutionary analogues—such as wings in insects, birds, and bats—provide useful functional information concerning, e. Such confounds can be prevented by accounting for each type of cause separately. Efficient causes, then, are the initial conditions for a change of state; final causes are the terminal conditions; formal causes are models of transition between the initial and terminal conditions; material causes are the substrate on which these other causes act. But of all behavioral phenomena, conditioning is the one least able to be comprehended without reference to all four causes: The ability to be conditioned has evolved because of the advantage it confers in exploiting efficient causal relations. Final Causes Conditioning shapes behavioral trajectories into shortest paths to reinforcement Killeen, Stable niches—those inhabited by most plants, animals, and fungi—neither require nor support learning: Tropisms, taxes, and simple reflexes adequately match the quotidian regularities of light, tide, and season. However, when the environment changes, it is the role of learning to rewire the machinery to exploit the new contingencies. Better exploiters are better represented in the next generation. Understanding learning requires knowing what the learned responses may have accomplished in the environments that selected for them.

**Efficient Causes** These are the prototypical kinds of causes, important enough for survival that many animals have evolved sensitivity to them. **Material Causes** The substrate of learning is the nervous system, which provides an embarrassment of riches in mechanisms. Development of formal and efficient explanations of conditioning can guide the search for operative neural mechanisms. In turn, elucidation of that neural architecture can guide formal modeling, such as parallel connectionist models—“neural nets”—that emulate various brain functions. Each of the four causes is a resource for understanding the others. **Formal Causes** Models are proper subsets of all that can be said in a modeling language. Associationist and computational models of learning are formulated in the languages of probability and automata, respectively. Their structures are sketched next. It holds that whenever C, then also E; it fails whenever C and E. Unnecessary effects degrade conditioning, just as unexpected events make an observer question his grasp of a situation. As is the case for all probabilities, measurement of these conditionals requires a defining context. This may comprise combinations of cues, physical surroundings, and history of reinforcement. Reinforcement engenders an updating of the conditionals; speed of conditioning depends on the implicit weight of evidence vested in the prior conditionals. The databases for some conditionals—such as the probability of becoming ill after experiencing a particular taste—often start small, so that one or two pairings greatly increase the conditional probability and generate taste aversions. Earlier pairings of the taste and health, however, will give the prior conditionals more inertia, causing the conditional probability to increase more slowly, and possibly protecting the individual from a taste aversion caused by subsequent association of the taste with illness. More common stimuli, such as shapes, may be slow to condition because of a history of exposure that is not associated with illness. This exemplifies how subsets of probability theory can serve as a formal model for association theory. **Associative theories** continue to evolve in light of experiments manipulating contextual variables; Hall provided an excellent history of the progressive constraint of associative models by data. **Computational Models** Computers are machines that associate addresses with contents *i*. Not only do computers associate, but associations compute: Computers can instantiate all of the associative models of conditioning, and their inverses. Automata theory is a formal characterization of computational architectures. A critical distinction among automata is memory: Finite automata can distinguish only those inputs histories of conditioning that can be represented in their finite internal memory. Representation may be incrementally extended with external memory in the form of push-down stores, finite rewritable disks, or infinite tapes. Turing machines are models of the architecture of a general-purpose computer that can compute all expressions that are computable by any machine. Personal computers are in principle Turing machines, silicon instruments whose universality has displaced most of the brass instruments of an earlier psychology. **The Crucial Distinction** Memory is also what divides the associative from the computational approaches. Most human behaviors are simple reflexes corresponding to finite automata. The adaptation permitted by learning would come at too great a price if it did not eventually lead to automatic and thus fast responsiveness. Consciousness of action permits adaptation, unconsciousness permits speed. Rats have memorial access to more of the history of the environment and consequences than captured by simple Bayesian updating of dispositions. If traditional associaters are too simple to be a viable model of conditioning, unrestricted computers universal Turing machines are too smart. Our finite memory stores fall somewhere in between. Automata theory provides a grammar for models that range from simple switches and reflexes, through complex conditional associations, to adaptive systems that modify their software as they learn. Context is often more than a cue for memory—it constitutes a detailed, content-addressable form of storage located where it is most likely to be needed. Perhaps more often than we realize, the medium is memory. The difference between associationistic and computational models reduces to which automata they are isomorphic with; and this is correlated with early versus late reduction of information to action. The challenge now is to identify the class and capacity of automata that are necessary to describe the capacities of a species, and the architecture of associations within such automata that suffice to describe the behavior of individuals as they progress through conditioning. **Comprehending Explanation** Many scientific controversies stem not so much from differences in understanding a phenomenon as from differences in understanding explanation: For example, associations are formal constructs; they are not located in the organism, but in our probability tables or computers, and only

emulate connections formed in the brain, and contingencies found in the interface of behavior and environment. Final causes are not time-reversed efficient causes. Only one type of explanation is advanced when we determine the parts of the brain that are active during conditioning. Provision of one explanation does not reduce the need for the other types. Functional causes are not alternatives to efficient causes, but completions of them. Formal analysis requires a language, and models must be a proper subset of that language. The signal issue in the formal analysis of conditioning is not association versus computation, but rather the circumstances of early versus late information reduction, and the role of context—both as a retrieval cue and as memory itself. Automata theory provides a language that can support appropriate subsets of machines to model these processes, from simple association up to the most complex human repertoires. Comprehension is a four-footed beast; it advances only with the progress of each type of explanation, and moves most gracefully when those explanations are coordinated. In this article, I have focused on the formal analysis of explanation, and formal explanations of conditioning. Comprehension will be achieved as such formal causes become coordinated with material brain states, efficient effective contexts, and final evolutionary explanations of behavior. Assessment of the Rescorla-Wagner Model. Toward a new behaviorism: The case against perceptual reductionism. Toward a general understanding of cognition in behavior. Annual Review of Psychology. On the origin of personal causal theories. Rule based or associative? Overshadowing and latent inhibition counteract each other: Support for the comparator hypothesis. Journal of Experimental Psychology: On certain formal properties of grammars. Readings in mathematical psychology.

**Chapter 3 : Antisocial Personality Disorder Causes**

*To work through aggressive behavior, you need to identify its underlying causes. It may help to talk to someone about experiences that make you feel aggressive.*

Consequences of Obesity Obesity is a complex health issue to address. Obesity results from a combination of causes and contributing factors, including individual factors such as behavior and genetics. Behaviors can include dietary patterns, physical activity, inactivity, medication use, and other exposures. Additional contributing factors in our society include the food and physical activity environment, education and skills, and food marketing and promotion. Obesity is a serious concern because it is associated with poorer mental health outcomes, reduced quality of life, and the leading causes of death in the U. Behavior Healthy behaviors include a healthy diet pattern and regular physical activity. Energy balance of the number of calories consumed from foods and beverages with the number of calories the body uses for activity plays a role in preventing excess weight gain. The Physical Activity Guidelines for Americans recommends adults do at least minutes of moderate intensity activity or 75 minutes of vigorous intensity activity, or a combination of both, along with 2 days of strength training per week. Having a healthy diet pattern and regular physical activity is also important for long term health benefits and prevention of chronic diseases such as Type 2 diabetes and heart disease. For more, see Healthy Weight “ Finding a Balance. Community Environment People and families may make decisions based on their environment or community. For example, a person may choose not to walk or bike to the store or to work because of a lack of sidewalks or safe bike trails. Therefore, it is important to create environments in these locations that make it easier to engage in physical activity and eat a healthy diet. Learn about strategies for a Healthy Food Environment and strategies to improve the environment to make it easier to be physically active. Strategies to create a healthy environment are listed on the Strategies to Prevent Obesity page. More specifically, strategies to create a healthy school environment are listed on the CDC Adolescent and School Health website. Genetic changes in human populations occur too slowly to be responsible for the obesity epidemic. Nevertheless, the variation in how people respond to the environment that promotes physical inactivity and intake of high-calorie foods suggests that genes do play a role in the development of obesity. How Could Genes Influence Obesity? Genes give the body instructions for responding to changes in its environment. Studies have identified variants in several genes that may contribute to obesity by increasing hunger and food intake. Rarely, a clear pattern of inherited obesity within a family is caused by a specific variant of a single gene monogenic obesity. Most obesity, however, probably results from complex interactions among multiple genes and environmental factors that remain poorly understood multifactorial obesity. Health care practitioners routinely collect family health history to help identify people at high risk of obesity-related diseases such as diabetes, cardiovascular diseases, and some forms of cancer. Family health history reflects the effects of shared genetics and environment among close relatives. Those changes can improve the health of family members”and improve the family health history of the next generation. Diseases and Drugs Some illnesses may lead to obesity or weight gain. Drugs such as steroids and some antidepressants may also cause weight gain. The science continues to emerge on the role of other factors in energy balance and weight gain such as chemical exposures and the role of the microbiome. Consequences of Obesity Health Consequences People who have obesity, compared to those with a normal or healthy weight, are at increased risk for many serious diseases and health conditions, including the following:

### Chapter 4 : Signs and Symptoms of Anger-Related Issues - Causes and Effects

*Suicide is the act of taking one's own life. According to the American Foundation for Suicide Prevention, suicide is one of the leading causes of death in the United States, taking the lives of.*

Like many mental health issues, evidence points to inherited traits. But dysfunctional family life also increases the likelihood of ASP. So although ASP may have a hereditary basis, environmental factors contribute to its development. One theory suggests that abnormalities in development of the nervous system may cause ASP. Abnormalities that suggest abnormal nervous system development include learning disorders, persistent bedwetting and hyperactivity. A recent study showed that if mothers smoked during pregnancy, their offspring were at risk of developing antisocial behavior. This suggests that smoking brought about lowered oxygen levels with may have resulted in subtle brain injury to the fetus. Yet another theory suggests that people with ASP require greater sensory input for normal brain function. Evidence that antisocials have low resting pulse rates and low skin conductance, and show decreased amplitude on certain brain measures supports this theory. Individuals with chronically low arousal may seek out potentially dangerous or risky situations to raise their arousal to more optimal levels to satisfy their craving for excitement. Brain imaging studies have also suggested that abnormal brain function is a cause of antisocial behavior. Likewise, the neurotransmitter serotonin has been linked with impulsive and aggressive behavior. Both the temporal lobes and the prefrontal cortex help regulate mood and behavior. It could be that impulsive or poorly controlled behavior stems from a functional abnormality in serotonin levels or in these brain regions. The Environment Social and home environments also contribute to the development of antisocial behavior. Parents of troubled children frequently show a high level of antisocial behavior themselves. In one large study, the parents of delinquent boys were more often alcoholic or criminal, and their homes were frequently disrupted by divorce, separation, or the absence of a parent. In the case of foster care and adoption, depriving a young child of a significant emotional bond could damage his ability to form intimate and trusting relationships, which may explain why some adopted children are prone to develop ASP. As young children, they may be more likely to move from one caregiver to another before a final adoption, thereby failing to develop appropriate or sustaining emotional attachments to adult figures. Erratic or inappropriate discipline and inadequate supervision have been linked to antisocial behavior in children. Good supervision is less likely in broken homes because parents may not be available, and antisocial parents often lack the motivation to keep an eye on their children. The importance of parental supervision is also underscored when antisocials grow up in large families where each child gets proportionately less attention. A child who grows up in a disturbed home may enter the adult world emotionally injured. Without having developed strong bonds, he is self-absorbed and indifferent to others. The lack of consistent discipline results in little regard for rules and delayed gratification. He lacks appropriate role models and learns to use aggression to solve disputes. He fails to develop empathy and concern for those around him. Antisocial children tend to choose similar children as playmates. This association pattern usually develops during the elementary school years, when peer group acceptance and the need to belong start to become important. Aggressive children are the most likely to be rejected by their peers, and this rejection drives social outcasts to form bonds with one another. These relationships can encourage and reward aggression and other antisocial behavior. These associations may later lead to gang membership. Child abuse also has been linked with antisocial behavior. People with ASP are more likely than others to have been abused as children. This is not surprising since many of them grow up with neglectful and sometimes violent antisocial parents. In many cases, abuse becomes a learned behavior that formerly abused adults perpetuate with their own children. It has been argued that early abuse such as vigorously shaking a child is particularly harmful, because it can result in brain injury. Traumatic events can disrupt normal development of the central nervous system, a process that continues through the adolescent years. By triggering a release of hormones and other brain chemicals, stressful events could alter the pattern of normal development. He currently is a professor of psychiatry at the University of Iowa College of Medicine. Antisocial Personality Disorder Causes. Retrieved on November 6, , from <https://>

**Chapter 5 : Childhood Obesity Causes & Consequences | Overweight & Obesity | CDC**

*Deviant behavior is a rejection of the asocial behavior of adolescents, which has a connection with the violation of the age-appropriate adolescent social norms and established rules of behavior inherent in family, school relationships. Most often, it manifests itself in the form of aggression, unwillingness to learn, demonstrating one's.*

Where can I get more information? What is autism spectrum disorder? Autism spectrum disorder ASD refers to a group of complex neurodevelopment disorders characterized by repetitive and characteristic patterns of behavior and difficulties with social communication and interaction. The symptoms are present from early childhood and affect daily functioning. Some children and adults with ASD are fully able to perform all activities of daily living while others require substantial support to perform basic activities. A diagnosis of ASD includes an assessment of intellectual disability and language impairment. ASD occurs in every racial and ethnic group, and across all socioeconomic levels. However, boys are significantly more likely to develop ASD than girls. Even as infants, children with ASD may seem different, especially when compared to other children their own age. They may become overly focused on certain objects, rarely make eye contact, and fail to engage in typical babbling with their parents. In other cases, children may develop normally until the second or even third year of life, but then start to withdraw and become indifferent to social engagement. The severity of ASD can vary greatly and is based on the degree to which social communication, insistence of sameness of activities and surroundings, and repetitive patterns of behavior affect the daily functioning of the individual. Social impairment and communication difficulties Many people with ASD find social interactions difficult. The mutual give-and-take nature of typical communication and interaction is often particularly challenging. Children with ASD may fail to respond to their names, avoid eye contact with other people, and only interact with others to achieve specific goals. Often children with ASD do not understand how to play or engage with other children and may prefer to be alone. People with ASD may have very different verbal abilities ranging from no speech at all to speech that is fluent, but awkward and inappropriate. Some children with ASD may have delayed speech and language skills, may repeat phrases, and give unrelated answers to questions. In addition, people with ASD can have a hard time using and understanding non-verbal cues such as gestures, body language, or tone of voice. For example, young children with ASD might not understand what it means to wave goodbye. People with ASD may also speak in flat, robot-like or a sing-song voice about a narrow range of favorite topics, with little regard for the interests of the person to whom they are speaking. Repetitive and characteristic behaviors Many children with ASD engage in repetitive movements or unusual behaviors such as flapping their arms, rocking from side to side, or twirling. They may become preoccupied with parts of objects like the wheels on a toy truck. Children may also become obsessively interested in a particular topic such as airplanes or memorizing train schedules. Many people with ASD seem to thrive so much on routine that changes to the daily patterns of life “ like an unexpected stop on the way home from school “ can be very challenging. Some children may even get angry or have emotional outbursts, especially when placed in a new or overly stimulating environment. Certain known genetic disorders are associated with an increased risk for autism, including Fragile X syndrome which causes intellectual disability and tuberous sclerosis which causes benign tumors to grow in the brain and other vital organs “ each of which results from a mutation in a single, but different, gene. Recently, researchers have discovered other genetic mutations in children diagnosed with autism, including some that have not yet been designated as named syndromes. While each of these disorders is rare, in aggregate, they may account for 20 percent or more of all autism cases. People with ASD also have a higher than average risk of having epilepsy. Children whose language skills regress early in life “ before age 3 “ appear to have a risk of developing epilepsy or seizure-like brain activity. About 20 to 30 percent of children with ASD develop epilepsy by the time they reach adulthood. Additionally, people with both ASD and intellectual disability have the greatest risk of developing seizure disorder. ASD symptoms can vary greatly from person to person depending on the severity of the disorder. Symptoms may even go unrecognized for young children who have mild ASD or less debilitating handicaps. Autism spectrum disorder is diagnosed by clinicians based on symptoms, signs, and testing

according to the Diagnostic and Statistical Manual of Mental Disorders-V, a guide created by the American Psychiatric Association used to diagnose mental disorders. Children should be screened for developmental delays during periodic checkups and specifically for autism at and month well-child visits. Very early indicators that require evaluation by an expert include: A comprehensive evaluation requires a multidisciplinary team, including a psychologist, neurologist, psychiatrist, speech therapist, and other professionals who diagnose and treat children with ASD. The team members will conduct a thorough neurological assessment and in-depth cognitive and language testing. Because hearing problems can cause behaviors that could be mistaken for ASD, children with delayed speech development should also have their hearing tested. Scientists believe that both genetics and environment likely play a role in ASD. There is great concern that rates of autism have been increasing in recent decades without full explanation as to why. Researchers have identified a number of genes associated with the disorder. Imaging studies of people with ASD have found differences in the development of several regions of the brain. Studies suggest that ASD could be a result of disruptions in normal brain growth very early in development. These disruptions may be the result of defects in genes that control brain development and regulate how brain cells communicate with each other. Autism is more common in children born prematurely. Environmental factors may also play a role in gene function and development, but no specific environmental causes have yet been identified. The theory that parental practices are responsible for ASD has long been disproved. Multiple studies have shown that vaccination to prevent childhood infectious diseases does not increase the risk of autism in the population. Twin and family studies strongly suggest that some people have a genetic predisposition to autism. Identical twin studies show that if one twin is affected, then the other will be affected between 36 to 95 percent of the time. There are a number of studies in progress to determine the specific genetic factors associated with the development of ASD. In families with one child with ASD, the risk of having a second child with the disorder also increases. Many of the genes found to be associated with autism are involved in the function of the chemical connections between brain neurons synapses. Researchers are looking for clues about which genes contribute to increased susceptibility. In some cases, parents and other relatives of a child with ASD show mild impairments in social communication skills or engage in repetitive behaviors. Evidence also suggests that emotional disorders such as bipolar disorder and schizophrenia occur more frequently than average in the families of people with ASD. The mutation then occurs in each cell as the fertilized egg divides. These mutations may affect single genes or they may be changes called copy number variations, in which stretches of DNA containing multiple genes are deleted or duplicated. Autism risk also increases in children born to older parents. There is still much research to be done to determine the potential role of environmental factors on spontaneous mutations and how that influences ASD risk. For many children, symptoms improve with age and behavioral treatment. During adolescence, some children with ASD may become depressed or experience behavioral problems, and their treatment may need some modification as they transition to adulthood. People with ASD usually continue to need services and supports as they get older, but depending on severity of the disorder, people with ASD may be able to work successfully and live independently or within a supportive environment. There is no cure for ASD. Therapies and behavioral interventions are designed to remedy specific symptoms and can substantially improve those symptoms. The ideal treatment plan coordinates therapies and interventions that meet the specific needs of the individual. Most health care professionals agree that the earlier the intervention, the better. In these interventions therapists use highly structured and intensive skill-oriented training sessions to help children develop social and language skills, such as applied behavioral analysis, which encourages positive behaviors and discourages negative ones. In addition, family counseling for the parents and siblings of children with ASD often helps families cope with the particular challenges of living with a child with ASD. Antipsychotic medications are used to treat severe behavioral problems. Seizures can be treated with one or more anticonvulsant drugs. Medication used to treat people with attention deficit disorder can be used effectively to help decrease impulsivity and hyperactivity in people with ASD. Parents, caregivers, and people with autism should use caution before adopting any unproven treatments. The mission of the National Institute of Neurological Disorders and Stroke NINDS is to seek fundamental knowledge about the brain and nervous system and to use that knowledge to reduce the burden of neurological

disease. Department of Health and Human Services agencies, the Department of Education, and other governmental organizations, as well as public members, including individuals with ASD and representatives of patient advocacy organizations. Such biomarkers could aid in understanding how and why ASD occurs in some children but not others, and help to identify patients who might benefit from early intervention. Other ACE centers and networks are investigating early brain development and functioning; genetic and non-genetic risk factors, including neurological, physical, behavioral, and environmental factors present in the prenatal period and early infancy; and potential therapies. NINDS funds additional research aimed at better understanding the factors that lead to ASD, including other studies on genetic disorders associated with ASD, such as TSC, Fragile X Syndrome, Phelan-McDermid syndrome which features such autism-like symptoms as intellectual disability, developmental delays, and problems with developing functional language, and Rett syndrome a disorder that almost exclusively affects girls and is characterized by slowing development, intellectual disability, and loss of functional use of the hands. Many of these studies use animal models to determine how specific known mutations affect cellular and developmental processes in the brain, yielding insights relevant to understanding ASD due to other causes and discovering new targets for treatments. For example, NINDS-funded researchers are investigating the formation and function of neuronal synapses, the sites of communication between neurons, which may not properly operate in ASD and neurodevelopmental disorders. Other studies use brain imaging in people with and without ASD to identify differences in brain connectivity and activity patterns associated with features of ASD. Researchers hope that understanding these alterations can help identify new opportunities for therapeutic interventions. The goals of the consortium are to understand shared mechanisms across these syndromes, which may suggest common approaches to their treatment. NINDS supports autism spectrum disorder research through clinical trials at medical centers across the United States to better our knowledge about ASD treatment and care. Additional studies can be found at [www](#). People should talk to their doctor before enrolling in a clinical trial.

*Anger Symptoms, Causes and Effects. According to a study conducted by the Harvard Medical School, close to 8 percent of adolescents display anger issues that qualify for lifetime diagnoses of intermittent explosive disorder.*

References Childhood obesity is a complex health issue. It occurs when a child is well above the normal or healthy weight for his or her age and height. Where people live can affect their ability to make healthy choices. Behavior Behaviors that influence excess weight gain include eating high-calorie, low-nutrient foods and beverages, not getting enough physical activity, sedentary activities such as watching television or other screen devices, medication use, and sleep routines. In contrast, consuming a healthy diet and being physically active can help children grow as well as maintain a healthy weight throughout childhood. Balancing energy or calories consumed from foods and beverages with the calories burned through activity plays a role in preventing excess weight gain. In addition, eating healthy and being physically active also has other health benefits and helps to prevent chronic diseases such as type 2 diabetes, cancer, and heart disease. Use these resources to eat well and be active! A healthy diet follows the Dietary Guidelines for Americans that emphasizes eating a variety of vegetables and fruits, whole grains, a variety of lean protein foods, and low-fat and fat-free dairy products. It also limits eating foods and beverages with added sugars, solid fats, or sodium. The Physical Activity Guidelines for Americans recommends children aged 6 years or older do at least 60 minutes of physical activity every day. Community Environment It can be difficult for children and parents to make healthy food choices and get enough physical activity when they are exposed to environments that do not support healthy habits. Places such as child care centers, schools, or communities can affect diet and activity through the foods and drinks they offer and the opportunities for physical activity they provide. Other community factors that affect diet and physical activity include the affordability of healthy food options, peer and social supports, marketing and promotion, and policies that determine how a community is designed. Consequences of Obesity More Immediate Health Risks Obesity during childhood can have a harmful effect on the body in a variety of ways. Children who have obesity are more likely to have High blood pressure and high cholesterol, which are risk factors for cardiovascular disease CVD. Increased risk of impaired glucose tolerance, insulin resistance, and type 2 diabetes. Breathing problems, such as asthma and sleep apnea. Joint problems and musculoskeletal discomfort. Fatty liver disease, gallstones, and gastro-esophageal reflux i. Childhood obesity is also related to Psychological problems such as anxiety and depression. Low self-esteem and lower self-reported quality of life. Social problems such as bullying and stigma. Future Health Risks Children who have obesity are more likely to become adults with obesity. Childhood obesity and cardiovascular dysfunction. J Am Coll Cardiol. Childhood obesity and risk of the adult metabolic syndrome: Int J Obes Lond. Cardiac abnormalities in youth with obesity and type 2 diabetes. Exp Biol Med Maywood. Narang I, Mathew JL. Childhood obesity and obstructive sleep apnea. Childhood obesity, bone development, and cardiometabolic risk factors. Lifestyle interventions including nutrition, exercise, and supplements for nonalcoholic fatty liver disease in children. Association of depression and health related quality of life with body composition in children and youth with obesity. Journal of Affective Disorders ; Associations between obesity and comorbid mental health, developmental, and physical health conditions in a nationally representative sample of US children aged 10 to Psychosocial aspects of obesity. Longitudinal trends in obesity in the United States from adolescence to the third decade of life. Bass R, Eneli I. Get Email Updates To receive email updates about this page, enter your email address:

## Chapter 7 : Behavior and Its Causes : Terry L. Smith :

*The Causes of Behavior B. F. SKINNER B. F. Skinner () was an American psychologist who spent his career at Harvard University. He was a leading proponent of behaviorism, which had a significant influence on philosophy. Skinner's books include Science and Human Behavior, Walden Two, and Beyond Freedom and Dignity.*

Video Game Anger Symptoms, Causes and Effects According to a study conducted by the Harvard Medical School, close to 8 percent of adolescents display anger issues that qualify for lifetime diagnoses of intermittent explosive disorder. What Are the Types of Anger Disorders? Individuals who have trouble controlling anger or who experience anger outside of a normal emotional scope can present with different types of anger disorders. Different experts have published contradicting lists of anger types, but some widely accepted forms of anger include: When you experience passive anger, your emotions may be displayed as sarcasm, apathy or meanness. You might participate in self-defeating behaviors such as skipping school or work, alienating friends and family, or performing poorly in professional or social situations. To outsiders, it will look like you are intentionally sabotaging yourself, although you may not realize it or be able to explain your actions. Because passive anger may be repressed, it can be hard to recognize; counseling can help you identify the emotions behind your actions, bringing the object of your anger to light so you can deal with it. In some cases, they redirect violent anger outbursts to scapegoats because it is too difficult to deal with the real problems. Aggressive anger often manifests as volatile or retaliatory anger and can result in physical damages to property and other people. Learning to recognize triggers and manage anger symptoms is essential to dealing positively with this form of anger. Stress, financial issues, abuse, poor social or familial situations, and overwhelming requirements on your time and energy can all contribute to the formation of anger. As with disorders such as alcoholism, anger issues may be more prevalent in individuals who were raised by parents with the same disorder. Mental health professionals look at trends in your behavior, emotional symptoms and physical symptoms to diagnose an anger disorder. Emotional Symptoms of Anger-Related Problems You might think the emotional symptom of anger-related problems are limited to anger, but a number of emotional states could indicate that you are failing to deal with anger in a positive and healthy fashion. Constant irritability, rage and anxiety are possible emotional symptoms. If you feel overwhelmed, have trouble organizing or managing your thoughts or fantasize about hurting yourself or others, you could be experiencing an anger disorder or another issue. Physical Symptoms of Anger-Related Problems Strong emotions often bring about physical changes to the body, and anger is no exception. Letting anger issues go unaddressed can put your overall health at risk. Some physical symptoms of anger-related problems include: Tingling Heart palpitations or tightening of the chest Increased blood pressure Pressure in the head or sinus cavities Fatigue Short-Term and Long-Term Effects of Anxiety Unresolved anger issues lead to anxiety, which can have long-term effects on your life. Immediate effects of anxiety might include dizziness, rapid breathing, nausea, muscle pain, muscle tension, headaches, and problems with concentration and memory. Such symptoms can make it difficult to perform routine tasks and can add to generalized anger about life. Long-term anxiety can pose dangerous risks to your physical and emotional states. Individuals who suffer from long bouts of anxiety can be at a greater risk for strokes. Serious memory loss, chronic sleep disorders and relationship issues can also develop. Before your anger and anxiety wreak havoc with your entire life, find out what you can do to stop the cycle by calling. A number of self-assessment tests are available online to help you to recognize any anger and anxiety issues you may be experiencing. Even if the test is offered by a reputable organization, you should never allow a self-diagnosis or an online test to direct your course of treatment. Individuals who think they might be suffering from anger issues should speak to professional counselors, family physicians or volunteers from local healthcare organizations. Anti-Anger Drug Options Mental health professionals recommend counseling, group therapy sessions and anger management classes as treatment options for anger disorders. In some cases, medication may be helpful in controlling emotions and chemical reactions in the body that lead to uncontrollable anger. Possible Options The type of drugs prescribed will depend on individual circumstances and take into account other diagnoses. Prozac or other antidepressants

Benzodiazepines known to treat anxiety, such as Klonopin Lithium or other medications known to stabilize mood Medication Side Effects According to reports, up to 50 percent of patients on lithium experience renal-related side effects. These effects are usually reversed by medical care or discontinuation of the drug but serve as a good illustration of why you should only take medication for anger symptoms while under the care of a physician. Other side effects for different anger-related medications include:

*Brain imaging studies have also suggested that abnormal brain function is a cause of antisocial behavior. Likewise, the neurotransmitter serotonin has been linked with impulsive and aggressive.*

Diagnosing and assessing people who are at risk for suicide Your health care provider may be able to determine whether you are at a high risk for suicide based on your symptoms, personal history, and family history. Your health care provider will want to know when your symptoms started and how often you experience them. They will also ask you about any past or current medical problems and about certain conditions that may run in your family. This can help them determine possible explanations for your symptoms and which tests will be needed to make a diagnosis. In many cases, thoughts of suicide are caused by an underlying mental health disorder. If your health care provider suspects that a mental health disorder is contributing to suicidal thoughts, they will refer you to a mental health professional. This person can provide an accurate diagnosis and determine an effective treatment plan for your particular condition. Alcohol or drug abuse can often contribute to suicidal thinking and acts of suicide. If substance abuse is causing you to have suicidal thoughts, then you will likely need to enroll in an alcohol or rehabilitation program. The use of certain prescription or over-the-counter drugs can also trigger thoughts of suicide and suicidal behavior. Treatment will depend on the underlying cause of your suicidal thoughts and behavior. In most cases, however, treatment consists of talk therapy and medication. Talk Therapy Talk therapy, also known as psychotherapy, is one possible treatment method for lowering your risk of committing suicide. It teaches you how to work through stressful life events and emotions that may be contributing to your suicidal thoughts and behavior. CBT can also help you replace negative beliefs with positive ones and regain a sense of satisfaction and control in your life. Treating the underlying cause of symptoms can help reduce the frequency of suicidal thoughts. You be prescribed one or more of the following types of medication: Avoiding alcohol and drugs: Abstaining from using alcohol and drugs is critical, as these substances can increase the frequency of suicidal thoughts. Exercising at least three times per week, especially outdoors and in moderate sunlight, can also help. Physical activity stimulates the production of certain brain chemicals that make you feel happier and more relaxed. How to prevent suicide To help prevent suicidal thoughts, you should: You should never try to manage suicidal feelings entirely on your own. Getting professional help and support from loved ones can make it easier to overcome any challenges that are causing suicidal thoughts or behavior. The National Suicide Prevention Lifeline is another great resource. They have trained staff available to speak to you 24 hours a day, seven days a week. Take medications as directed. You should never change your dosage or stop taking your medications unless your health care provider tells you to do so. Your suicidal feelings may return and you may develop withdrawal symptoms if you suddenly stop taking your medications. Never skip an appointment. Sticking with your treatment plan is the best way to overcome suicidal thoughts and behavior. Pay attention to warning signs. Work with your health care provider or therapist to learn about the possible triggers for your suicidal feelings. This will help you recognize the signs of danger early on and decide what steps to take ahead of time. It can also be beneficial to tell family members and friends about the warning signs so they can know when you may need help. Eliminate access to lethal methods of suicide. Get rid of any firearms, knives, or dangerous medications if you worry that you might act on suicidal thoughts. If you suspect that a family member or friend may be considering suicide, you should talk to them about your concerns. You can begin the conversation by asking questions in a non-judgmental and non-confrontational way. You may ask them: Have you ever thought about committing suicide? Have you ever taken steps to commit suicide? Have ever attempted to commit suicide in the past? Calling or going to a hospital emergency room are good ways to prevent a suicide attempt. You can also get help from a crisis or suicide prevention hotline. Befrienders Worldwide and the International Association for Suicide Prevention are two organizations that provide contact information for crisis centers outside of the United States. During the conversation, make sure you: Listening to them and showing your support is the best way to help them. You can also try encouraging them to seek professional care. Offer to help them find a health care provider or mental health professional, make a phone

call, or go with them to their first appointment. Starting a conversation and risking your feelings to help save a life is a risk worth taking. If you think someone is at immediate risk of self-harm or hurting another person: Call or your local emergency number. Stay with the person until help arrives. Remove any guns, knives, medications, or other things that may cause harm. If you think someone is considering suicide, get help from a crisis or suicide prevention hotline. Try the National Suicide Prevention Lifeline at <https://www.suicidepreventionlifeline.org/> Medically reviewed by Timothy J.

**Chapter 9 : The Four Causes of Behavior**

*Obesity is a complex health issue to address. Obesity results from a combination of causes and contributing factors, including individual factors such as behavior and genetics. Behaviors can include dietary patterns, physical activity, inactivity, medication use, and other exposures.*

If you have OCD, you engage in compulsive, repetitive behavior despite realizing the negative consequences of “ or even the unreasonable nature of “ your actions. Performing these repetitive acts does nothing more than relieve stress temporarily. If you or a loved one is experiencing any of these behavioral disorders, it is important to get help as soon as possible, because these conditions can affect quality of life to such a degree that they may lead to self-harm. Please call for assistance. What Causes a Behavioral Disorder? A behavioral disorder can have a variety of causes. According to the University of North Carolina at Chapel Hill, the abnormal behavior that is usually associated with these disorders can be traced back to biological, family and school-related factors. Some biological causes may include: Divorce or other emotional upset at home Coercion from parents Unhealthy or inconsistent discipline style Poor attitude toward education or schooling What Are the Signs of a Behavioral Disorder? Someone who has a behavioral disorder may act out or display emotional upset in different ways, which will also vary from person to person. Easily getting annoyed or nervous Often appearing angry Refusing to follow rules or questioning authority Arguing and throwing temper tantrums Having difficulty in handling frustration Physical Symptoms of Behavioral Disorders Unlike other types of health issues, a behavioral disorder will have mostly emotional symptoms, with physical symptoms such as a fever, rash, or headache being absent. However, sometimes people suffering from a behavioral disorder will develop a substance abuse problem, which could show physical symptoms such as burnt fingertips, shaking or bloodshot eyes. People may get into trouble for acting out, such as face suspension or expulsion for fighting, bullying or arguing with authority figures. Adults may eventually lose their jobs. Marriages can fall apart due to prolonged strained relationships, while children may have to switch schools and then eventually run out of options. The earlier a behavioral disorder is diagnosed and properly treated, the more likely it is that a child or adult suffering from it will be able to control their behavior. Contact us at for assistance in finding treatment options. Mental health professionals and treatment centers can evaluate people to determine if they a behavioral disorder. Tests called functional behavioral assessments offer problem-solving help to address behavioral problems in students. According to Center for Effective Collaboration and Practice, these assessments are based on many techniques and strategies for identifying problem behaviors. Individualized educational program teams use these assessments to choose interventions that address specific behavioral problems. These teams are involved in the education of students, and they may include parents and teachers. Behavior-Modifying Drug Options A person may receive prescription medications to help manage a behavioral disorder. Though medication will not cure the disorder, it is effective in assisting with treatment to control and modify behaviors. Possible Options Many drugs are available for behavioral problems, and the type of drug that will be prescribed depends on the specific condition being treated. They may help a child focus better, reduce impulsive behavior and reduce motor restlessness. Ritalin is also included in a group of medications known as long-acting stimulants. These medications may also be effective against ADHD. Concerta may prevent drug abuse, as can Vyvanse and Daytrana. These medications are aimed at decreasing impulsivity, reducing hyperactivity, decreasing obsessive-compulsive actions and reducing feelings of depression. Medication Side Effects Medications for behavioral disorders may have side effects. They can increase emotional issues, increase suicidal thoughts and aggravate seizure conditions. Some of the possible side effects include: