show Title: #9

The Schizophrenias

"Not Available"

#10

ORGANIC MENTAL DISORDERS AS BROADCAST SCRIPT
JANUARY 7, 1991

FADE UP ON LOGOS

NARRATION: Funding for this program was provided by The Annenberg/CPB Project.	The Annenberg/CPB Project
NARRATION: Sometimes, as we face life, we can master our experiences, sometimes we can't.	Mauve; fade up on music and pictures for open 1. boy looking into camera on stomach 2. children in schoolroom 3. girl at blackboard 4. boy alone with group off to side - zoom in on him 5. two people walking under catwalk 6. band 7. older black couple hugging 8. man and woman at table with chins in hands 9. man sitting on bed with face in hand 10. woman in mourning with hankie over eyes
MAIN TITLE	The World of ABNORMAL PSYCHOLOGY (over montage of photos)
SHOW TITLE	ORGANIC MENTAL DISORDERS

FADE IN:

NARRATOR: Nick Crane is not a typical teenager. He has problems. He has trouble walking; he can't speak clearly and he has trouble remembering things.

B-Roll: Nick in physical therapy

One thing he can't remember is exactly what happened to him that caused many of his problems.

But what happened to Nick is something his mother will never forget.

MRS. CRANE: It was a very hot summer day.

Over B-Roll
Cut to 2-shot: Nick & Mom

...It was about 4:00 o'clock in the afternoon. His grandmother was visiting from Canada. His other grandparents had come over.

We were all just sitting on the patio to relax and have an afternoon cocktail before we had a cookout and my older son had put up this 30 foot swing that everyone had been enjoying for a couple of months.

And I kept saying that swing is going to do some harm to somebody but you know, oh, mom, you're always ruining...

NICK: And dad always said- I don't remember you saying but I remember dad, someone's going to get hurt on that swing.

MRS. CRANE: Well, I remember saying that too. And- but anyway it was- everybody using the swing and all of a sudden, Nicholas went to swing and he swung out and there was like a dead silence and a thud.

NARRATOR: Nick landed on the left side of his head with enough force to cause his brain to careen violently around the inside of his skill leaving him severely brain damaged.

B-Roll: Nick working on computer

He spent a month in the hospital and then two years in physical rehabilitation. But the injury to his brain created psychological wounds that took far longer to heal.

Cut to CU hands on keyboard

Pan to CU Nick

Larry Gorrell's brain has also been damaged, not from an accident but from a disease; a disease that has left him severely impaired.

B-Roll: Larry raking leaves

Cut to CU Larry

Wyatt Ingram has no short-term memory. The result of many years of alcohol abuse.

B-Roll: Wyatt in garage workshop

The problems these people have are known as Organic Mental Disorders.

Generally speaking, organic mental disorders fall into one of three categories: Physical Trauma, injuries from falls, accidents or blows to the head; Medical problems such as Alzheimer's Disease, Parkinson's syndrome, AIDS and stroke; and Toxic Substances, environmental pollutants, drugs and alcohol.

Graphic: brain

ADD: HEAD TRAUMA

ADD: MEDICAL PROBLEMS

ADD: TOXIC SUBSTANCES

In this program, we will look at just a few of the many types of Organic Mental Disorders.

Robert Carson is professor of psychology at Duke University in Durham, North Carolina.

Dissolve to WS Carson

CARSON: The term Organic Mental Disorder refers to instances of mental aberration, mental or behavioral aberration in which there is accompanying evidence of structural or functional- physical impairment of the brain, of the brain's hardware, if you will, and- and where this physical impairment is assumed to be causal- is assumed to be causal of the behavioral output.

NARRATOR: To better understand how certain types of injuries, disease and powerful chemicals can effect a person's behavior, it is first necessary to understand how the human brain works.

B-Roll: patient and doctor

The brain is the most important organ in the body. It controls all of our functions- how we think, feel and move, our ability to communicate, to remember and to understand ourselves and the world around us.

Dissolve to graphics: brain

The outer layer of the brain is called the cortex. It is here that all of the bits of information that come into the brain are integrated, processed, stored and retrieved.

ADD: Cerebral Cortex

Beneath the cortex is the limbic system. This part of the brain is where our emotions, sex drive, defense mechanisms and memory are managed.

Lose word; Add graphic of limbic system over brain; ADD: Limbic System ADD: Hypothalamus, Medulla, Thalamus and lines to graph

When any part of the brain is damaged, one or more of the functions will be altered, weakened or destroyed.

Lose everything but brain

For example, an injury to the frontal lobe can create problem solving difficulties.

Highlight in purple frontal lobe; ADD: Frontal Lobe

Lose

Damage to the left temporal lobe can impair speech.

Highlight in purple Temporal Lobe: ADD: Temporal Lobe; Lose words

If the occipital or visual lobe is effected, a person might not be able to recognize familiar faces and objects.

Highlight in purple Occipital Lobe; ADD: Occipital Lobe

The brain itself is made up of billions of cells called neurons. These neurons form networks or pathways throughout the brain.

Cut to graphic of neurons

The neurons transport information by means of electrical impulses to and from the brain's different areas.

The individual neurons communicate with each other across minute gaps called synapses.

Cut to graphic of Neurotransmitters

Chemical substances called neurotransmitters flow from one neuron to another.

Fade in dots

These neurotransmitters lock onto receptor sites on the neighboring neuron, continuing the flow of information.

Dot goes to synapse and divides

dots fill gaps

This infrastructure is complex and it is fragile.

Montage graphics; brain, neurons, neurotransmitter

Damage from injury or illness can upset the balance that exists within the brain, impairing normal functions.

Dissolve to computer X-Ray of brain

This, in turn, can lead to numerous intellectual and emotional problems.

Pan back to include two techs

FADE DOWN

FADE UP

TITLE CARD: HEAD TRAUMA

NARRATOR: Over two million people in the United States suffer a head injury each year. Some 500,000 are severe enough to require hospitalization.

Graphic: Map with box
ADD: 2 million people

The psychological effects of head trauma occur along a continuum. Some are minor and transitory; others are devastating and permanent.

B-Roll: therapy

4-2 6 5 10

CARSON: One can have one's brain injured in a variety of ways, quite obviously.

Over B-Roll

...There are famous cases on record...

...the famous crowbar case in which Phineas P. Gage was blown away by a crowbar that literally transversed his head from...

Cut drawing: WS Gage w/pick
Cut to MS crowbar in head

Cut to CU head

...here through and out the top. And Phineas lived, remarkably enough, but he was changed very substantially in consequence of that experience.

...He now was sort of out of control. He was- he swore a lot in contrast to his prior very proper behavior. He could...

Dissolve: CU happy Phineas

Pan right to mean Phineas

...not be relied upon in contrast to his prior behavior and in general exhibited an inability to keep things regulated, particularly in relation to emotionality and impulsivity.

NARRATOR: There was nut much that could be done for Phineas Gage after his physical wounds healed. But the head injury rehabilitation has advanced greatly in the 160 years since.

Dissolve to MS Gage w/pick

Dissolve to CU Gage

Today science and medicine have enabled us to look within the brain and assess the physical damage incurred. Psychological damage cannot be seen with technology. That is evident only in the behavior of the injured person.

B-Roll CAT scan and Magnetic Resonance Imaging

This is the New Medico-Highwatch Head Injury Rehabilitation Center In New Hampshire.

Aerial of facility

Stephen Baker is a permanent resident here.

Cut to B-Roll: Baker

In some ways, Stephen Backer's story is similar to that of Phineas Gage. While his injury was not as dramatic, the psychological effects were far greater.

An automobile accident destroyed many parts of Stephen's brain. The widespread damage left him with severe problems. He cannot speak; he has limited intellectual ability; he has little memory and he has no control over his emotions.

Cut to CU Baker

In fact, his deficits are so severe that he cannot live in mainstream society.

Nick Crane's injury was similar to Stephen's but not nearly as damaging. He did return home after the hospital. But then he began to experience a number of emotional problems.

B-Roll: Nick and Lennox

MRS. CRANE: I think that's when the decline started in and a lot of stress started to build up. I think he was having more difficulty peer-wise as well.

I think he was a typical teenager and starting to experiment with alcohol once in a while, a occasional joint.

And there were several family problems at the same time, going on. And so our family life was really very dysfunctional at that point.

And very shortly after that, my husband left the household and it was shortly after then that I really- I could see almost a psychotic type of behavior and depression.

NICK: I would just sit in the house everytime I came home from school and just sit there and I went a little stir crazy after a while and took the car out.

MRS. CRANE: He didn't have a driver's license at that point and we had discussed the car. We were going out, actually, to clean the car and he just took off with it.

And when he came home that night, it was just visible that I had to take him to the emergency room, that I couldn't control the situation any more.

NICK: When I was admitted after taking the car out, then I was really sick then. I admit that. I was, like I was lying in my bed and I would hear people crying- crying, laughing at me, just lying in my bed and hear this outside and I knew I needed some help desperately.

NARRATOR: Nick's injury left him with several problems. He had difficulty speaking, lost his coordination, and he could not solve even simple problems.

Nick also developed severe emotional problems- he became socially withdrawn, had trouble remembering things; he often felt anxious, impulsive and frequently, very depressed.

B-Roll: Nick and Lennox in rehab

These types of problems are typical for people who have injured the frontal lobe of the brain.

B-Roll: Nick in group therapy session with other head injured persons

People have problems initiating activities, planning things, exercising judgement, understanding social situations and regulating their behavior.

These psychological problems are a direct result of the injury.

But some problems, such as depression, can come about indirectly, when people realize they will never quite be the same again.

Dennis Russo, Director of Behavioral Programming for New Medico explains.

Cut to CU Russo

RUSSO: Depression can be caused by many things. It can be caused by many things in a non-head injured individual such that you have endogenous or internal depression, and an external or reactive depression. But seem to be caused by different things and may be responsive to different therapies.

Similarly, in brain injury, we find that depression can be a secondary outcome of the brain injury itself. That is, if a certain part of the brain is injured, it leads to depression.

On the other hand, it may be a reactive depression, particularly as clients emerge, as they learn, as they become more oriented, many clients become depressed because they realize that they're never going to be the same as they were.

Learning to cope with that, helping the client to cope with that psychologically is a wholly different issue treatment-wise.

NARRATOR: Problems resulting from head injury often impact on the person's family life as well. Nick's parents separated after his injury.

B-Roll: Nick talking

As part of his rehabilitation, Nick is learning ways to help himself deal with some of the emotional problems surrounding that event.

NICK: But, I called my dad one day to, like, ask him to come on over and he- he didn't know. You see he was talking originally to my sister and then my sister gave me the phone and he was still talking and he said, I'm not going to come out to the house just for a birthday party and that- he didn't know I was on.

He thought my sister was on and he like- that made me feel sort of down and depressed.

NARRATOR: David Lennox has been working with Nick for more than a year.

Over Nick

LENNOX: We instituted a problem solving strategy early on that Nick has since implemented independently.

It's fairly simple but we made it quite a salient rigorous procedure where though pencil and paper he would write down a problem, define it fairly objectively, come up with several solutions, advantages and disadvantages of those solutions and then pick the best solution.

Those are strategies that you and I use every day and he needed assistance through every step on. And he now does that fairly effectively independently.

NARRATOR: As a result of the behavioral and cognitive skills training he has received, Nick has been able to recover some of his losses, to the point where he is ready to leave the controlled environment he has been living in.

B-Roll: Nick, mother, Lennox

How he fares in the real world remains to be seen.

RUSSO: It's the client's worst behavior, not his best behavior that will determining his future...

Over B-Roll: Nick, mother, Lennox

...by identifying for each head injured-injured individual those receptive channels which are least damaged.

By focusing our therapeutic and teaching approaches that way and then by gradually changing those approaches to take and deal with more and more complicated problems what we find is that individuals are able to learn to function in ways they could never function before.

LENNOX: I think Nick and others like him will be able to function fairly independently, go about daily living just as you and I do.

Acquire jobs, albeit they may be slightly less sophisticated jobs but, in some cases, given cognitive impairments, some memory impairments which still may exist but there are a great many compensatory strategies that help overcome those to let Nick and others lead pretty successful lives.

NICK: I've seen like my- the ideal person I' wish to be and I just do everything like that person like, I don't know- I- I walk like them; I talk like them and I work hard trying to fix my deficits, and that has made me- that person has been a driving force within me to accomplish my goals.

NARRATOR: For many people with head trauma, this stage of recovery Nick has reached is often the first step in a more difficult process, returning to the same world they knew before they were injured, but with less ability than they once had.

B-Roll: Group therapy

PERSON IN THERAPY: Even small things add up very quickly with a head injury; it's so hard to handle so many little problems that you handled spontaneously before.

NARRATOR: Doctor Yehuda Ben-Yishay is Director of the Head Trauma Program at the Rusk Institute in New York City.

Cut to XCU side Ben-Yishay

BEN-YISHAY: The patient himself is rarely aware of the crucial consequences of the head injury in terms of what it did to the cognitive abilities and what implications these deficits have down the road in life...

Over therapy

...Then you have another major problem on top of this and that is the problem of the person's sense of self.

The injury has affected the central mechanism that guides what we call the thinking, planning aspect of the individual as well as the self- the sense of self.

And if this is disturbed, it is not surprising that the individual's sense of self-esteem, confidence, is very shaken up.

NARRATOR: Doctor Ben-Yishay's program is based on a six stage model. Each individual stage is viewed as a landmark in the patient's total rehabilitation.

B-Roll: patient & therapist at computer

BEN-YISHAY: The first part is to engage the individual appropriately in the process of learning. Rehabilitation is learning and engagement has two components.

Over B-Roll: patient & therapist at computer

...One component is to optimize the person's attention and concentration.

Without attention, concentration, you cannot have a pupil. So that's the first part.

The other end of the engagement is psychologically giving the individual, who has been scared out of his wits, is disorganized, confused, giving him or her a sense that this is my life and I'm going to take charge.

So engagement means literally optimizing attention and getting the individual to become an active partner, a motivated active partner in rehabilitation. That's the first stage.

Once you have accomplished a reasonable degree of engagement, you have to make the patient aware of the problems that the injury has caused without breaking the patient's spirit.

BEN-YISHAY: Can you tell Sam and Daniel what extent do you feel some of the boo-boos, some of the problems, that you mentioned initially, can interfere and foul up the pro- the situation and thinking?

CU patient in red in group
Cut to WS group

PATIENT IN RED: I'm not as motivated as I was before. I tired; I get tired more quickly so that takes away from my ability to- to reason or to remember things. I'm so tired that I can't work on- on reasoning with people or remembering what I have to- to think about.

BEN-YISHAY: (Int.) Making them aware requires very careful and delicate work to bring to their attention some of the terrible deficits and failure in life, and yet at the same time, not to stifle their desire to keep on fighting. That's the second stage.

NARRATOR: The third phase in the program, compensation, evaluates the person's potential to learn new skills.

B-Roll: patient & therapist

BEN-YISHAY: In the phase of compensation you really have...

...to answer three basic questions.

...Can this individual learn. And if so, at what level of sophistication can the individual learn?

Over B-Roll: patient

...If he learns some routines, can you teach this person work routines, thinking routines, all kinds of routines of solving problems?

If so, what will it take to make this stick because brain injury result in serious memory problems often. So can he learn? Can he retain it? Can he apply it appropriately?

...And the third question is, can the person improvise and problems solve in unexpected situations?

Over B-Roll: patient

And our job under compensation is to get these three things.

NARRATOR: While the person is learning to become aware, to become engaged and to compensate for the deficits, the individual must also learn to accept that brain injury cannot be completely reversed and that many of the deficits are permanent.

B-Roll: group therapy

PATIENT IN BEIGE: I know that I'm not- I'm not going to be the way I was. I don't- that's forgotten. I don't want to be that same person. However, I would like to have the same capabilities.

BEN-YISHAY: We use a very strong metaphor to our trainees. We tell them...

Over B-Roll: group

...no one has learned how to rewire the brain.

So what is rehabilitation? Rehabilitation is learning new ways to troubleshoot around the problems without changing the spare parts. Which means on a practical level that the individual in the end must learn to accept everything that could be done, was done; this is what I can do.

And yet accept this with a certain grace and dignity and say, this is a worthwhile accomplishment.

BEN-YISHAY: The next phase is, now that all is said and all that could be done was done, what kind of work situations could you fit in, in order to train you gradually to become a productive worker again?

B-Roll: trainee in occupational trial working in medical records department of the hospital

That's when we take our trainees and send them to the occupational trials which is that practical training before the step which is graduating and sending them out to actual work.

This is the time when we determine what kind of a worker he will be. Can he become a worker full-time, part-time, and does this person...

...have the capacity, when away from this training cocoon, if you wish, can the person apply independently all the tricks of compensation that he or she has learned during this phase?

NARRATOR: The final stage of the resocialization process is the placement of the program trainees in real world situations. These three people are graduates of Dr. Ben-Yishay's program.

B-Roll: three graduates, Ben-Yishay

Terry was injured in an automobile accident a year and a half ago.

He used to run a publishing company. The pressures of that job are too much for him to handle now and so he has turned his attention to writing.

Nonetheless, he is satisfied with the outcome of his rehabilitation.

Cut to CU Terry

TERRY: Well, I sort of reflect, philosophically, if you will, that I think that all of us in life are given a deck of cards.

With the head injury, that deck has been re-shuffled and you have to play your new hand so-to-speak.

There are aspects of that- that new hand I rather like that I'm not as bitchy now; I'm not as compulsive now; I'm not as much of an overachiever now, that sort of thing.

There are pieces that I miss, as I sometimes say, my compulsive knowledge of the irrelevant is not what it used to be but perhaps that just gives my room- my head more room for more important things to be there.

NARRATOR: Celia was a bank executive before she was injured in a taxicab accident. She is working in a clerical job now and only part-time.

But she has come to terms with the limits her injury has placed on her life.

Over CU Celia

CELIA: I have always gone- people go for 100%. I've al- my goal has always been 101%.

And even though I can't do what I'd like to do, I realized for whatever right, I ended up doing this is my 101%. So, this is my best.

NARRATOR: Mark was run over by a bus when he was only 13 years old. He has had nine operations on his head since then. He has also suffered from alcohol and drug abuse.

Cut to CU Mark

Today, Mark works full time as a teachers aide in a program for disabled children.

MARK: It's been a lot of just hard- nose drive and don't let little things get you down or overcome- overcome you. Just keep plugging because the minute I know I quit, it's like saying the heck with the world; I'd rather curl up in a ball and die. Life is not- life is too precious to do that.

NARRATOR: Long after the physical wounds have healed, there are many psychological problems these people with head trauma must overcome. The Rusk Institute program addresses their cognitive-emotional and personal deficits.

Cut to WS group

Learning exercises enable people to become aware of the extent of the deficits. Scale exercise teach them how to compensate and community activities help them understand and accept the permanent changes their injuries have caused.

Cut to CU patient

Cut to WS group

FADE DOWN

FADE UP

TITLE CARD: MEDICAL PROBLEMS

NARRATOR: Larry Gorrell was once a high school guidance counsellor, helping students make important decisions about their lives.

B-Roll: Larry working in his yard

Today, Larry Gorrell has difficulty making any decisions at all about his own life.

Once outgoing and opinionated, he is now withdrawn and depends completely on his wife, Willadene, who tries to help him find his way in a world he can hardly recognize.

WILLADENE: Everything is difficult for him. Everything. Brushing his teeth- where are my teeth? How do you hold a toothbrush? Everything is a decision.

B-Roll: Larry in yard

NARRATOR: Alzheimer's was once thought to be a rare disorder. However, some 4 million have been diagnosed with the illness.

Graphic: Map with box

ADD: 4 Million

Today, nearly 10% of people over 65 have the disease. And almost half of those who are over 85. And the number of cases is expected to rise.

Cut to B-Roll: street

Like many Alzheimer's patients, Larry Gorrell began to experience problems with his memory. He also began to behave differently.

Cut to B-Roll: Gorrells at table

MRS. GORRELL: He would misplace something like his keys. Now the misplacing it wasn't the strange thing but his reaction to misplacing it was strange because there's just two of us in the house and he'd say, well, somebody moved my keys and I didn't do it which was so unlike Larry.

And I argued with him awhile, you know, And then I thought, this is the silliest argument I've ever had in my life so let's forget that. That was the first symptom.

NARRATOR: In the four years since, other problems have surfaced. Larry's thinking has become confused. He forgets what things are and where he is. He sometimes doesn't recognize his wife.

And educator before his illness, he now is losing his ability to form new thoughts and communicate them.

B-Roll: Larry in clinic with therapist

LARRY: For the most part- just recently I have not- read a- or did a corn- a corn...

MRS. GORRELL: Driven a car. Driven a car.

LARRY: Did a corn.

MRS. GORRELL: you have not driven a car.

NARRATOR: What happens in the brain of an Alzheimer's patient that causes such profound problems?

Over CU Larry

In the early stages of the disease, the areas typically effected are the parietal and temporal lobes producing language and memory difficulties.

Dissolve to graphic: brain

Highlight parietal w/PARIETAL LOBE; Highlight temporal lobe w/TEMPORAL LOBE

As the frontal lobe becomes involved, severe behavioral changes may come about. Some people develop depression; others become belligerent.

Highlight frontal lobe w/FRONTAL LOBE

CARSON: It happens that- that I had a grandmother myself who suffered from Alzheimer's disease and she felt that- felt very strongly- I was a little boy- that my grandfather who was in his 80s was...

...taking off to the local pub, an Irish pub that would not let women in. He was accused of meeting women in the pub and that was why he was going there regularly.

Dissolve to drawing: WS grandparents in bar

Cut to CU grandmother; pan right to grandfather

...My grandmother took to following him there and raising quite an embarrassing scenes following...

...him all the way home with various obscenities and so on to get him out of the clutches of the women that she imagined were meeting him in the pub.

Dissolve to drawing: WS grandparents outside apt.

Cut to CU grandfather; pan to right to grandmother

...I have some appreciate of the embarrassment of this because I was a little boy and- and- and in my imagination the whole neighborhood sort of was- was participating and observed this scene was- was awfully embarrassing.

And at that point, of course, I had no very good explanation about what- what was going on.

NARRATOR: Alzheimer's disease may be caused by the development of protein fibres or plaques that attach to the ends of the neurons. It is through that these plaques then destroy the cell.

Graphic: neuron

Add: blue dots

Along with the loss of cells is a reduction in certain neurotransmitters that aid in the communication of information throughout the brain.

One dot separates
Three dots disappear, two in gaps
Graphic: neuron with dots

EARL: He came for a second diagnostic opinion as well as to potentially participate in treatment trials for progressive memory disorders.

NARRATOR: The fact that this process happens in diffused areas in the brain helps to explain why the symptoms related to Alzheimer's disease can be so varied.

B-Roll: Earl and team discussing Larry

Nancy Earl is a neurologist and clinical psychologist at The Duke University Alzheimer's Disease Research Center.

EARL: There are a variety of changes that can be seen although I think what I see most frequently is a social withdrawal and isolation to some extent.

Frequently early on we may see withdrawal from activities, where they are tending to stay home, not being as active in church or hobbies or different kinds of things. Now wanting to speak out as frequently and basically a- a social withdrawal.

...People become more dependent on their spouse or children and people that have been very independent will start to defer more to other people's judgement, allow other people to make the choices.

B-Roll: Larry & wife on bench reading and drinking
Cut to CU wife; pan right to Larry

WILLADENE: I was first attracted to Larry because of his intelligence and his sense of humor.

Over CU Larry

...Those were the first two things to go. Here was a man who's well-informed about politics, current affairs; he can't read a newspaper.

If he watches television, he does recognize a few conservatives that he doesn't agree with but for the most part, he doesn't recognize really what's on at all.

He can't drive a car and hasn't driven in two or three years. And he's quite willing to quite which was a big advantage to me.

He was always very comfortable about his dress; no he- I pick his clothes, put them out in the morning. I sit beside him as he gets dressed and he looks at his sock and he things, do I put the sock- well, you can see him- do I put the sock on my foot or do I put the sock in my shoe.

Everything is difficult for him; everything.

TECH: Ok, Mr. Gorrell, I'm going to go over some questions with you like we usually do when you come to see us and what I'd like for you to do is to just try and answer these as best you can for me. Okay?

B-Roll: Larry in cognitive assessment session

NARRATOR: Not all Alzheimer's patients present in the same way as Larry Gorrell.

There are other diseases that can cause similar mental impairments, making Alzheimer's difficult to diagnose.

Testing for Larry Gorrell's specific deficits reveals the extent of his illness and provides an indication of the areas of the brain that are being effected.

B-Roll: scenes of the cognitive assessment session with Larry

Two shot Larry & tech

TECH: And what season of the year is it?

LARRY: It's in the 19th month- or I mean...

TECH: What season is it?

LARRY: Season? That's in the 19...

EARL: We will do a mental status exam and basically that's a systematic way to explore different areas of function in the brain. You test memory involving the temporal lobes; you test language involving the left temporal lobes; you'll test idiomotor praxis, or using hands in tests, writing and manipulating objects, basically thought to be parietal.

So you explore a variety of cognitive questions...

...and in testing the mental status.

B-Roll: Larry testing

TECH: What I'd like for you to do is to take a look at this drawing and try to draw it again for me right down there, okay? Take your time on that.

EARL: Those particular tests that he had are also specifically designed to tax areas or to test areas that we know are impaired in Alzheimer's disease.

B-Roll: Larry trying to draw

People can appear very unimpaired and when you are put n a confrontational setting it taxes you so that you don't perform as well.

NARRATOR: It is often said that in Alzheimer's, there is a second patient involved- the spouse or family member who is the day-to-day care provider.

B-Roll: Willadene and Larry at home

Lisa Gwyther is a Director of the Duke Family Support Program.

Cut to Gwyther

GWYTHER: A person with Alzheimer's disease loses their memory and so they can't learn new information or learn from experience or draw on their experience.

The caregiver, on the other hand, has vivid memories of the person as they were and as they were when they loved them or know them and can learn new information, can draw from experience and can get better.

They can be helped to understand why the patient behaves the way they do and how to be a more effective caregiver while still reducing the negative consequences of providing that care on themselves.

NARRATOR: It may be 20 years between the onset of memory problems and the end stage of the disease when it is terminal.

B-Roll: Larry in cognitive assessment

The time between diagnosis and death is marked bu slow and continual intellectual, emotional and physical decline, placing extraordinary stress on both the patient and the caregiver.

4.18

WILLADENE: Sometimes he says to me, life isn't worth living this way. Sometimes he says to me, I'd like to die. And I can't seem to say to him, oh no, Larry, you don't want to die. This is a great life you have.

Sometimes, however, as we'd be driving over here this morning, he said, you know, I really think I'm a lot better.

So he is not consistent about it but he is unhappy; he is frustrated; he is fearful.

But you think just a minute, how would you feel if when you get up in the morning, the room is strange; you don't recognize anything. If you look at the woman in bed next to you, you wonder who she is.

If you go to the bathroom and you don't really know where the commode is; you don't really know where the toothbrush is. Everything is strange.

His reflections in the mirror. I have a sheet- a tablecloth taped over our mirror in the bathroom now because otherwise he thinks that's an enemy.

He thinks that his feet are children and apparently they're not very loving children because I can hear him go (slap sound). They must been teenagers, I've decided. They're very aggravating to him.

GWYTHER: I also try and get them to understand the role of fear. Patients are very frightened if they don't understand what's going on, and they're looking for reassurance and they're looking to make sense of their environment and so their gaps in memory sometimes they fill in by making up stories, confabulating.

If they can't find something that they misplaced, then someone must have taken it and it mast have been whoever's in the house, their children, their spouse, whatever.

If they're frightened of being left in a world that doesn't make sense, then they're more likely to accuse the spouse of infidelity or of leaving them.

So that if people understand and reappraise the behavior and personality changes and say, if my wife did not have this illness, she would not have behaved in this way. And this is beyond her will or her control. And it is also beyond my control to change that.

NARRATOR: It may be another 10 to 15 years before Larry Gorrell reaches the terminal stages of Alzheimer's disease and dies.

B-Roll: Gorrells sitting on porch

During that time, his intellectual, emotional and physical losses will continue.

Yet, Mrs. Gorrell, like many caregivers, is committed to providing the support Larry needs as long as she is able.

Cut to CU Larry; pan left to Willadene

GWYTHER: People do this because they believe that this is what a family should do for each other or a spouse or a parent.

Sometimes it comes because people say, she was a good mother or she was a good wife and she would have done the same thing for me.

But they don't- the one thing that happens in caregiving is that there's this total change in the normal give and take of relationships.

In an acute illness, you know if your husband is hospitalized for surgery that you'll mobilize, you'll give it your all and eventually he'll get well and if that ever happened to you, he probably would do the same thing for you.

In a progressive, chronic illness, you're giving more and more and that person is never going to have an opportunity to pay you back.

WILLADENE: Well, I think the people might be interested in what are the emotional that the caregiver feels. First of all, you feel a great deal of grief. You see, day after day after day, a person die, his intelligence.

Somebody just recently told me her mother had a sense of humor. You can't have a sense of humor if you don't see relationship. You- funny paper's not funny unless you can understand what's back of it.

Larry's physical health is broken a great deal. He walks like a much older man.

So I am reminded me a little, as if a surgeon says, we're going to do major surgery but I'll tell you what, we won't make a great big, deep cut.

We'll just cut a little bit each day so it won't really hurt much and we won't need an anesthetic.

So every day, you cut a little bit more and a little bit more. That's grief that goes on and on.

FADE DOWN

FADE UP

TITLE CARD: TOXIC SUBSTANCES

NARRATOR:

One of the most enduring tales in English Literature is Alice in Wonderland by Louis Carroll.	B-Roll: Alice in Wonderland statue in Central Park
One of Alice's most extraordinary characters was the volatile and quite irrational Mad Hatter.	Cut to Hatter on statue
This character was actually based on a very real and well-known fact of 19th century life- that many long term workers in the hat making trade frequently exhibited erratic personality traits.	Cut to drawing: Hatter at table Cut to CU real hatter photo
These behavioral problems came about after years of exposure to toxic mercury used in the process of making felt.	Cut to vat in photo Pan up to MS hatter
This behavior was so common that the expression 'to be mad as a hatter' earned a permanent place in the English language.	Cut to Hatter drawing

Much like the experience of the hat worker one hundred years ago, exposure to toxic material remains an unfortunate consequence of contemporary life.

B-Roll: scenes from a toxic dump site

there are numerous potent substances, found not only in the workplace but also in the environment, that can produce a range of physical and psychological effects.

The substances that have an impact on the cells of the brain and a resulting psychological impairment, are called neurotoxins.

Cut to B-Roll: bottles in factory

Like traumatic head injury and Alzheimer's disease, neurotoxic substances can effect several different areas of the brain producing a spectrum of cognitive and behavioral disorders.

Cut to B-Roll: dump scenes

One recent and dramatic example of the effects of neuotoxic exposure occurred in Michigan in 1973 where thousands of people were accidently exposed to toxic polybrominated biphenals or PBB's.

Clips from 1976 documentary: cows

Clips of blood draw

Clips of lab

VALCUIKAS: In the summer of 1973, in the process of mixing animal feed in the state of Michigan, someone made a mistake.

B-Roll: clips of barn, cows, hay, feed

As a result of this mishap in the...

...place where they mix cattle feed, and also chicken feed, they mixed a fire retardant, FireMaster, with the cattle feed.

Now nobody knew that and many months after the- the fire retardant was in- was left in the food chain, people were noticing very interesting changes.

...In- the cattle were experiencing severe weight loss. The animals were dying for no apparent reason.

B-Roll: clips of cows

And the people were experiencing unusual illnesses.

...Those people were farmers and are very hard working, you know, getting up a four o'clock in the morning and you would find stories of these very clever, very successful farmers not getting up in the morning.

NARRATOR: In addition to oversleeping, farmers reported depression, an inability to concentrate and severe memory loss.

Clips from PBB documentary

In a few months, as the PBB's spread through the food chain, these same symptoms began to show up in the population at large, the thousands of people who consumed the contaminated food products.

Clips: CU ERG mobile lab sign

Clips from documentary

VALCIUKAS: Because of the concern that we actually did not know the extent of the contamination two years later, we studied a cross-section of the entire Michigan state for the prevalence and we found that almost all of the Michigan residents were- had demonstrable levels of exposure in their blood and fat.

NARRATOR: The psychological effects of toxic substances are frequently present even in absence of physical symptoms.

Clips from PBB doc: farm scenes

The implication is that a high degree of awareness if required on the part of the public and the clinicians who might see these people.

VALCIUKAS: The idea is that you have to be alert, that there are certain elements, animal, plants, chemical compounds that through the improper handling, or the improper absorption or accidental absorption, will cause a behavioral change which you might not be noticed with a clinical approach.

That is the most tragic consequence and where the psychologist could make the most important conclusion.

There are no gross effects that will kill you. I mean, lead, you have to really take extraordinary amounts to- to- to kill.

But it will- by minute dose, it will produce subtle effects that you only notice when you challenge your brain to do certain tasks.

This is a message that is clear.

NARRATOR: Alcohol is also a neurotoxic substance.

B-Roll: bartender pouring big glass of liquor

For some social drinkers, the deleterious effects of alcohol are minor and transient.

B-Roll: DWI tests

For others, these effects can be deadly.

B-Roll: overturned car

Long term alcohol abuse can also be the sources of other problems including permanent changes in personality and mental ability.

B-Roll: person drinking at bar

B-Roll: row of bottles behind bar

BUTTERS: If someone is a chronic alcoholic and is drinking a pint or a quart of whiskey a day and he does it over many years, he develops a loss of certain cognitive abilities.

The most striking of these conceptual abilities, problem-solving abilities, perceptual abilities, memory remains relatively intact.

NARRATOR: Nelson Butter is Child of the Psychology Service at the Veteran's Administration Medical Center in San Diego.

Over Butters

BUTTERS: The defects tend to range from mild to moderate in severity and tend to be related to how long a individual's been drinking

NARRATOR: Wyatt Ingram is good with his hands.

A former supervisor for an aircraft manufacturer, he keeps his skills sharp by working around the house he built 50 years ago.

B-Roll: scenes of Wyatt in garage

Mr. Ingram can easily recall the day he bought the land his house sits on.

What he cannot remember is what day it is today; in fact, he doesn't remember anything that has happened to him for more than a few seconds.

Wyatt Ingram literally lives from moment to moment.

HARRIETTE: It's difficult. He wears himself out because he has to continually do the same thing over again.

A simple task like putting up the mini-blinds in the kitchen that normally would have taken him a half hour, he worked on for four days because he had the blinds lying out here on the floor to measure them and then he would go out in the kitchen and he would forget what the measurements were and come back in here and remeasure. And he has to work so hard to get anything done.

NARRATOR: Wyatt Ingram has Korsakoff's syndrome, a rare neurological impairment caused by long term alcohol abuse and a deficiency of the B-complex vitamin, Thiamin.

B-Roll: Wyatt in yard

This combination causes damage to one specific part of the brain.

BUTTERS: Korsakoff syndrome has been associated more with the malnutrition that alcoholics invariable suffer and more specifically with Thiamin deficiency.

So that if someone is Thiamin deficit for a given period of time, this will lead to an acute episode of bleeding or hemorrhaging in a particular part of the brain, namely the thalamus of the brain...

...and he'll be left in a totally amnesic state.

B-Roll: Ingram house and Wyatt

That is, he will be unable to learn new information; he'll be unable to recall the past, and this will be chronic.

This, in most cases, will remain permanently for the rest of the patient's life.

NARRATOR: The thalamus is sometimes described as the brain's central relay station.

Graphic: brain w/thalamus
ADD: THALAMUS

It is by way of the thalamus that new information is stored, as memory, in other parts of the brain.

WYATT: (B-Roll) Hello. Well, I'm- my head feels like an accordion. Other than that I'm fine Sherry. You want to speak with Harriette? Well, just a minute. It's Sherry, Harriette.

NARRATOR: So while Mr. Ingram can recall events of more than 30 years ago with remarkable clarity, he often cannot remember what has happened more than 30 seconds ago.

B-Roll: Wyatt answering phone

?: Could you tell me who just called you on the phone, Wyatt?

CU Wyatt for whole interview (off camera questions)

WYATT: Who called me on the phone? Someone that wanted Harriette.

?: Do you remember who it was?

WYATT: It was her sister.

HARRIETTE: No, that was Sherry, honey, our daughter-in-law.

WYATT: Well, I made a good guess anyway.

NARRATOR: Because of his profound learning disability, Wyatt Ingram was initially diagnosed as an Alzheimer's patient.

B-Roll: Wyatt in garage workshop

But Dr. Butters determined that unlike the typical Alzheimer's patient, many of his other cognitive skills, such as his ability to express himself, to compute math problems and perform complex motor skills were intact.

B-Roll: Wyatt and therapist testing

THERAPIST: Why don't you give me all the words you can think of that start with the letter F.

WYATT: Oh, fight, fry, fist, first, fuddle...

BUTTERS: I did assess his aspects of his general intelligence, vocabulary, his language functions.

B-Roll: Wyatt's memory evaluation

...I had him do some fluency tests. Those were all designed to get at his basic overall mental status or intelligence.

And you'll remember that he did quite well on- on many of those tests.

Where he failed is when I got into tests of memory.

BUTTERS: (testing Wyatt) What I'd like to do again with you Mr. Ingram is to again to see if you can remember the date. Could you tell me what the date is today.

WYATT: No, right off I couldn't tell you that but I think it's about the 18th.

BUTTERS: The 18th of what? What month is it?

WYATT: Well, we are about July. It's July or August.

BUTTERS: This is September the 11th.

WYATT: September the 11th.

BUTTERS: 1990.

WYATT: 1990.

BUTTERS: Now, how old are you now?

WYATT: 78. 77 or 78.

BUTTERS: 77, that's right. Very good. And what's the date today?

WYATT: The 19th.

BUTTERS: The 19th of what?

WYATT: September.

BUTTERS: No, it's September 11th.

WYATT: September the 11th.

BUTTERS: And what year is it?

WYATT: 1984.

BUTTERS: No, it's 1990.

WYATT: 1990.

BUTTERS: (Int.) It was very clear that he could store practically nothing new.

Over B-Roll: previous interview

...That is, I kept on telling him the date, he couldn't remember the date.

I mean, I was unable in the course of that total interview to really teach him the date, that it was September 11, 1990. He couldn't learn it.

In fact, you'll note that in parts of that interview, he had forgotten that information within ten seconds.

Cause I would tell him the information, distract him by maybe asking him maybe my name or something else for a few seconds, then go back and say what's the date and he'd go back to telling me it was 1984.

That is, in ten seconds, the information had been lost. What we're seeing there is the inability to consolidate any new information or to transfer it from short term memory into a kind of long term memory.

BUTTERS: (testing) Do you remember John Kennedy? No?

WYATT: Something of him yes.

BUTTERS: Yes. Was he a- was he a president of the United States or what did he do?

WYATT: Yes, he was if I recall correctly. John Kennedy.

BUTTERS: Was he ever president of the United States?

WYATT: Well, Kennedy was but I'm not too sure if the John was.

BUTTERS: Well, John Kennedy was president of the United States.

WYATT: He was?

BUTTERS: And do you remember what happened to him or how - what happened during his presidency?

WYATT: Well, if I recall correctly, somebody took a shot at him.

BUTTERS: Yes, and what happened?

WYATT: It seemed to me as though he was hospitalized for quite a little while and I believe he fully recovered.

BUTTERS: He did fully recover, huh?

WYATT: Yeah.

BUTTERS: Well, actually, he- he died. He was assassinated.

WYATT: He was actually assassinated.

BUTTERS: Yes, he was.

BUTTERS: (Int.) For a man of his attainment in life, he certainly should have remembered that John Kennedy was assassinated.

Over CU Wyatt

...That is, there are many thing that he forgot or could not recall at this time that he wants knew.

You'll also note that there is a kind of a temporal gradient to that loss.

As you go back in time, his memory gets better, That is, his memories for the 1940s is better than his memories for the 1960s and 70s.

So as you go back in time, his memory tends to overall get better. That is typical of a Korsakoff patient, typical of any amnesic patient.

NARRATOR: Living with an inability to remember most of the events in your life for the past thirty years is a significant handicap.

B-Roll: Wyatt greeted by wife by car after golf game.

What enables Wyatt Ingram to cope with his difficulties is a highly structured living environment, where life remains as familiar as possible.

HARRIETTE: Anyone that lives with a person with the type of amnesia that he has has to be able...

...to stay calm and live with it because they are unable to do anything about it really.

And Wyatt is very good about improvising and being very independent. Where he needs a little help is remembering because he can't remember what he did five minutes ago or an hour or yesterday.

B-Roll: CU calendar
CU Wyatt

CU different signs/notes around house

...But he has a burden with me too because I'm physically unable to do many things.

So he does the physical part and I have to remind him to keep doing it because if he leaves it, like he was washing windows yesterday and he forgot what he was doing, so I have remind him to continue to wash the windows.

And he's been going to trim the hedge out here and I had to remind him to do that.

I don't know what I would do without him. But he doesn't know what he would do without me either.

FADE DOWN

FADE UP

TITLE CARD: SUMMING UP

NARRATOR: The human brain is a complex organ but it is not beyond understanding.

B-Roll: brain images from MRI, PET scan, etc.

Medical and technical advances yield more information about inner workings of the brain every day.

B-Roll: getting scanned for MRI, PET

But it would be wrong to assume that someday scientists will find a neurological reasons for every psychological problems.

How we are shaped by our genes, by our environment and by our interaction with other people is too complicated a process to be determined solely by damaged or defective brain cells.

Nick Crane suffered a traumatic head injury.

Cut to MS Nick and therapist

Larry Gorrell has Alzheimer's disease.

Cut to Larry in yard

Wyatt Ingram has Korsakoff syndrome.

Cut to Wyatt on phone

Each of their lives has been fundamentally effected by the damage their brains have suffered.

The understanding that medical science has provided about the origin of their problems is significant.

Cut to Wyatt and therapist

But the knowledge of how those problems will impact their daily lives will continue to be provided by psychology, the science of human behavior.

Cut to Nick and therapist

CARSON: It's difficult to believe that we are going to find a pill or anything else at some point along the way that is going to suddenly cause new neurons to sprout. That it is almost inconceivable to me.

Hence, in many cases of- in fact most cases of organic brain damage, we have no realistic hope of- of achieving cure of the problem.

On the other hand, there is this whole array of psychological problems that are visited upon the individual with significant brain damage.

Many of which, for example, combativeness, are not again, a necessary product of brain damage.

But rather of the psychological situation in which the individual finds himself or herself.

Now that can be worked with psychogically.

And, as a matter of fact, there is a fair amount of data, increasingly so in recent years, that demonstrates that people who are getting on in age and beginning to have Alzheimer-type dementia problems can be very substantially helped psychosocially.

Their life-burdens can be much lessened by virtue of appropriate psychosocial measures such as, for example, setting up the environment in such a way that the individual is still making his or her own choices.

BEHAVIOR DISORDERS OF CHILDHOOD
As Broadcast Script
May 30, 1991

#11

FADE UP ON LOGOS

NARRATION: Funding for this program was provided by The Annenberg/CPB Project.	The Annenberg/CPB Project
NARRATION: Sometimes, as we face life, we can master our experiences, sometimes we can't.	Mauve; fade up on music and pictures for open 1. boy looking into camera on stomach 2. children in schoolroom 3. girl at blackboard 4. boy alone with group off to side - zoom in on him 5. two people walking under catwalk 6. band 7. older black couple hugging 8. man and woman at table with chins in hands 9. man sitting on bed with face in hand 10. woman in mourning with hankie over eyes
MAIN TITLE	The World of ABNORMAL PSYCHOLOGY (over montage of photos)
SERIES TITLE	BEHAVIOR DISORDERS OF CHILDHOOD
NARRATOR: Childhood is often thought of an an idyllic period in a person's life, a time of innocence and exploration, understanding and establishing one's place in the family environment and social structure.	B-Roll: children in classroom

Too often this is not the case however. It has been estimated that 1 in 7 children has an emotional or physical disorder that makes the early years a time of great difficulty.

In this program, you'll meet James, a highly impulsive and impatient 11 year old, who has a condition known as attention deficit hyperactivity disorder.

B-Roll: James in room not doing homework

9-35 @ 10:10

AMANDA: I didn't want to leave the home. I wanted to be with my mom; I didn't want to go anywhere.

KLEIN: And how did that effect your life then?

NARRATOR: Amanda's fear of being away from her mother is an emotional disorder known as separation anxiety.

Girl and mother talking to therapist

Wesley's behavior and language problems are the result of his autism.

Boy with autism acting out

And Paul, who was arrested at 14 for stealing cars, has a behavior problem known as conduct disorder.

Boy and mother sitting talking

In this program we will look at a variety of psychological disorders of childhood, look at what causes them and some of the ways they are treated.

GRAPHIC: four children mentoned above

Many psychological disorders can occur in childhood. These may include disruptive behavior problems, emotional disorders and developmental disorders.

B-Roll: children listening to man tell story
GRAPHIC STILL w/Childhood Disorders
ADD: Disruptive Behavior
ADD: Emotional
ADD: Developmental

Some of these disorders are similar to what an adult may experience; others are unique to childhood.

Unstill frame

In either case, it is essential to understand that the criteria for abnormal behavior in children differ from those ~~in~~ for adults.

JONES: It's important to look at children in the context of growing up that children grow at different rates.

NARRATOR: Russell T. Jones is Associate Professor of Psychology at the Virginia Tech University.

Over Jones

JONES: It's quite common, for example, for three year old children to talk a lot, but how about the child that- that does not. Is that a function of an underlying emotional disorder or is it simply a function of developmental lag?

NARRATOR: As Dr. Jones points out, there is a range in the process of normal development.

GRAPHIC STILL (in classroom) w/Behavior Factors

Whether behavior is normal or abnormal depends on several important factors, the frequency, duration, and intensity of the behavior.

ADD: Frequency
ADD: Duration
ADD: Intensity

JONES: The child who ocassionally cries when he or she doesn't get her way, that behavior's qualitatively different from a child who cries quite intensely for long periods of time when he or she doesn't get her way.

One may be quite acceptable and an isolated event whereas another one may be a pattern which is symptomatic of possible underlying psychopathology.

NARRATOR: Interest in childhood related problems and behaviors has intensified in recent years for a variety of reasons.

In turn, this has led to an increase in appreciating the unique aspects of childhood psychology.

NARRATOR: Additional factors for determining whether behavior is normal or abnormal is fixation and regression.

The word Fixation is highlighted

Fixation refers to behaviors that continue beyond the age that's considered normal for those behaviors to occur.

JONES: For example, it's quite common for three to four year old children to occasionally wet the bed. However, the child who continues to wet the bed until age eight, nine, or ten, is exemplifying this particular phenomenon.

The word Regression is highlighted

NARRATOR: Regression means that a child has reverted to a behavior that is characteristic of an earlier developmental stage.

JONES: Staying with the bed wetting example. A child may go through toilet training quite appropriate, cease from wetting the bed for a long period of time and then maybe following some incident, traumatic event, etc., begin wetting the bed quite frequently.

NARRATOR: Interest in childhood related problems and behaviors has intensified in recent years for a variety of reasons.

GRAPHIC: Newspaper clippings RE: child abuse, etc.

In turn, this has led to an increase in appreciating the unique aspects of childhood psychology.

JONES: One only needs to look at the alarming statistics on child abuse, sexual abuse, neglect and child exploitation in today's literature to see that children are yet to achieve the status as due adults in many, many instances...

...There is significantly less known about childhood psychopathology and we are now starting to evolve as a field and we are understanding to a greater extent the assessment, the conceptualization...

Over B-Roll: James in room

Over B-Roll: Wesley & mom on couch

Over B-Roll: Paul & mom

...as well as the treatment of problem behavior.

TITLE CARD: DISRUPTIVE BEHAVIOR DISORDERS: ATTENTION DEFICIT HYPERACTIVITY DISORDER

NARRATOR: James is 11 years old. Like many boys his age, he is easily captivated by video games which may hold his attention for long periods of time.

B-Roll: James playing Nintendo & shot of game

JAMES MOTHER: So you're going to do that same thing into the knives. So go ahead and do that.

JAMES: I can't do it in there- there.

JAMES MOTHER: You do it in the next spot.

JAMES: Uh-uh.

NARRATOR: Also like many children his age, he finds everyday tasks like homework are not nearly as stimulating.

B-Roll: James & mom trying to do his homework

But James' inability to focus on activities like his homework is much more serious than it is for most other children

James is also impulsive; he has a hard time controlling his emotions and his behavior. And that has led to problems for him and his family.

JAMES MOTHER: It's not my homework to do.

JAMES: I know. You do it.

JAMES MOTHER: You erased the whole thing.

JAMES: I know.

JAMES MOTHER: No, come on. Go back and do the rest.

JAMES MOTHER: (Int.) When he was nine months old, we went to some friend's house and rather than sit on the couch like, or sit in our laps like some of the other children, he was climbing up the back of the chair, and pulling a cord that hung their lamp on the wall and he pulled that down and it broke, just lots of busy activities.

And throughout the years, the early months, the pediatrician kept telling us that he was quick minded.

JAMES: Look what's- look what's in the chapter.

NARRATOR: Over the next five years, James' quick minded and aggressive behaviors continued and intensified. He had trouble at home and in preschool.

B-Roll: James & mom working on homework

It was hard for him to follow instructions and to make friends. These problems were puzzling as well as painful for his parents.

JAMES MOTHER: Finally, in first grade, the teacher confided in me and said, you know, I'm really not supposed to tell you this because this is- we really have to go through the ed plan and do the formalities of this but my nephew has attention deficit disorder and I think that's what your son has too.

NARRATOR: Some 3% of children are may have attention deficit hyperactivity disorder characterized by a number of symptoms.

B-Roll: James in testing room

JONES: When we talk about ADHD...

...we're talking about a disorder where children exhibit a number of very distinct symptoms. One of which is developmentally inappropriate inattention. The child doesn't attend to tasks, the child doesn't attend to teacher, the child doesn't follow instructions, etc.

Another symptom is impulsivity. Here we have a child who doesn't complete homework for example, who switches from one task to another, who talks out of turn, who responds before questions are actually finished. Again, a quality of impulsivity.

The third symptom which may be the most notable is hyperactivity. Here a child is always moving around. A child is unable to stay in a seat; a child may fidget. A child is always active.

NARRATOR: James' symptoms were so severe that his mother brought him here to the Center for Attention Deficit Hyperactivity Disorder at The University of Massachusetts Medical Center.

B-Roll: James and a psycholgist talking in testing room

But making a finding of ADHD poses some problems.

Dr. Russell Barkley is the center's founder.

7-16 1SP

BARKLEY: Probably the greatest difficulty is trying to distinguish between what is typical of normal children, particularly normal boys and what is typcial of these children. Many studies indicate that up to 40 to 50% of normal boys are described as restless and inattentive and impulsive.

The best way we have of determining whether this child is ADHD or deviant is using the reports of parents and teachers such as on a behavior rating scale or questionnaire and comparing that to what teachers say about normal children of that age.

That gives us a measure of just how far from normal this child falls in his ratings of behavior by these people.

NARRATOR: One problem with diagnosis is that many children with ADHD see the clinical evaluation as an opportunity to perform. They pay greater attention and score better than they would under normal circumstances.

B-Roll: James & psychologist talking in testing room

Dr. Arthur Anastopolis is the center's director.

9-21@2:00

ANASTOPOLIS: You need to keep in mind that when you evaluate children in a clinic, the more novel one-to-one it is, the less likely you'll see ADHD...

B-Roll: James in room by himself

...So our job with them is to create situations that are relatively uninteresting, boring, if you will, of long enough duration, that have a chance of eliciting ADHD symptomotology.

NARRATOR: One of the evaluation techniques is called the restricted academic situations task.

B-Roll: James being tested

Here a child is asked to work on math problems over a period of 15 minutes.

Dr. George ~~James~~ DuPaul explains the procedure while observing James through a one way mirror.

B-Roll: James through mirror & DuPaul silhouette

DuPAUL: Okay, well what we're looking for is how well Jamie pays attention to this work and also how fidgety and restless he might be during the time that he's working on this, how often he might get out of his seat or play with objects in the room that have nothing to do with the task itself.

So what we end up with during this 15 minute observation is- is a percentage of time that Jamie is paying attention to his work, as well as the percentage of the time that he's fidgety and restless and out of his seat and doing other behaviors that might be related to attention deficit disorder.

NARRATOR: In less than 5 minutes, James begins to exhibit some ADHD behaviors including some apparent frustration and anger.

B-Roll: James playing with phone

As Dr. DuPaul tracks the number of incidents and when they occur, James quickly reaches the limits of his attention span.

B-Roll: DuPaul's chart, pan up to silhouette

B-Roll: Looking at James through mirror

DuPAUL: You notice too that Jamie was better able to pay attention during the earlier part of this observation. Now as we're approaching the 8 or 9 minute mark of this observation, his attention has- has really diminished significantly.

ANASTOPOULOS: Well, certainly the behavior that we observed during that restricted task would be in the abnormal range and probably...

B-Roll: James testing

...in the mild to moderate end of the abnormal range.

Some of the children that come into the clinic would in fact be even more restless, more out of their seat, maybe complete even fewer problems than he did.

He was at least able to complete three out of the five pages, I believe and those were done fairly accurately.

So in his case, accuracy is not as much of a problem; what was the problem was the total productivity if you will.

TITLE CARD: CAUSAL FACTORS
& TREATMENT

BARKLEY: If you have an attention deficit, then you ought to be having trouble anytime you're asked to pay attention to something and yet they're good with Nintendo; they're lousy at homework. What explains those differences...

B-Roll: James playing video games

...There have been a few theories around that have suggested that this could develop out of purely social circumstances; those primarily pertain to either bad parenting or to the degree of stress and change in our society, what you might call the tempo of modern life.

We now know that this disorder is not due to how your parents are raising you.

JAMES MOTHER: Okay, what numbers are you going to use to divide?

JAMES: 62 and 2 tenths.

JAMES MOTHER: Right.

NARRATOR: For more than 50 years, the precise cause of attention deficit hyperactivity disorder has remained unknown although several theories have been offered.

B-Roll: James & mom doing homework

Some have suggested that the behaviors relating to ADHD have their roots in a specific part of the brain, the frontal lobe.

CU: James

BARKLEY: The centers of the brain that control motivation, how sensitive you are to your world and especially the consequences that happen to you seems to be not working well in these children. It makes them less sensitive then to the things that would motivate a normal child to behave.

So we are now coming around to looking at ADHD as a deficit, a biological deficit in motivation and that seems to explain where they'll do well and where they- where they don't.

You can now predict that under a highly motivating situation where they enjoy what they're doing, where there is some immediate consequence such as the promise of money or chips or toys for getting that work done, these children will have no trouble with that...

...but it also predicts the opposite.

B-Roll: James & mom doing homework

Where there is no consequence for doing your work, where the work you're asked to do is boring and protracted over long periods of time, for instance, and the consequences for what you do are in the future, in the long run, these children will have substantial problems.

NARRATOR: Stimulant drugs such as Dexidrin or Ridilin, are often prescribed to help manage the symptoms and related behaviors.

But one might question, as many have in recent years, why a stimulant is being prescribed for a child like James who is already overactive.

Dr. Barkley has a theory on why this works.

BARKLEY: For many decades, professionals thought that these drugs did something opposite to these children, paradoxical you might say than they did to normal children and the belief was is you gave a normal child a stimulant, you would excite him and make him hyperactive and yet if you give a hyperactive child this drug it seemed to calm them down and make them concentrate.

We now know that both of those are completely myths, misconceptions. First of all, we have given these drugs to normal children in a few experiments at the National Institute of Mental Health for instance, and found that normal children get better too.

Not as much because they weren't as deviant in their behavior but the direction of change is identical to that seen in normal children, better concentration, less fidgeting, better impulse control and better work productivity than we would see in the child off medicine.

The second thing is that we've discovered that hyperactive children do not have a brain that is overactive and therefore the stimulant calms it down; they actually have a certain part of the brain, as I said, that is underactive, sleepy, sluggish, and this drug seems to have a particular affinity for going to that part of the brain and activating it.

Now that part of the brain is the one responsible for inhibiting behavior, for focusing your concentration, and for suppressing activity level especially unwanted activity level.

As one parent says, what you're doing is stimulating his brake-linings in his brain so that you're activating the very part of the brain that's involved in inhibiting and controlling behavior.

NARRATOR: Sometimes problems within the family system can contribute to ADHD behavior.

B-Roll: Barkley leading parents group

So in additon to medication, family therapy or individual therapy may be necessary.

But educating the parents is almost always essential.

BARKLEY: You cannot raise one of these children properly if you don't fully understand what this child has and particularly that the child struggles with a disability, that this is not willful misbehavior of an otherwise normal child.

That education involves teaching them about the symptoms of the disorder, what causes it, what is likely to happen as these children grow up...

... and also tries to work with the parent on understanding that it's not their fault either, trying to bring them around to the idea that normal things that can be used with typical children are not going to be as successful at helping to manage and raise such child.

B-Roll: ADHD parents group

BARKLEY: (in group) Some children respond to a reprimand where you can turn to them and say Kathrine, stop doing that, or Steve, or Ken or whatever, stop that. And they'll stop.

You're kids, you could say that till the cows come home and it's not going to stop what's going on.

You have to get up and confront them...

NARRATOR: The methods used to help parents cope and to better manage the child with ADHD are typically based on behavior modification concepts.

B-Roll: James' mom and Anastopoulos in office

One common method is called a token economy in which a child recieves poker chips for good behavior. These tokens may be cashed in for treats, toys, or priveledges.

JAMES MOTHER: (in office) A few years ago, wqe were going to California for two weeks and both of my children were on that and then...

...what I did was at the end, they could trade back the chips for a nickel a piece or whatever so they both had spending money to go to California and that was the most peaceful time during that time which would have been and otherwise crazy time for us...

...It was difficult to implement in the beginning and it took a lot of practice but once we actually used it...

... (Int.) we perfected the system pretty much and we had to carry poker chips with us in the car.

The babysitter had to learn how to do it, my g- you know, my mother had to learn how to use it so that we would be riding with friends in the car and something would occur and I'd say oh, Jamie, here's a chip and friends would say, potato chips, what are you talking about.

And they all got to understand and sometimes the friends would predict and we'd say to him, oh, you got a chip for that or you're going to lose a chip and so everyone was on his case and- and it was really successful. It worked out well.

HENNINGSON: What do we call this? Excuse me. Look at me. You're getting points for what today?

KID: Being good.

HENNINGSON: Of course. But when I say to you- when I ask you a question, right, you just get the answer like that. You don't have to give me all the reasons why. Okay, you're going to swallow your voice. I'm going to ask it again.

NARRATOR: Children with ADHD not only have problems at home but also at school.

Unrecognized and left untreated, a child with ADHD runs the risk of a multitude of problems with schoolwork, teachers and other students.

Pat Heninngson is a special education teacher who works with children with behavioral problems such as ADHD.

She began working with the University of Massachusetts psychologists three years ago.

B-Roll: Henningson & young children in a classroom

HENNINGSON: (Int.) I'm basically teaching them to tune into themselves...

...at every moment of the day, you know, just to stop and think, look at the situation, and come up with a plan because if they don't that's when, you know, they're so impulsive and there's just so much going on, it's so difficult for them to focus that things can go wrong.

I mean, you know, at times it's comical, because you just watch things fall down and pages falling all over the place and you're just look at them like- they're looking like I didn't mean to do it; and they didn't.

HENNINGSON: What am I supposed to do? When we have group time Shena, what are we supposed to do? One thing.

SHENA: Listen.

HENNINGSON: We listen. What else?

HENNINGSON: (Int.) We review the rules, we pick a target behavior.

B-Roll: in classroom

KID: You raise your hand every single day.

HENNINGSON: Excuse me. When you're talking to someone, who do you look at?

KID: You.

HENNINGSON: The person who is talking. That's right. We remember to what?

KID: Raise your hand.

HENNINGSON: That's right.

KID: Every day.

HENNINGSON: Every day.

HENNINGSON: (Int.) And throughout the group time, I will remind them about the behavior that we're working on...

B-Roll: in classroom

...because they have to be continuously reminded.

They also had to be continuously reminded that there is a goal and at the end of the day they will achieve this goal. But the immediacy is the tokens.

HENNINGSON: Nice job Shena. Would you go up there please and find me a proper noun.

NARRATOR: Poker chips are given to reinforce positive behaviors. This is most effective when they're given almost immediately.

B-Roll: in classroom

HENNINGSON: (Int.) The main focus is to really encourage them to behave, to do the proper thing...

...I think the misunderstanding with behavior mod is that oh yeah, they're only doing it because they know they're going to get something out of it but it's not true because it works. They do learn to tune in to their own behaviors, to tune in to the proper behaviors.

And to tune in to their own behaviors and accept the consequence for it and learn from the consequence.

NARRATOR: Despite advances in understuanding and managing attention deficit hyperactivity disorder only about one in five children will outgrow the disorder.

B-Roll: in classroom

Those that don't may be vulnerable to a range of problems including difficulties getting through school or holding a job or maintaining relationships.

Others may have trouble with substance abuse and about one in four will develop serious anti-social behavior byh repeated arrests.

BARKLEY: The disorder is one that's very curious because although it seems to have a biological cause to it in many cases, the outcome of the children as they grow older is purely the result of social circumstances, so how well you're doing in adulthood or how poorly you're doing has very little to do with how severe your problems were in childhood or what you're- what you're causes of your disorder are.

Instead it has a lot more to do with how your family chose to deal with your problems, whether they understood that you had a developmental disorder, whether they used a great deal of punishment and control and discipline or whether they were very sensitive to your problems...

...And although they tried to structure your life, they were not overcontrolling and excessively punitive with you.

B-Roll: James & mom doing homework

JAMES MOTHER: Are there enough flowers and vases in the two boxes?

JAMES: No. Yes.

JAMES MOTHER: Okay, do you have to answer yes or no? Probably. It says solve it and use the information.

NARRATOR: The outcome for James is unknown. But his best chance for overcoming his disorder comes from the nurturing and structured environment in which he lives.

B-Roll: James & mom doing homework

JAMES MOTHER: You hear such gloomy pictures out there about all of these children that all of these things could potentially happen to them and a lot of times it does, even with some training or supportive parents but I think monitoring things closely as we do; we monitor the medication; we're looking into programs on a regular basis and I'm closely involved with him and I hope that that combination will help him be successful.

TITLE CARD: DISRUPTIVE BEHAVIOR DISORDERS: CONDUCT DISORDER

NARRATOR: A more violent, disruptive behavior disorder is conduct disorder or CD.

Over title card

Paul was diagnosed with conduct disorder at the age of 14. He was arrested for stealing cars and placed in a juvenile detention center. Dona is Paul's mother.

B-Roll: courtyard with Paul & mom

PAUL'S MOTHER: Did you do what you were supposed to do today?

PAUL: Yes.

PAUL'S MOTHER: Then you were a good boy, right?

DONA: We had a terrible relationship. He didn't feel he could talk to me cause I was nothing but a screaming person and I wouldn't listen.

B-Roll: Paul & Dona going in restaurant

We both had tempers. We'd yell, we'd scream, we didn't get anywhere, we'd just go around in circles. He's get so mad he'd go out break, steal, rob, whatever cause he was so angry.

I'd be tearing my hair out and wanting to strangle him, screaming like a fool, getting nowhere.

PAUL: I used to be selfish, didn't really care about anybody else but me...

...I was having problems with my mom, my brother, when he was here. He'd think he was boss of everything, take anything he want.

And since my mom hadn't seen him for a while, at first he got everything. I mean, he got everything.

And I got really mad and jealous about it and I started getting in trouble and at first it started off just small and it just grew bigger and bigger and bigger and bigger and I ended up just finallygetting taken away from home.

DONA: It was very traumatic. It was hard to see your son in jail at 14. Very hard.

NARRATOR: Conduct disorder behaviors begin to appear in some boys when they were ten or eleven years old effecting one out of 12 boys.

FOOTAGE: Boys getting in trouble

The behaviors include fighting, stealing, destroying property, truancy, and running away.

FOOTAGE: Gangs, car wreck, running, etc.

Psychologist Jerry Patterson of the Oregon Social Learning Center describes a typical child with conduct disorder.

Over Patterson

9-32 top

PATTERSON: A child with conduct disorder is likely to be a boy and he's likely to be pretty unpleasant to be around and in the kind of studies we're doing here, we find that at the core, the inside of this kid, he's essentially non-compliant; that he's sort of like in a castle that he's defending against all comers all the time.

So in addition to the anti-social symptoms that we count up you know, when we're arriving at a diagnosis of the CD case, in- in addition to that, he's failing in almost all the essential things that a kid engages in.

He's rejected by peers; he's failing at school and when those failures go on long enough, then you have an anti-social child who's also sad, he's depressed, he has low self-esteem.

As a matter of fact, if he's really good at his trade, he drags along behind him a whole secondary cloud of miseries, other symptoms.

So he's really a complex kid that's failing at everything he does.

TITLE CARD: CAUSAL FACTORS & TREATMENT

NARRATOR: Conduct disorder has a lot to do with the relationship between child and parent. Although there is evidence of a gneetic element, CD is more typically results from a neglectful, harsh or unstable family life.

Over title card

B-Roll: Paul & mom at restaurant

So the treatment of a conduct disorder must involve the parent and the child.

For example, for the child, as an alternative to juvenile detention, the Oregon Social Learning Center has established a special foster care program.

B-Roll: Parent group

The child lives with these specially trained foster parents for up to six months.

Ideally during that time, negative behaviors are modified through behavior management techniques.

MALE FOSTER PARENT: He always has a lot ot things to talk about and stories to tell. So he's kind of hyper that way but as she said, he did real well.

LEADER: Did he make bedtime last night?

MALE FOSTER PARENT: Sort of. Sort of. Kind of.

CHAMBERLAIN: We find families in the community who are already skilled at parenting...

...and we train them in behavior management skills and we place one child in each home and give them a lot of intensive supervision in a structured program.

NARRATOR: These foster parents meet weekly to discuss the progress of each child with the learning center counselors.

B-Roll: Parent group

KARLA ANTOINE: This kid in some ways kind of has this hat on all of us. It feels like we can't really do anything or it feels like this is a read difficult thing to do. You feel like you're doing all of the work and I think this is where we have to get really creative about you may have to do a lot of work but I think you guys are so skilled at being able to do that and not be irritated with him that I think that's what so hard is to keep that separated.

And somehow I just feel like if we could identify what he's doing and set something up so everybody- that we all know what we need to be doing so that and then keep- let us help support you so that you're not irritated with him. That's the- that's the biggest thing that reinforces this kind of behavior because people get irritated and they give up and they let him get away with it.

MALE FOSTER PARENT: And then we started the incentive of the home visits along with the positive points. I think that's getting his attention. I think he's just slow to- to do that sometimes. So I think with just being consistent with it for awhile longer.

CHAMBERLAIN: These kids usually have gotten by by behaving badly and they have gotten to the point in their lives where that's really all they know how to do.

So we're making very explicit with them what exactly we expect and we're giving them a lot of encouragement along the way.

So each kid has a daily program that's laid out for them that really tells minute by minute what they should be doing and we're giving them points, you might have heard the foster parents talking about points, we're giving them points for things like getting out of bed in the morning, eating breakfast and putting your cereal bowl in the sink. Mundane, kind of normal, everyday things.

But these kids respond in a very positive way to this level of high incentives.

NARRATOR: During the time the child is living in the foster home, the natural parents work with counselors to develop better parenting skills.

B-Roll: Dona in parenting session

CHAMBERLAIN: The natural parents meet every week, once a week, with the therapist and partake in family therapy and basically they're learning the same kind of skills that the foster parent is using with their kid in the foster home...

...What we're doing is teaching them how to supervise their child, how to use effective, non-violent kinds discipline and how to encourage their child to behave appropriately in school and at home and with their friends.

NARRATOR: The major emphasis in the Oregon program is to work with both the child and the parents, combining elements of individual counseling, family therapy and parent training to try and develop a more stable family structure.

B-Roll: Dona in parenting session

MIKE'S MOTHER: Mike used to be in control. When things first went bad and now I'm back in control. I'm the mom. And it used to be that I would cry and he wouldn't.

And now when he gets upset, he cries and I don't. I am in control now. If it wasn't for the points system, and learning how to do that I wouldn't know how to be a mother. I didn't know how to be a mother.

PATTERSON: The way we talk about kids and parents would aways have little arrows going from the parent, to the kid. Now, you know, so the parent does something and that changes the kid.

But in point of fact, there are longitudinal studies are showing the arrows going both ways which simply means that the kid is also impacting the parent.

So if- if you've got a boy 9, 10, 11 years of age that you let get somewhat out of control, they- they push you very hard so that you become more and more physical, more and more negative, more and more authoritarian. You really look terrible and it's not that you started that way but this stuff going back and forth over time, you come out looking like a real heavy over here and you are, you're hitting the kid.

You know, you're trying to put him down on the floor to keep him from growing up sometimes when you really get ticked off. He also looks bad but you both put each other there over a long period of time.

So in the kind of stuff that Patti is doing and Marion, in these groups are training parents, okay, you're both up here, you're really angry and you're frightened of each other, how do you get it down here were it is with most of us? We fight a little bit but not like that.

It takes a long time to do that, like months; it's not a weekend therapy.

NARRATOR: Untreated conduct disorder can have an impact not just on the child and his family but on the community as a whole.

FOOTAGE: courtroom scenes

Studies indicated that between 50 and 70% of juvenile crime is committed by young people with conduct disorder.

LAWYER: His prior school history indicates that there is a prior history of truancy and the fact the he was a runaway problem.

CHAMBERLAIN: Kids who are seriously conduct disordered and don't get out of that pattern...

...there are a lot of longitudinal studies show that the prognosis for them in adulthood is pretty grim.

They're incarcerated more often; they have more traffic accidents; they're divorced more often; they don't hold down jobs. All of their relationships are unstable; they end up in mental institutions. Just about every bad outcome you can think about these people have.

NARRATOR: After six months of living with his foster family, Paul was allowed to return to his mother.

B-Roll: Paul & mom in restaurant

Both believe that they are different for having undergone this experience.

DONA: (w/Paul) It's not a bad report. You're behavior's good. Little behind on homework for being sick. But if we do it, we're okay, I think.

DONA: (Int.) We're able to communicate a whole lot better and get along better and, you know, just be able to talk it out...

...work it out one way or another without the screaming and without him feeling he has to go rob a house, you know, cause he's so frustrated.

PAUL: She- I mean, she understands a lot what I say. And she don't- she don't like get all uptight and say that's not true, and lie, and stuff like that. Basic, typcial mom.

TITLE CARD: EMOTIONAL DISORDERS: SEPARATION ANXIETY

NARRATOR: There are several emotional disorders of childhood. One of the most common is separation anxiety disorder.

Over Title card

Of course, it is normal for all children to experience the pangs of separation from a loved one but a child's inability to eventually overcome those feelings is not normal and is considered an emotional disorder.

DRAWING: Baby reach out of playpen
CU mother going out leaving kid
Mother looking down at kid hanging on; pan down to kid hanging on

About 3% of children are likely to actually have separation anxiety disorder at some point in their lives.

DRAWING: boy with teddy; pan out

JONES: With separation anxiety, we're talking about a child who almost, every minute of every day, has extreme anxiety, extreme fear, thoughts of being separated from mom, thoughts of loved ones being injured or hurt. And this is not an isolated incident.

These children- if these symptoms persist for a period of time, these children are very likely to be labeled or diagnosed as separation anxiety.

AMANDA: The feelings are hard to explain cause they were just kind of like butterflies through your whole body and in your stomach mostly. And I just felt like I don't want to do this; I don't want to do this; don't make me do this; I don't like doing it; I don't want to. Please don't make me go.

And I was always upset and crying when I didn't want to do something. And it was just difficult to do everything.

NARRATOR: This is Amanda. She was diagnosed with separation anxiety disorder several years ago. She was extremely uncomfortable being separated from her mother and over a period of time this generalized to many situations.

B-Roll: Amanda & mom in Klein's office

She never wanted to go to school, a restaurant, a movie, even a friend's house.

For the past three years Amanda has been under the care of Dr. Rachel Klein.

KLEIN: Separation anxiety becomes abnormal when it interferes with the kind of behaviors that are expected from each child of that age...

...Not so much so much that it shouldn't occur but it occurs to a degree that really impairs the child's well-being.

LINDA: She was always cautious about everything she did, you know. Everything. Again, after awhile when you start realizing- when you look back on the things that she use to do, when you realize they weren't such normal things.

If we went into a restaurant that was downstairs, she didn't want to go in and I never knew why because she felt closed in, and it would make her nervous and uneasy.

Going on vacation, even though we were together, was a horror beccause she was away from home. I mean, we went to Disneyworld and Disneyworld was a nightmare for her.

She was afraid of everything. She was afraid of the ferry, she was afraid of the tram, she was afraid of everything.

NARRATOR: Because the symptoms of separation anxiety are not always consistent from one child to another, a diagnosis can be difficult to make.

B-Roll: Amanda & mom in Klein's office

Some children experience the feelings on anxiety but never show it or act on it.

Other child behave very differently.

CU Amanda

KLEIN: The child with separation anxiety can have only, let's say, worries, and not show any evidence of- of it in his behavior.

So a child could have a great deal of concern about the welfare of his parents, where they are, something happening to them, etc., go to school, do everything that he or she is supposed to do but be miserable in the process or be uncomfortable. And there are degrees from mild discomfort to very severe discomfort.

On the other hand, there are children with separation anxiety who become dysfunctional and who then refuse to experience the kind of separation that we take for granted in children of their age, such as going out to play with your friends, sleeping over at children's houses, letting the parents go out for the evening, staying with relatives, even going on a trip sometimes where you go away from home, etc.

KLEIN: (w/Amanda) And how did it stop you from doing things that you wanted to do or should have done. Those feelings that you describe.

AMANDA: I- they- they were just so strong that I couldn't do anything. I'd just break down in crying and I couldn't go.

KLEIN: And so what did you do?

AMANDA: I would just- I would say mom, please don't let me go. And most of the time she'd make me do it even if I didn't want to.

TITLE CARD: CAUSAL FACTORS & TREATMENT

NARRATOR: Many psychologists believe that separation anxiety has adaptive value in the evolutionary process.	over title card
That in fact, it helps to insure survival of the species.	DRAWINGS: WS mother leaning over crib
When the infant is helpless and needs parental care, its jolting awareness of loss causes anxiety that leads to crying which brings the parent back to help.	CU: baby in crib CU: mother, pan down to baby

But what explains the more intense fears of a separation anxiety disorder.

Parental behavior is one possiblility. Children who have experienced an unpredictable, unavailable, or rejecting parent have been observed to be prone to more intense separation anxiety.

Man reading paper

Pan left to baby in playpen reaching

In addition, parents who become anxious when they have to leave the child may inadvertently teach the child to model their own anxiety.

Parents going out for evening
Pan left to kid on sitters lap
CU: Parents faces

Learning theory would explain the development of separation anxiety by suggesting that it is reinforced by its aftermath.

CU: girl hanging on leg

Out to mother with kid hanging on leg

A mother hastens back to the child that has had separation anxiety and the child learns that anxiety is a useful tool in getting what it wants.

Experts also generally agree that some children are simply tempermentally different from birth and more prone to anxiety.

CU: Baby in playpen reaching
Pan right and out to WS of baby and dad reading

Sometimes these tempermental differences can cause parents to react negatively. This can then increase the separation anxiety.

CU: Newspaper dad's reading
Pan up to CU dad

But parentaly behavior is not the only explaination. Traumatic childhood events, a long illness, a death in the family, even an extended parental vacation, may separate the child from a loved one and exacerbate normal childhood fears.	CU: Boy looking out window at ambulance Pan right to all of ambulance WS boy looking out window at ambulance
Some psychodynamic theorists see children's unconscious anger at their parents at the heart of separation anxiety disorder.	CU Body and teddy in bed Pan our to WS
The angry wishes can become so intense that children fear the parent will actually die or go away.	
Others, such as those of the object relations school, view separation anxiety as arising from the child's fear that it cannot relieve it's own pain.	CU girl handing on leg Pan up to CU mother
That separation from a loved one will literally cause anhiliation from the self.	
Whatever causes separation anxiety disorder, it always requires attention and treatment.	B-Roll: Amanda & mom in Klein's office
Treatment for separation anxiety disorder can involve traditional play therapy, family therapy in which the whole family system is investigated plus traditional exposure therapy which involves a supervised step-by-step process of encouraging the child to confront the situations that create anxiety for her.	GRAPHIC STILL: ADD: Play therapy ADD: Family therapy ADD: Exposure therapy Unstill frame

This was an important part of Dr. Klein's therapy with Amanda.

CU Amanda

KLEIN: And that essentially helps the child learn that in a situation of separation, he's okay. Because what happens in these children is that they're afraid to be away from their parents and then they develop the fear when they are- when they're not separated. That once separated, something terrible will happen so that the actual experience of being without their parents is corrective in many cases.

But just talking about how bad you feel, in my experience is not.

...Parent's aren't trying to keep their children with them. What they do really, what seems to be more typcial to them is that they can't bring themselves to inflict pain on their child...

Over Amanda & mom

So when their child doesn't want to separate, they can't sort of say tough but that's the way it's going to be. They plead, they reason, they- they lose it.

But I have yet to see a mother who was resentful of the progress that her child had made. And if she was the one hanging onto the child, she should really be resentful of the fact that the child is cured and I've never seen a mother destroyed by that.

KLEIN: (w/Amanda) Do you have sleepoever dates where you do to other kids houses?

AMANDA: All the time.

KLEIN: All the time?

AMANDA: Yes.

KLEIN: Is it fun?

AMANDA: A lot of fun.

KLEIN: Yes.

AMANDA: Yes.

KLEIN: Okay, I won't ask you what goes on.

LINDA: Don't ask.

TITLE CARD: DEVELOPMENTAL DISORDERS: AUTISM

NARRATOR: This is Wesley. He has autism, a profound developmental disorder.

B-Roll: Wesley & mom on couch

TEACHER: What's that word?

CARLEY: Thesaurus.

TEACHER: Let's see if that fits in. Read it for me.

CARLEY: I can't.

NARRATOR: Carley is another child with autism, although her condition is much less severe.

B-Roll: Carley & teacher

Autism is a perplexing disorder, not just for people with autism and their families, but for psychologists and researchers as well.

Typically, autism involved three different symptoms. The first is a lack of responsiveness to other people.

VIDEOTAPE: Callum/Ryan tapes

For example, this young boy is seemingly unconcerned that his father has left the room.	Callum just hanging out
A more normal response in a child his age is likely to be this, fierce crying until the parent returns.	Ryan crying because dad left
The second symptoms of autism is impaired communication skills, both verbal and non-verbal.	Wesley on couch w/mom
Many children with autism, like Wesley make apparantly meaningless sounds; others repeat words and phrases.	
The third symptom is that children with autism have a limited number of stimuli. Some may sit and stare for hours, rocking back and forth endlessly.	B-Roll: Classroom
Some prefer a rigid sameness in their activities and do not respond well to changes in their lives.	Wesley & mom on couch
It is the hallmark of autism that all of these types of symptoms appear very early in a child's life, often within the first 30 months, and they may range from mild to severe.	Callum not watching as people throw things at him
Most experts agree that what is common to all people with autism is that the disorder is organic in nature.	Over Carley in classroom
Anne Donnellan has written about and researched autism extensively.	Over Anne

9-13 top

DONNELLAN: Autism is a tremendous deficit, a profound deficit in two way social interaction and communication.

There probably isn't anything more profound as a deficit because most of us come neurologically hot-wired as infants to learn about social information through our parents or the person in the parenting role. And that early interaction, that tuning, that wonderful dance that goes on between the parent and the child teaches the child essentially everything that they need to know about being social competent in a particular culture...

...Some how these kids don't seem to be able to do that and you end up with somebody who's kind of two dimensional, doesn't have depth and the richness which makes for being a social human being...

B-Roll: Wesldy

...Out of that you not only have somebody who has language problems and social problems and lots of things that may or may not come as part of the package but probably do but you have somebody who doesn't understand the effect of their own behavior, doesn't understand what communication means, even if they had words, don't always understand how those words can effect other people and just an awful lot more than that.

NARRATOR: One of the problems in recognizing autism in a child is that in early life, the symptoms can be extremely subtle.

VIDEO: Callum being shown blocks

Yet to a trained eye, they are present. Dr. Donnellan recently videotaped two young boys; one of them, Callum, was suspected of having the disorder. The other, Ryan, is a child with more normal behaviors.

VIDEO: Ryanplaying with stuff

DONNELLAN: Because kids with autism look so good in infancy, they very seldom get diagnosed early...

...And what we did was try to demonstrate some of the things that we see in the older kids as, even on into adulthood, that seem to be inadequate or seem to be impaired in some way and because we're comparing him in these films to a normal child who's just slightly younger, who is not yet talking, it's pretty dramatic. You can see it...

...He looks pretty good in some of the scenes, for example, when you- when you see him with the shaving cream on his hands, it's not that he's ignoring it, he's paying attention. It's that single stimulus kind of thing. He's paying attention to that.

Callum paying attention to shaving cream

When he pays attention to that shaving cream, that's all he pays attention to. The fact that his father is a foot away or his mother's right next door and somebody else is there, he's just oblivious to that.

He looks pretty good however, until you see the other child, Ryan...

...who gets the shaving cream, is also delighted with it, but immediately turns around to show mom, immediately incorporates everybody in it and he gets to be the star of the show which is his- his major function at that age...

Ryan playing with shaving cream

...What is devastatingly clear to me watching Ryan and comparing him to Callum is that Ryan who I think in an hour's worth of film that we did probably has a word or two in it, but essentially isn't talking yet, has all the communication he needs.

He's doing fine so when the language drops in or the communication drops in, it's- it's- it's like computer programmed perfectly for it, whereas Callum...

...in the same situations, while he attends and he cooperates and he does very well, he doesn't know how things happen. It's all rooted in just one experience at a time. Seemingly...

People cleaning off Callum

...And then in the scene where he- his parents leave, in both cases the parents leave the room...

...Callum is clearly concerned, he gets- goes from where he is over to the person who's filming and because he sees trousers...

Callum walking around room

...I think he thinks it's his dad; he's- he shows concern. He wanders around looking for him but there's no change in his expression, essentially.

Whereas in Ryan, in ten seconds, it goes from oh no, they're not really leaving me to you've got to be kidding to oh my God, they're gone and he's crying and as soon as they come back in, he's comforted and he's fine. It's all there...

Ryan crying for his father

...in those tapes. You can see the essence of autism, the inability to understand means and ends, causality, how to make things happen, how to make them happen again. The all the kind of investigatory behaviors, the- and most importantly of course, the use of other people to make the whole thing work for them, the depth and the richness of it. It's real painful to watch.

TITLE CARD: CAUSAL FACTORS & TREATMENT

NARRATOR: Since autism was first described, several theories have been put forth to explain this disorder.

B-Roll: Carley reading

DONNELLAN: For 15-20 years, typically people blamed the parents in one way or the other, either directly or indirectly for causing the autism which caused tremendous tragedy.

B-Roll: Carley & dad reading

And it was hard enough to have a child with tremendous needs but to be blamed for it and nobody being able to tell you what you did, you may not meant to do it but you did it and it was just awful cycle that was most unfortunate cause there were no data to support that.

I'm sure anybody who is knowledgable in the field believes it's an organic cause...

...I mean you couldn't be around these kids and not know because that what happened was that breakdown that we blamed on the parents was not because of the parents' inadequacy but because of the child's inadequacy. He didn't bring his part to the dance.

NARRATOR: Like many children with autism, Carley is able to live a very functional like at home.

B-Roll: Carley & family

The first hurdle was her parents' willingness to accept her disorder.

KATHLEEN: We really focus on what she can do rather than what she can't. When she was first diagnosed, I feel like I went through all the steps of grieving that I did when my father died. I was really angry, why was this happening to me. Why her? That was the big thing, why her?

And, you know, the denial. Just how- how can this be happening, how can I have a child with a diability and then gradually accepting it.

GARY: She looks at the world just a little different than we do in some ways. Sometimes I think her though processes are different. I'm not exactly certain about that. There's nothing I can show you. It's just when you talk to her, it seems like you can see the wheels grinding sometimes and the process is a little different than ours.

KATHLEEN: There are just so many things that she can do and it doesn't really bother me that she might act a little differently than some children...
B-Roll: Carley & family

B-Roll: Carley & family

...So I think- we've always loved her the way she is. We don't love her in spite of the fact that she has autism but because she is the way she is. I know that if there were a cure found tomorrow, we'd certainly have it given to her but...

...our lives aren't in despair because of our situation. We think we have it pretty good.

B-Roll: Carley & family

NARRATOR: Treatment of autism must be matched to the severity of the behavior.

B-Roll: Carley in school with teacher

Carley is fortunate because her autism is moderate enough to allow her to be mainstreamed into a school district where she lives.

Nancy Negri is the district coordinatorfor Carley's program.

9-11 @ 4:00

NEGRI: She would fall into the range of people we would call more able individual's with autism...

> I- I think her autism is fairly classic. It looks, you know, to be that way. Her clearest problems are in the area of speech and language but she doesn't have any of the severe kinds of acting out behaviors that other kids have.
>
> She does have lanaguage; she can use language to communicate. It's still not as easy for her but it's there which is not something that is true for all kids with autism...

But what we know about those kinds of students is that they can continue to progress and learn academically...

B-Roll: Carley in classroom

> ...I've worked with and supported a number of students who, in fact, have gone on to junior college. They still need support at that level. They need some help, espeically with, you know, in the area of social skills and sometimes, some adeptations for the academics when it's a real lecture kind of format. But they certainly have that potential...

...We know people who have Ph.D.s and also have autism.

B-Roll: Carley in classroom

NARRATOR: If Carley is a child whose autism would be considered mild to moderate, Wesley is in the more moderate to severe end of the spectrum.

B-Roll: Wesley

Because of his inability to communicate in any meaningful way, Wesley was assumed to be retarded.

But advances in the understanding of autism now raise some questions. Are these people lacking in intelligence or are the simply unable to communicate in ways that are understandable or is it both?

9-13 93 1:00

DONNELLAN: Well, this is a magical moment in time in some ways because if you had asked that question a year ago, I would have said that the literature tells us and my experience tells us- tells me that most people with austim, certainly 75%, have the additional problem of mental retardation.

I'm not saying that isn't true. I'm saying we don't know what that means any more because many of the young people with autism and young adults with autism who have been given a visual, a written word, means to communicate are demonstrating that they have a fairly good symbolic ability, that they're much more aware of what's going on than they ever gave any indication of from their affective behavior or from their- from their observable behavior and that they can use the written word to communicate when nobdy ever taught them to read.

NARRATOR: The method of communicating is a small, electronic keyboard that is able to display typed messages. A device often used by people who have lost their ability to speak.

B-Roll: Keyboard device

In this videotaped session in Wesley's home, he was able, over a period of time, to communicate his thoughts to the outside world.

B-Roll: Wesley typing out message

For example, when he was asked what he would like people watching to know, he typed this message:

I go to biology ...

ENHANCED: I go to biology.

The biology course he refers to is a high school level program in which he excels.

The remarkable fact about this is that Wesley was never formally taught to read or write.

B-Roll: Wesley typing

Somehow he was able to learn on his own.

DONNELLAN: No one knew he could read even one word and now we have somebody who is typing out with one finger, messages quite clear and quite coherent to his mother and to other people.

We don't know what all that means and so far every young person with autism with whom it has been tried that I know of, they've been able to do something and things that we didn't even know they could do so I don't know what it means and everybody's just sort of saying oh my goodness, what is this phenomenon?

I don't believe that it's the magic key. I think it is a communication device but they still need to learn all the other things they need to learn just like Carley who has reasonably good language for a person with autism still needs to learn all the rest.

NARRATOR: Only a small number of children with autism have had an opportunity to use the communicator.

B-Roll: Wesley with communicator

As Dr. Donnellan suggests, there is much that remains unknown about autism.

New insights are being made as a result of breakthroughs like Wesley and other like him using a communicator or from children like Carley who can maintain a high degree of independent living when given the proper structure.

B-Roll: Carley & family

DONNELLAN: I've never seen a person with autism or any developmental disability given the reasonable supports who couldn't be maintained in the community.

Even the most physically fragile kids, you know, on- on total life supports can- can be maintained in the community if the right support is there. In autism, it's- it's far simpler than that.

We know what people need. If the supports are there, they can have jobs; they can have relationships; they can be in the community. They're going to need help.

I mean, they're going to need all kinds of help from just those people who need, you know, to make sure somebody else watches over their shoulder when they're signing contracts to those who need a lot of help in managing their everyday lives.

But given the right supports, every person with autism can live, work, and recreate, as a more fully functioning person in their community.

It's cheaper, it's better, it's more humane, and on a very personal level, I figure that one day I'm going to join the group of the disabled if I live long enough. I'd like to have a society that treats people better than we have historically treated people with autism.

TITLE CARD: SUMMING UP

NARRATOR: We have concentrated in this program on those children who show dysfunctional behavior.

B-Roll: James in testing room

It's important to remember however, that not all such behavior is symptomatic of deep abnormal problems.

B-Roll: Amanda in office
B-Roll: Wesley on couch
B-Roll: Paul and mom

Dr. Jones:

JONES: Certainly there are norms but I think...

...it's important to know that children deviate from the norm and when children deviate from the norm, that doesn't necessarily mean psychopathology; it doesn't necessarily mean underlying emotional disorder. It could simply mean developmental lag; it could mean the child simply isn't ready to talk.

And that with proper nurturants, with proper reinforcement, patience on the- the part of parents, change agents, this child is very likely to develop into a great child, very likely to develop into a very normal, appropriately functioning individual.