

Discovering Psychology: Updated Edition

21 Psychopathology

- 1 01:00:14:23 >> I started hallucinating after I'd wake up...
- 2 01:00:16:16 >> ZIMBARDO: What is mental illness?
- 3 01:00:19:18 What causes it?
- 4 01:00:21:08 Is it the result of early life experiences?
- 5 01:00:26:12 Or is it caused by something in our genetic makeup?
- 6 01:00:31:28 How can the study of twins help us better understand mental disorder?
- 7 01:00:38:04 "Psychopathology," this time on *Discovering Psychology* .
- 8 01:01:14:11 (*man babbling*) >> That's good.
- 9 01:01:20:21 Just take that deep breath.
- 10 01:01:23:07 That's good.
- 11 01:01:24:01 We're going down one more step.
- 12 01:01:27:03 >> I don't think anybody can help me.
- 13 01:01:30:11 >> Have you felt like this before?
- 14 01:01:35:17 >> ZIMBARDO: Schizophrenia, agoraphobia, depression -- these are just a few of the hundreds of ways in which the brain and mind, our greatest attributes, can turn against themselves.
- 15 01:01:46:11 Because we can love, we can be jealous.
- 16 01:01:49:05 Because we can remember the good, we can recall the bad and dwell on it.
- 17 01:01:53:11 Because we can think about the future, we can fear its uncertainties.
- 18 01:01:57:19 It's as if each coin of the psychological realm has one side that mocks and demeans the other.

- 19 01:02:04:26 >> They referred you here from the satellite clinic.
- 20 01:02:06:17 >> ZIMBARDO: Psychopathology is the study of mental disorders.
- 21 01:02:10:13 A mental disorder is defined as a clinically-significant behavioral or psychological syndrome or pattern that occurs in an individual and that is typically associated with either a painful symptom or impairment in one or more important areas of functioning.
- 22 01:02:28:05 What's the extent of such disorders?
- 23 01:02:30:23 Several long-term studies reveal that about one out of every five Americans, 20%, suffer from some form of recently-diagnosed mental disorder.
- 24 01:02:41:18 That's tens of millions of people in the United States alone.
- 25 01:02:45:03 >> You're not going nowhere at all.
- 26 01:02:47:15 >> ZIMBARDO: And these statistics may underestimate the problem.
- 27 01:02:50:21 If we're going to help people with mental disorders, the first thing we have to do is identify them.
- 28 01:02:56:26 Just having problems isn't enough to classify someone as having a mental disorder.
- 29 01:03:01:27 We all have problems.
- 30 01:03:03:09 Instead, a person's functioning has to be clearly abnormal.
- 31 01:03:07:10 Not that the person is abnormal, but that some aspect of mental or behavioral functioning is off base.
- 32 01:03:14:08 This judgment is made by observing the person's behavior or analyzing scores on diagnostic tests or evaluating reports by the person or by people who know him or her.
- 33 01:03:27:19 Mental health specialists are trained to make these kinds of judgments.
- 34 01:03:31:29 They include clinical psychologists, who have PhDs in psychology; psychiatrists, who are also medical doctors; and psychoanalysts, who specialize in using Freudian techniques in their therapy.

- 35 01:03:46:00 >> I wonder if you could tell us a little bit more about that.
- 36 01:03:48:14 >> ZIMBARDO: These specialists then determine which of the following criteria of mental disorders are met by an individual.
- 37 01:03:53:18 Is he or she suffering?
- 38 01:03:55:06 Acting in ways that work against personal well-being?
- 39 01:03:58:12 Creating discomfort in others who feel threatened or distressed by his or her behavior?
- 40 01:04:06:19 Other criteria come into play for more severe disorders, such as schizophrenia.
- 41 01:04:11:12 Does the person act or talk irrationally, behave unpredictably from situation to situation?
- 42 01:04:17:27 Is his or her appearance or actions extremely unconventional?
- 43 01:04:22:11 The key here is a matter of degree -- how much and how often a person's behavior matches these criteria.
- 44 01:04:29:25 We need to classify mental illnesses for several very practical reasons.
- 45 01:04:34:09 First and most importantly, because knowing what type of disorder a person has helps us to plan an appropriate treatment.
- 46 01:04:44:08 Second, for legal reasons -- the courts may use psychiatric diagnosis to assess whether a person is competent to stand trial or to manage an estate.
- 47 01:04:54:22 Third, for research purposes -- to study different aspects of psychopathology and to evaluate treatments.
- 48 01:05:02:17 And fourth, for economic reasons -- to provide payments by insurance companies and health plans for certified cases of mental disorders.
- 49 01:05:13:11 Of course, madness has been a part of the human condition from the very beginning.
- 50 01:05:18:16 Prehistoric skulls, like this one, have been found with holes drilled into them.

- 51 01:05:24:03 Some experts believe that these holes were a primitive attempt to release demons from within the brain.
- 52 01:05:30:10 Until recently, the mentally disordered were perceived almost as animals -- to be tortured, chained, and exhibited to a curious public -- or lumped together with society's other problems, the poor and the criminal.
- 53 01:05:43:29 Not until the 18th century were people with psychological problems finally seen as sick.
- 54 01:05:49:11 It was a great French physician, Philippe Pinel, who first wrote, "The mentally ill, far from being guilty people deserving punishment, are sick people whose miserable state deserves all the consideration that is due to suffering humanity."
- 55 01:06:04:28 But such enlightenment was rarely shared by the public and the state.
- 56 01:06:09:22 Moreover, the label of madness was often extended to anyone who challenged the status quo or was different.
- 57 01:06:16:11 The French impressionists, for example, were initially called crazy.
- 58 01:06:20:20 In more recent times, political and religious dissidents in the Soviet Union have been incarcerated in mental institutions.
- 59 01:06:28:01 This medicalization of deviance was also used to justify the treatment of slaves in this country.
- 60 01:06:34:18 Blacks were said to suffer from a sensory disease that made them insensitive to pain when being punished.
- 61 01:06:40:22 And it was also claimed that they suffered from a strange, new disease: drapetomania, the obsession to seek freedom.
- 62 01:06:50:01 One vocal critic of mental diagnosis, psychiatrist Thomas Szasz, argues that mental illness is, in fact, a complete myth.
- 63 01:06:58:17 He sees the symptoms of mental illness as mere excuses for authorities to repress people who are different, who violate social norms.
- 64 01:07:07:03 According to Szasz, there is no underlying mental illness in these people at all; only medical labels used to justify their

repression.

- 65 01:07:16:04 It's an extreme position, rejected by many, but a provocative one that forces us to reexamine our assumptions about what's normal and what isn't.
- 66 01:07:27:29 A different kind of criticism, but one that's just as provocative, has been leveled by David Rosenhan of Stanford University.
- 67 01:07:36:13 >> Between 1969 and 1972, a group of colleagues and I gained admission to psychiatric hospitals by simulating, by faking a single symptom, which was that we said that we heard voices.
- 68 01:07:51:07 And the voices said, "Empty, dull, thud."
- 69 01:07:56:23 The moment we were admitted to the hospital, we abandoned our symptom and we behaved the way we usually behave.
- 70 01:08:04:10 The question was, would anyone detect that we were sane?
- 71 01:08:08:06 The answer was no, no one ever did.
- 72 01:08:12:19 Admitted with the diagnosis in the main of paranoid schizophrenia, we were discharged with the diagnosis of paranoid schizophrenia in remission.
- 73 01:08:22:26 Now, in remission doesn't mean quite the same thing as sane.
- 74 01:08:28:10 The term we used to describe the experience is dehumanized.
- 75 01:08:33:21 Nobody talks to you.
- 76 01:08:35:22 Nobody has any contact with you.
- 77 01:08:38:07 The average contact of patients with staff was about six-and-a-half minutes a day.
- 78 01:08:45:26 Nobody comes to visit.
- 79 01:08:47:25 The first time I was in a psychiatric hospital, on an admissions ward with 41 men, my wife constituted four of the seven visitors on a weekend.
- 80 01:09:00:29 Psychiatric hospitals are storehouses for people in society

who you really don't want, who you really don't understand, and for whom you've lost a great deal of sympathy.

- 81 01:09:15:20 Staff need constantly to be reminded, and it's very hard to remind them.
- 82 01:09:20:17 They are, after all, doing their best on the front end.
- 83 01:09:23:22 But they need constantly to be reminded that the people who are their charges are not merely collections of symptoms; they are people with spouses, with children, with parents, with jobs, with mortgages and bills to pay.
- 84 01:09:42:10 That they are, in the fullest sense of the word, very human and very unhappy.
- 85 01:09:48:12 >> ZIMBARDO: The lesson of David Rosenhan's experiment is that virtually anyone can be diagnosed as mentally ill depending on the situation.
- 86 01:09:57:01 But that doesn't mean that mental disorders are just figments of society's imagination.
- 87 01:10:01:21 Far from it.
- 88 01:10:03:07 There is real suffering involved.
- 89 01:10:05:13 Three of the major types of mental illness account for an estimated 25 million cases in the United States alone.
- 90 01:10:13:23 They are anxiety disorders, such as phobias; affective disorders in which the primary symptoms are disturbances in mood, such as depression or mania; and schizophrenic disorders.
- 91 01:10:27:11 Anxiety disorders have three common features: physical symptoms of arousal, including increases in heart and respiration rates, dizziness, and muscle tightness; feelings of tension, tremors, and shaking; and intense apprehension that something bad is about to happen.
- 92 01:10:47:17 Our anxieties become phobias when we suffer from persistent and irrational fear of a specific situation or object, such as the fear of heights.
- 93 01:10:58:10 This fear is totally out of proportion to the real danger.
- 94 01:11:04:09 While some researchers think the disorder is organically

based, Freud studied anxiety as one of the symptoms of neurosis.

- 95 01:11:12:18 For Freud, the neurotic individual is unaware of the relationship between his or her symptoms and their underlying causes because they represent unresolved infantile conflicts that have been repressed.
- 96 01:11:26:00 It's important to realize, however, that there is no clear dividing line between the neurotic and the normal in Freud's theory; they are simply parts of the same continuum of functioning.
- 97 01:11:36:22 The difference is just one of degree.
- 98 01:11:40:06 Another related class of mental illness is what's known as affective disorders, from which the great Dutch painter Vincent Van Gogh suffered.
- 99 01:11:49:09 His paintings are a visual record of the illness, revealing great disturbances of mood, with excessive elation called mania or deep depression or both.
- 100 01:11:59:28 During a manic episode, a person is full of boundless energy, optimism, and grandiose ideas, taking needless risks and promising anything.
- 101 01:12:11:15 Almost always, a manic person also experiences periodic episodes of depression.
- 102 01:12:16:14 He or she becomes drained of energy and is filled with feelings of sadness, guilt, and failure.
- 103 01:12:23:19 Depression has been characterized as the common cold of psychopathology.
- 104 01:12:28:08 In its milder forms, it is experienced by almost everyone.
- 105 01:12:32:06 When it becomes extreme and chronic, an individual may require drug therapy or hospitalization.
- 106 01:12:39:02 The term "neurosis" is no longer used by psychologists and psychiatrists as a diagnostic category for affective disorders or chronic anxiety, because it's considered too general and imprecise.
- 107 01:12:51:00 On the other hand, it's a term that's generally understood by almost everyone in our society, which makes it especially

- useful in making the contrast between it and psychosis.
- 108 01:13:05:27 As this artwork by psychotic patients shows, people with psychotic disorders suffer from impaired perception, thinking, and emotion.
- 109 01:13:15:19 They lose touch with reality and require intensive treatment and often hospitalization.
- 110 01:13:25:21 A major subclass of psychotic disorders is schizophrenia -- full-blown madness.
- 111 01:13:31:27 Schizophrenic disorders strike about one percent of the world's total population.
- 112 01:13:36:20 Less than a third improve with treatment.
- 113 01:13:39:15 Of the rest, half are sick on and off throughout their lives, and the other half never improve.
- 114 01:13:46:12 The symptoms include a break with reality, delusions of grandeur, false beliefs, intense jealousies, and hallucinations.
- 115 01:13:54:29 (*man speaking nonsensically*) >> Are you comfortable with your shirt back on?
- 116 01:14:00:29 >> Yes.
- 117 01:14:02:00 >> ZIMBARDO: Researchers use psychological and also biological approaches to study schizophrenia.
- 118 01:14:08:21 Researcher Dr. Fuller Torrey...
- 119 01:14:11:16 >> Basically, what the biological theory says is that schizophrenia is a brain disease, just exactly like Alzheimer's disease, like multiple sclerosis, like Parkinson's disease.
- 120 01:14:20:15 Something gets in the brain, changes the chemistry in the brain, and therefore the brain does not function normally.
- 121 01:14:25:26 It therefore becomes a disease, like diabetes.
- 122 01:14:28:20 It's simply a disease of the body, except the brain is the part of the body that's affected.
- 123 01:14:34:14 >> ZIMBARDO: One biological factor that can predispose a person to mental illness is genetics.

- 124 01:14:40:04 Genes that are passed on in some families can adversely affect parts of the nervous system.
- 125 01:14:46:19 Abnormalities in the structure of the brain caused by tissue damage may also play a role in mental disorders, as may hormonal imbalances.
- 126 01:14:56:22 Irving Gottesman of the University of Virginia is a leading expert on the genetics of schizophrenia.
- 127 01:15:04:18 Research with twins has convinced him that there's a genetic transmission path for some forms of schizophrenia.
- 128 01:15:12:07 >> We knew that genes were somehow involved in the causing of this kind of mental illness called schizophrenia.
- 129 01:15:20:17 But we couldn't fill in the details.
- 130 01:15:22:23 >> This is one of the early sets of twins, with some of the more marked differences on the ventricle.
- 131 01:15:28:13 You can compare the sick one here...
- 132 01:15:30:17 >> ZIMBARDO: To fill in the details, Gottesman is collaborating with Fuller Torrey on a unique, ongoing study of identical twins here at St.
- 133 01:15:37:25 Elizabeth's Hospital in Washington, D.C.
- 134 01:15:42:07 >> The goal is to try to see what is there about the brain of the schizophrenic twin that is different from the brain of his or her identical co-twin, where the co-twin does not have schizophrenia.
- 135 01:15:56:00 >> We're bringing in 60 sets of twins from all over North America to study schizophrenia.
- 136 01:16:02:14 In 30 sets, one has schizophrenia and the other does not.
- 137 01:16:06:26 And 20 sets, both have schizophrenia.
- 138 01:16:09:19 And in 10 sets, which are the normal controls, neither one has schizophrenia.
- 139 01:16:14:01 Basically, what we're doing is we're measuring brain structure and brain function in these identical twins.
- 140 01:16:21:07 And the reason we're doing this is because in identical twins in which one has the disease and the other does not,

whatever the disease is that the one has is by definition non-genetic, because they started out with the same genes.

- 141 01:16:36:23 >> ZIMBARDO: Sally and Sue are one of the discordant pairs in the study.
- 142 01:16:41:07 Sue, on the left, has schizophrenia.
- 143 01:16:44:02 Sally does not.
- 144 01:16:45:27 Like the other twins, they came to Washington for a week of intense medical and psychological testing, including magnetic resonance imaging of the brain, blood tests, and in- depth interviews with Torrey and staff.
- 145 01:17:00:11 These pictures were taken of the twins during their tests at the hospital.
- 146 01:17:05:20 Their parents were also interviewed about the twins' childhood.
- 147 01:17:13:16 One new technique Torrey and Gottesman are using to study the brain is called SPECT analysis.
- 148 01:17:20:17 >> Here we are interested in the way the blood flows to the brain when it's working on solving different kinds of problems.
- 149 01:17:29:21 While they're in that particular piece of apparatus, they're being exposed on a TV screen to different problems which they have to solve mentally.
- 150 01:17:40:08 And as they solve these problems, the blood going to different parts of their brain will take on different appearances, and we can record that with this device.
- 151 01:17:54:03 >> In those twins where one is schizophrenic and the other is not, in every case so far we've been able to visualize differences; to actually see differences in the brain, especially on the MRI, the magnetic resonance imaging.
- 152 01:18:08:18 We see, for example, the person who has schizophrenia will have larger ventricles in the brain.
- 153 01:18:16:12 The ventricles are the spaces in the brain that carry the fluid through the brain.
- 154 01:18:21:06 These are identical twins.

- 155 01:18:22:07 The twin on the right is relatively normal.
- 156 01:18:25:21 The fluid-filled chambers, the dark areas that you see there, for example, right in the middle of the brain, these are... these are normal.
- 157 01:18:34:20 There is no loss of brain tissue.
- 158 01:18:36:14 On the other hand, on this one, they are about twice as large as they should be; about twice as large as the well twin.
- 159 01:18:44:01 That means that some brain tissue has been lost, so the fluid has expanded to occupy the area.
- 160 01:18:50:22 It's further evidence that something has gotten in the brain and changed the structure of the brain.
- 161 01:18:54:05 That's part of the disease schizophrenia.
- 162 01:18:59:09 >> Genes are very important for the transmission of the vast majority of cases of schizophrenia, but they're not sufficient.
- 163 01:19:08:08 They're not enough by themselves to produce this devastating form of mental illness.
- 164 01:19:13:15 You have to have other contributors from the environment.
- 165 01:19:16:13 These may be either psychological factors or they may be biological factors which are late in an individual's life.
- 166 01:19:25:10 For example, having a severe viral infection or having some kind of influenza, being involved in an automobile accident where you have a concussion, exposing yourself to such things as LSD, PCP, other kinds of so-called street drugs which are not recommended.
- 167 01:19:45:14 These things could be enough to push you over a threshold.
- 168 01:19:50:07 >> ZIMBARDO: It has been said that schizophrenia is the cancer of mental illness.
- 169 01:19:54:23 Although a complete picture of what causes schizophrenia remains a puzzle, it is certainly one of the most profound illnesses treated by mental health professionals.
- 170 01:20:05:09 As we enter the 21st century, there are twice as many mentally ill people living on the streets then in all of our state psychiatric wards.

- 171 01:20:15:18 Many go untreated.
- 172 01:20:18:15 One such person was David Tagart.
- 173 01:20:21:23 Living on the streets and in shelters of New York City, David was diagnosed as having a paranoid schizophrenic disorder.
- 174 01:20:28:24 >> I'm attempting to secure newspapers.
- 175 01:20:31:23 My income doesn't permit me to buy them.
- 176 01:20:34:29 >> ZIMBARDO: Considering the severity of his illness, he surprisingly agreed to have a camera crew follow him on his morning rounds at New York City's Pennsylvania Railroad Station.
- 177 01:20:44:07 >> I continue to talk.
- 178 01:20:45:01 This is not a photo op of Dave's habits.
- 179 01:20:47:00 You've got guys with long lenses and parabolic mikes for that, okay?
- 180 01:20:49:22 No comment.
- 181 01:20:52:29 >> ZIMBARDO: Part of David's condition was his deep mistrust and rejection of any consistent help and medication from outreach programs.
- 182 01:21:02:08 >> The program is saying in a de facto manner that I have to be on medication to get housing.
- 183 01:21:10:29 I repeat, there's no real justification in that.
- 184 01:21:14:07 >> David, let me ask: the FBI, all of this intense surveillance, could this be part of an illness that you have?
- 185 01:21:23:07 >> Nice try.
- 186 01:21:27:13 If... when you look, when you say, "Well, maybe it's just something I'm thinking of and a product of my situation."
- 187 01:21:38:17 But when it happens 120, 150 times.
- 188 01:21:42:05 I mean, let's take an example.
- 189 01:21:46:05 Someone might be reading a book and leave it on a telephone booth while he's making a call.

- 190 01:21:52:26 Someone might do that.
- 191 01:21:54:21 And sometimes, that book might be a really attractive book or an expensive book or somebody else might have liked that book, and that book might not be there when you turn back, say, 30 seconds later.
- 192 01:22:05:04 Okay?
- 193 01:22:06:09 But when that happens 30 or 40 times; when sometimes those books are obviously of no conceivable cash value to anybody; when sometimes the books contain your identification documents and your money, which nobody but someone maintaining close surveillance on you could have discovered...
- 194 01:22:22:29 See, when determining whether something is real or something is not real, it's real simple: get the facts.
- 195 01:22:30:28 >> ZIMBARDO: Having adamantly refused medication, David's condition worsened and he became acutely suicidal.
- 196 01:22:38:20 Several weeks after the taping of this segment, a body was pulled from the East River.
- 197 01:22:45:12 It was David Tagart.
- 198 01:22:49:16 In the search for the origins of psychopathology, mental health specialists have been using the biological approach, the psychological approach, and a combination of both -- the interactionist approach.
- 199 01:23:02:02 But there's another way to look at the origins of psychopathology, and that's as a function of cultural factors.
- 200 01:23:08:25 Teresa La Framboise is a Native American psychologist trying to understand and treat some of the types of mental disorders among Indian peoples.
- 201 01:23:19:01 >> Most of us that are doing work in this area really feel that the major issue is the influence of American culture; the clash of American culture on other ethnic cultures.
- 202 01:23:32:05 Indian people, for instance, have been forcibly removed across country many times.
- 203 01:23:37:16 Their children have been removed from their homes for boarding school purposes in order to assimilate them.

- 204 01:23:46:11 Some people have been removed from their homelands, even now, three times in a lifetime.
- 205 01:23:53:19 Most of the problems in Indian communities really, in terms of psychological problems, are classified in terms of depression and alienation.
- 206 01:24:02:29 And with rampant poverty, unemployment rates that are as high as 80%, underachievement in terms of education, there's just not a whole lot happening and not a lot of hope that things will get better.
- 207 01:24:19:14 When you think of all the effort to exterminate or to acculturate, the fact that Indian people have withstood this pressure shows that there really is, you know, an enormous amount of strength in the culture.
- 208 01:24:39:05 >> ZIMBARDO: Mental illness may be influenced by genetic factors, personal experiences, or by cultural forces.
- 209 01:24:46:07 Its diagnosis may sometimes be biased by social factors or be completely inaccurate.
- 210 01:24:52:05 But in the end, there's deep and genuine suffering.
- 211 01:24:56:03 The individual who is afflicted suffers, the family suffers, and society suffers.
- 212 01:25:02:25 In our next show, we're going to focus on how that suffering can be alleviated by psychotherapy.
- 213 01:25:08:23 Whether mental health specialists rely on pills or electric shocks, verbal insights or behavior modification; whether they work with individuals or groups, they often provide the only chance millions of people have to overcome their mental problems.
- 214 01:25:24:18 The psychotherapists, modern-day healers of the mind, next time.
- 215 01:25:29:01 I'm Philip Zimbardo.
- 216 01:25:33:18 [Captioned by The Caption Center WGBH Educational Foundation]
- 217 01:26:09:24 >> *Funding for this program is provided by Annenberg/CPB to advance excellent teaching .*

218 01:26:21:02 *For information about this and other Annenberg/CPB programs, call 1-800-LEARNER and visit us at www.learner.org.*