

Discovering Psychology: Updated Edition

12 Motivation and Emotion

- 1 01:30:09:15 >> ZIMBARDO: What motivates human beings to behave as they do and feel the way they feel?
- 2 01:30:18:09 Why are certain human emotions universally recognizable?
- 3 01:30:24:07 What can we learn from studying sexual attraction?
- 4 01:30:30:14 "Motivation and Emotion," this time on *Discovering Psychology* .
- 5 01:31:11:28 >> What's going through my mind right now is a lot of pain.
- 6 01:31:16:18 >> You are three blocks away.
- 7 01:31:18:24 Would you like some beer?
- 8 01:31:19:28 >> No thanks, no, no.
- 9 01:31:21:03 >> All right, you're doing good.
- 10 01:31:24:27 >> ZIMBARDO: Whenever I watch a marathon, I'm always amazed as the last runners stagger toward the finish line.
- 11 01:31:32:01 Even though their times are embarrassingly slow, they keep going, determined to finish.
- 12 01:31:37:04 (*cheers and applause*) The race was lost and lost badly, but that didn't stop the runners from moving relentlessly toward the finish line.
- 13 01:31:47:18 In fact, it's from the Latin word *movere*, "to move," that we get the psychological term motivation.
- 14 01:31:54:04 Motivation is the general term for all the physical and psychological processes that start behavior, maintain it, and stop it.
- 15 01:32:02:12 It's part of the explanation for what made the runners hang in there when most of us would have quit.
- 16 01:32:10:16 We want to know what motivates people to do good deeds and what triggers them to do evil.

- 17 01:32:19:09 (*crowd saying, "Heil"*) When psychologists study motivation, they too look for causes of behavior by trying to separate those causes of behavior that come from the environment from causes that come from the individual.
- 18 01:32:42:02 For example, the motivation for an act of aggression might be the result of political factors.
- 19 01:32:48:16 Or it could be influenced by the heat or a hostile crowd, all of which are environmental factors.
- 20 01:32:54:22 (*woman yelling*) Or the aggression might be caused by factors within the individual -- psychological factors such as hostility or frustration, or physical causes such as a brain disorder.
- 21 01:33:09:19 But whatever the factors involved, the result is movement, action.
- 22 01:33:15:01 So when psychologists study what motivates organisms, they really study what makes them act; what makes them move toward some things and avoid or ignore others?
- 23 01:33:26:25 When we can't help moving toward something, we have an addiction which dominates our other actions.
- 24 01:33:34:09 We're motivated by an overpowering desire.
- 25 01:33:38:16 (*doorbell rings*) And when we have an unnatural aversion to something, we have a phobia.
- 26 01:33:45:10 We're motivated by an overwhelming fear.
- 27 01:33:49:00 >> We're worried about you, and so are your neighbors and your son.
- 28 01:33:54:00 >> Just leave me, just leave me!
- 29 01:33:55:20 I'm not going anywhere.
- 30 01:34:00:18 >> ZIMBARDO: But between these two extremes lie the motivational currents that shape the flow of our daily lives; motivations that are constantly reflected in our preferences for some activities over others, the intensity of what we do, and the persistence of our actions.
- 31 01:34:26:00 For example, most living creatures are motivated above all to survive.

- 32 01:34:32:27 They have a preference for those actions that sustain or protect themselves.
- 33 01:34:37:18 They pursue them with great intensity, and they persist in behavior that maximizes their chances for survival.
- 34 01:34:47:05 Evolution has always been on the side of those individuals who are strongly motivated to survive, who move toward what they need while moving away from or opposing whatever threatens them.
- 35 01:34:58:18 Usually, if something is pleasurable, we're motivated to get it; and if it's painful, we're motivated to avoid it.
- 36 01:35:05:14 It's a very simple and, in most cases, a very effective survival mechanism.
- 37 01:35:10:04 But culture, family, and personal experience also define what is desirable and what is not.
- 38 01:35:19:16 We get into trouble when pleasurable things, like alcohol, drugs, or tobacco, are actually bad for us or when painful things, like studying hard, are good for us.
- 39 01:35:34:15 In fact, much of life involves a clash between the basic motivation to seek pleasure and the constraints of society which direct us to restrain ourselves.
- 40 01:35:45:20 A vital part of growing up in most societies involves training by adults on how to reframe the tensions between desire and restraint.
- 41 01:35:55:05 >> David, remember, no crashing.
- 42 01:35:56:21 >> Get out of my way.
- 43 01:35:59:14 >> If you guys don't slow down, we're going to have to take them away from you.
- 44 01:36:02:19 >> I will slow down.
- 45 01:36:05:24 >> ZIMBARDO: We learn to do what initially seems irrelevant or even distasteful, but which will pay off down the line.
- 46 01:36:12:04 But does the desire ever go away?
- 47 01:36:18:05 Sigmund Freud thought not.

- 48 01:36:20:21 "Desire never goes away," he said, "no matter how strong the restraint."
- 49 01:36:25:18 Freud analyzed behavior in terms of underlying, unconscious motivation, a process hidden deep in the unconscious mind.
- 50 01:36:35:26 According to Freud, there are two primary motivations that have to be repressed: there's our motivation as children to seek sexual satisfaction or pleasurable physical contact and our motivation to express aggressive violent urges against those who thwart us in our pursuit of pleasure.
- 51 01:36:58:21 But no matter how much effort we put into restraining these basic drives, they still find a way to break into our consciousness.
- 52 01:37:06:28 Our concealed motives are revealed through our anxieties, our slips of the tongue, dreams, and fantasies.
- 53 01:37:17:10 Freud had a fairly negative, restricted view of motivation based on his own experience and that of his neurotic patients.
- 54 01:37:26:27 But later theorists, such as Carl Rogers and Abraham Maslow, added a more positive dimension to the study of psychological motivation by focusing on normal, healthy people and the interplay between human nature and society.
- 55 01:37:44:01 >> How good a society does human nature permit?
- 56 01:37:46:24 (*laughs*) And then the other one, how good a human nature does society permit?
- 57 01:37:56:22 >> ZIMBARDO: After our basic survival needs are met, Maslow believed, we become motivated by needs for attachment with others and for esteem.
- 58 01:38:06:10 He proposed that there's a Hierarchy of Needs which dominates the individual's motivation.
- 59 01:38:16:13 As each level is adequately satisfied, the higher needs occupy the individual's attention and effort.
- 60 01:38:25:06 There are so many different types of motivation that it's difficult to select one to illustrate the process by which motivation influences actions.
- 61 01:38:33:16 But if we have to pick just one to study in depth, we want

something that isn't essential for individual survival but which motivates an enormous amount of behavior among all living creatures.

- 62 01:38:44:23 We want something that has both psychological and biological causes; something that can be triggered by a smell, a sight, a touch, or even a fleeting thought; something that motivates you, me, the birds and the bees; something known as sex.
- 63 01:39:05:16 Because the survival of many species depends on sexual reproduction, nature made sexual stimulation intensely pleasurable and then added orgasm as the ultimate reinforcer for all the time and effort it takes to get a sperm and egg together.
- 64 01:39:26:18 Nature also arranged things so that any event regularly associated with sexual arousal could become a sexual motivator, and that any event that was paired with sexual gratification could become a learned reinforcer, as advertisers well know.
- 65 01:39:46:02 Some other animals, like these jellyfish, don't need sex to motivate them.
- 66 01:39:51:00 They reproduce by a variety of nonsexual means.
- 67 01:39:54:14 That's because they live in highly-stable environments and need only the same genes as their parents to adapt to the same conditions.
- 68 01:40:05:12 But in a changing, variable environment, there's an advantage to having offspring who are the product of a mixed set of genes from two parents.
- 69 01:40:14:21 Genetic variability ensures that the offspring will not be carbon copies of their parents and that some will survive by adapting to changing conditions.
- 70 01:40:27:15 (*elk calling*) The next biological problem to be solved is how to synchronize the activity of males and females so that their sperm and egg cells meet under the right conditions.
- 71 01:40:45:26 First, a sexually-mature partner must be selected from the same species, preferably one who will supply the best genes for the new generation.
- 72 01:40:55:06 This is where the males strut their stuff for the females, who

then pick their ideal partner.

- 73 01:41:02:02 Male peacocks fan their feathers, rams fight off potential competitors -- all with varying degrees of success.
- 74 01:41:13:02 Next, the male and female have to pick the right time and place.
- 75 01:41:18:29 Most animals only produce offspring in the spring and summer, when the environment can provide enough food and warmth for the young.
- 76 01:41:27:17 The mating place must also be safe from predators and natural disasters, so to get to the right place may involve traveling thousands of miles in vast migrations to mate and breed where they were born.
- 77 01:41:46:05 Next come the behavior patterns that are necessary for fertilization.
- 78 01:41:51:06 Courtship rituals, for example, increase the female's readiness to accept the male and also serve to excite the male to focus all his attention on the matter at hand.
- 79 01:42:00:11 (*goose honking*) Then, built-in reflexes aid in orienting and positioning both partners during copulation.
- 80 01:42:08:11 And so behavior and biology work together to produce the next generation.
- 81 01:42:16:06 Psychologist Norman Adler of the University of Pennsylvania studies the mechanisms of sexual behavior.
- 82 01:42:23:23 >> We're interested in the two realms of physiology and behavior.
- 83 01:42:27:17 We study reproductive behavior and its physiological consequences.
- 84 01:42:32:17 The triggering of reproduction by behavior is a fundamental way of synchronizing the animals.
- 85 01:42:37:09 It makes sense that the female would become reproductive or pregnant only when the stimuli from the male are around; otherwise, it's wasting her energy and her resources.
- 86 01:42:46:18 Pregnancy in female rats is different from the pregnancy in humans, and the males' behavior fits into that different

pattern.

- 87 01:42:55:16 In humans, the menstrual cycle is 28 days and has a little progesterone phase after ovulation.
- 88 01:43:04:07 In rats, the cycle's much shorter; it's only a four-day cycle.
- 89 01:43:08:04 And the way it works is that there is no progesterone secretion after ovulation, so something has to trigger the progesterone, which is the hormone of pregnancy, if the female rat is going to get pregnant.
- 90 01:43:20:14 The thing that we've discovered that triggers that progesterone secretion is the male's stimulation during copulation.
- 91 01:43:27:16 In the rats, the mating behavior consists of the male and the female signaling each other.
- 92 01:43:34:00 The female has a solicitation pattern that attracts the male.
- 93 01:43:39:05 He emits a series of vocalizations and follows the female.
- 94 01:43:43:02 And then he will, if everything goes right up to that point, he'll mount her and then jump off.
- 95 01:43:48:03 He'll do this ten or 15 times within a few minutes.
- 96 01:43:51:10 On some of these mounts, he will insert the penis into the female and stimulate the nerves in the cervix, and that seems to be the beginning of all these wonderful events that are occurring inside the female -- the hormonal secretions, the uterine contractions -- and they are also stimulating the male to allow him to release the sperm at ejaculation.
- 97 01:44:11:02 After about, let's say, ten of these intermissions, on the last intermission he will ejaculate the sperm.
- 98 01:44:17:02 And then he deposits a coagulate called the vaginal plug, which acts like a stopper to some extent and plugs the cervix for at least a few minutes.
- 99 01:44:25:25 That allows the sperm to get through, and that's the end of the sequence... at least for a time.
- 100 01:44:31:20 He then has the good taste to stop for about ten minutes.
- 101 01:44:36:02 And we think that his stopping the behavior is an act of

- inhibition, because during that ten minutes is a critical time for the female.
- 102 01:44:43:14 The sperm have to move from the vagina into the uterus, and so the sex behavior is cut off during that time to allow the sperm to get in there.
- 103 01:44:53:03 The change in the female's hormonal status is a function of psychological state, a function of the behavior that she's gone through.
- 104 01:45:03:08 Most people think that the brain secretes behavior; that physiology somehow acts on the animal's nervous system and out pops behavior, when in fact it's a double relationship.
- 105 01:45:14:24 It works both ways.
- 106 01:45:15:24 It's like any relationship -- it has to go in two directions.
- 107 01:45:18:27 So not only does physiology control and produce behavior, but behavior and the stimuli produced from behavior also affect physiology.
- 108 01:45:27:12 >> ZIMBARDO: In humans, unlike rats, sexuality is also a way of using the body to satisfy personal desire.
- 109 01:45:36:10 Sexual motivation becomes a readiness to experience intense pleasure.
- 110 01:45:42:29 Often, sexual motivation finds expression in romantic love: strong emotions and intense attractions toward another person.
- 111 01:45:53:14 Romantic love embodies a potent mix of positive and negative emotions and blends them with strong motives.
- 112 01:46:02:13 Our need to be understood, accepted, cared for, and sexually satisfied can create tension as well as harmony.
- 113 01:46:10:25 We may become jealous, frustrated, or angry due to the pain and uncertainty caused by such an intense relationship.
- 114 01:46:19:14 Despite its revered position in our culture and close association with marriage, romantic love tends to be fragile, short lived, and not always sensible, as when we fall in love with someone we know is not good for us.

- 115 01:46:35:17 With romantic love, we invariably see situations of strong motivation mixed with intense emotion.
- 116 01:46:43:14 In fact, romantic love highlights the extent to which motivation and emotion are intertwined.
- 117 01:46:49:12 The more emotional we feel, the greater we assume our motivation is.
- 118 01:46:53:09 While the motivated person usually moves physically toward or away from something, the emotional person is moved internally by psychologically- significant situations.
- 119 01:47:02:24 The result is a complex pattern of changes involving feelings, thoughts, behavior, and physiological arousal -- a pattern we know as emotion.
- 120 01:47:15:06 For Charles Darwin, emotions were innate, not learned.
- 121 01:47:19:08 They were evolutionary remnants of previous adaptive behaviors, such as fighting.
- 122 01:47:26:04 He argued that some of our facial expressions are similar to those of animals in comparable situations.
- 123 01:47:34:23 At birth and soon after, all infants show similar expressions of emotion.
- 124 01:47:41:21 It isn't until later that we learn from our environment when to express and when to inhibit our emotions, depending on a number of social factors.
- 125 01:47:54:08 Psychologist Robert Plutchik has proposed that we are born with eight basic emotions, depicted here in the inner circle.
- 126 01:48:03:12 These eight are made up of four pairs of opposites, such as joy and sadness or anger and fear.
- 127 01:48:14:00 All the other emotions depicted in the outer circle are blends of the basic ones.
- 128 01:48:20:10 For example, love is a combination of joy and acceptance, while remorse is a blend of disgust and sadness.
- 129 01:48:32:21 Our emotions also seem to be universal.
- 130 01:48:35:28 In a study conducted by psychologist Paul Ekman, photographs of different expressions were shown to people

from a variety of cultures.

- 131 01:48:45:14 The subjects then identified the emotions associated with these expressions.
- 132 01:48:49:25 The results revealed a remarkable similarity in the way people decode emotions, whether they are college students in the United States or tribes-people in New Guinea.
- 133 01:49:03:08 When psychologists talk about emotion and motivation, they always distinguish clearly between them, but the truth is that we tend to experience them together.
- 134 01:49:11:18 Moreover, they're often subject to the same influences.
- 135 01:49:14:29 For instance, why we do things, motivation, and how we feel about them, emotion, are both affected by the degree of our optimism and pessimism, or in psychological terms, our explanatory style: how we explain our successes and failures to ourselves, with an optimistic style or a pessimistic style.
- 136 01:49:36:08 For the past ten years, Martin Seligman of the University of Pennsylvania has studied why some people succeed while others fail because of their explanatory styles.
- 137 01:49:49:07 >> We began to look at people's explanatory style, the habits they had for explaining tragedy in their life.
- 138 01:49:55:01 Why do bad events occur?
- 139 01:49:57:22 There are three dimensions we focused on.
- 140 01:49:59:17 The first dimension is external/internal: Is the cause of this bad event something about me or something about other people or circumstances?
- 141 01:50:08:14 That's the least important dimension in the theory.
- 142 01:50:11:07 The two crucial dimensions are stable and global: Is this bad event caused by something that stays around in time, stable, or something that goes away in time?
- 143 01:50:22:08 So, for example, if you fail an examination, you might say, "I'm stupid."
- 144 01:50:26:21 Well, stupidity abides; it's something highly stable.

- 145 01:50:29:16 On the other hand, you might say, "I had a hangover.
- 146 01:50:32:09 I was exhausted."
- 147 01:50:33:21 Exhaustion comes and goes, hangovers fade in time -- unstable.
- 148 01:50:39:07 The third dimension, specific/ global: Is the cause of my failure something that is just this one situation or something that is going to undermine everything I do?
- 149 01:50:49:14 So if you are rejected by someone you love, you might say, "I'm worthless.
- 150 01:50:53:24 I'm unlovable."
- 151 01:50:55:01 Being worthless is global -- it hurts everything you do.
- 152 01:50:58:14 On the other hand, you might say, "She was in a bad mood."
- 153 01:51:02:23 Well, it's just her; it's not going to affect you in many situations.
- 154 01:51:06:20 So the three dimensions -- internal, stable, and global -- add up to optimism and pessimism in the following way: Those of you who habitually say, "It's me, it's going to last forever, it's going to undermine everything I do," are a pessimist; those of you who believe, "You did it to me, it's going away quickly, and it's just this one situation," are the people we call optimists.
- 155 01:51:32:15 There are three general areas that we explore optimism and pessimism in -- first is depression, second is achievement, and the third is health.
- 156 01:51:42:17 In all three we ask, over one's life, these habits of the heart, do these habits of optimism and pessimism: One, make you more or less susceptible to becoming depressed?
- 157 01:51:52:24 Secondly, do they make you achieve below or above your potential?
- 158 01:51:57:22 And third, do optimists and pessimists have different physical health and even different length of life?
- 159 01:52:05:20 Let's take the first area of depression.
- 160 01:52:08:00 If you take young children, we work with fourth to sixth

- graders and measure their depression level and their explanatory style at different points as they're growing up.
- 161 01:52:19:03 We find that those kids who start off as pessimists, even if they're not depressed now, by the fifth and sixth grade are the ones who become depressed.
- 162 01:52:29:19 Those kids who start out depressed but who were optimists anyway are the ones who get better.
- 163 01:52:38:11 We took the freshman class a few years ago.
- 164 01:52:41:06 When they entered, we gave them the attributional-style questionnaire.
- 165 01:52:45:02 We then looked at their first semester's grades compared to what they're predicted to get.
- 166 01:52:49:18 The people who do better than expected are optimists; the people who do worse than expected are the pessimists.
- 167 01:52:56:06 So in academic achievement, you can predict from the combination of so-called talent or intelligence and optimism what the performance is going to be.
- 168 01:53:07:15 Studies of animals showed that when animals were helpless, they grew tumors at a greater rate.
- 169 01:53:13:05 Their immune system didn't do what it should.
- 170 01:53:16:23 We began to wonder about the same question in humans: Are optimistic humans -- that is, people who are better capable of coping with defeat and helplessness -- do they lead healthier lives than non- optimistic humans?
- 171 01:53:31:02 And what we found at age 30 and age 40, there's no effect; optimism and pessimism has no effect on health.
- 172 01:53:37:12 What controls health is how healthy you were at age 25.
- 173 01:53:41:00 But starting at my age, starting at about 45, in middle age, the pessimists start to get the chronic illnesses associated with middle age; the optimists tend not to.
- 174 01:53:51:29 And this trend continues into the 60s.
- 175 01:53:54:28 This tells us that pessimists are more at risk for chronic illness over the course of middle age than are optimists.

- 176 01:54:04:03 If pessimism is a life-long habit that's so insidious to health, achievement, and depression, where do we get it from?
- 177 01:54:11:10 Where do we get pessimism from?
- 178 01:54:12:16 There are three shallow hints about where we get it from.
- 179 01:54:16:21 One, your mother's pessimism looks like yours.
- 180 01:54:19:28 We seem to learn it at our mother's breast.
- 181 01:54:22:23 Secondly, the kinds of criticisms our teachers make of us, important adults make of us, when we are in grade school seem to shape the optimism or pessimism we have.
- 182 01:54:32:14 And third, the reality of the first major event that occurs when you're a youngster may shape our pessimism or optimism.
- 183 01:54:40:01 So for people whose mother dies before they're 11 years old, it turns out they have a more hopeless, more pessimistic explanatory style.
- 184 01:54:48:27 And the reason seems to be that when your mother dies when you're 7 years old, that's a stable and global loss -- she goes away, she never comes back.
- 185 01:54:58:00 That may become the cookie cutter in which you look at tragedy in the future.
- 186 01:55:03:28 >> ZIMBARDO: So we've gone from sex and romantic love to the joys of success and the agonies of failure -- just a few of the areas studied by psychologists who seek to understand the basic whys of animal and human nature, why we act and feel as we do.
- 187 01:55:24:05 Even our brief explanation of motivation and emotion reveals the intricate interplay of nature and nurture, of biology and behavior, of mind and body.
- 188 01:55:38:14 In our next program, we'll venture into that most elusive part of the human mind: our consciousness.
- 189 01:55:44:07 It can put us in touch with our inner self or out of touch with reality.
- 190 01:55:49:04 The nature of sleeping and dreaming and altered states of consciousness, next time.

- 191 01:55:55:00 I'm Philip Zimbardo.
- 192 01:55:59:12 [Captioned by The Caption Center WGBH Educational Foundation]
- 193 01:57:05:00 >> *Funding for this program is provided by Annenberg/CPB to advance excellent teaching .*