

Discovering Psychology: Updated Edition

11 Judgment and Decision Making

- 1 01:00:17:19 >> ZIMBARDO: How do we actually make decisions?
- 2 01:00:21:10 >> Come on, kids, what next?
- 3 01:00:23:10 >> ZIMBARDO: What effect does the group have on our judgment?
- 4 01:00:26:28 >> Well, I just will not tolerate that kind of behavior from you.
- 5 01:00:29:21 And as a result of that...
- 6 01:00:31:03 >> ZIMBARDO: What mistakes do we commonly make when we negotiate?
- 7 01:00:35:08 What conditions would make this student believe her own lie?
- 8 01:00:39:07 >> ...was the same experiment because this one wasn't boring at all.
- 9 01:00:43:04 >> No way that he's going to look at your bill...
- 10 01:00:44:21 >> ZIMBARDO: "Judgment and Decision Making," this time on *Discovering Psychology* .
- 11 01:01:21:12 >> ZIMBARDO: Every day we have to make decisions: from legal and business ones to what we're going to eat, from products we buy to whom we're going to marry.
- 12 01:01:30:25 No matter how uncertain life is, we have to act decisively, time after time, even if it's just hiring someone else to make our decisions for us.
- 13 01:01:41:11 As a species we like to think of ourselves as pretty good at this sort of thing.
- 14 01:01:45:26 But then in comes a bunch of psychologists to tell us we've been living a pipe dream.
- 15 01:01:50:20 Much of their research has cast grave doubts on the rationality and wisdom of our decision making, revealing the failures of human intuition even when it comes to the best and brightest among us.

- 16 01:02:02:24 >> Come on, kids, what next?
- 17 01:02:04:23 >> ZIMBARDO: Traditionally social scientists identify two reasons why people lapse into irrationality.
- 18 01:02:11:19 First, there is the influence of the crowd.
- 19 01:02:14:19 As part of a mob, the individual can no longer think independently or clearly.
- 20 01:02:20:07 In the extreme case, mob psychology becomes mass hysteria.
- 21 01:02:25:27 A second view, held by Sigmund Freud and others, argues that people stop being rational and become bestial when driven by primitive needs that demand immediate gratification: sex and aggression.
- 22 01:02:39:27 To Freud, society's task is to control these animal urges by socially appropriate rules of conduct.
- 23 01:02:49:11 Today cognitive and social psychologists look for the origins of irrationality or mental fallibility elsewhere: within the very processes of the mind itself.
- 24 01:03:00:14 Fundamental to the way humans make judgments, inferences, and decisions are mental strategies that can be biased.
- 25 01:03:08:05 When a systematic way of thinking is responsible for an error in judgment, it's called a cognitive illusion.
- 26 01:03:14:29 Not that there's anything wrong or irrational with using these kinds of mental strategies; it's just that people don't always discriminate between appropriate and inappropriate conditions for using them.
- 27 01:03:25:25 In fact, human irrationality and stupid decisions are cut from the same cloth as human reason and wise decisions.
- 28 01:03:34:01 Let's see how.
- 29 01:03:37:01 Amos Tversky of Stanford University and Daniel Kahneman of the University of California, Berkeley, are two of the world's leading researchers studying how and why people make illogical choices.
- 30 01:03:49:09 Maybe we can begin with the big question.

- 31 01:03:52:07 What contribution has psychology made to our understanding of judgment and decision making?
- 32 01:03:57:14 >> There are two approaches to the study of decision making.
- 33 01:04:02:19 One, which has been called normative, asks a question of how we ought to make decisions.
- 34 01:04:10:12 What is the nature of rational decision making?
- 35 01:04:15:29 The second approach, which we call descriptive, asks not how decisions ought to be made but how they're actually being made and practiced.
- 36 01:04:26:06 >> Well, the major theme of psychological research, as it turns out, is that the normative model of rational and coherent decision making isn't a terrific model of how people actually make judgments and decisions.
- 37 01:04:40:13 When people are put to the test, then it turns out that although their intuitions are often correct, they're also often systematically wrong in ways that are predictable and are quite systematic.
- 38 01:04:51:02 >> ZIMBARDO: Now tell me, how are we going to prove to our audience that they're not as logical as they think they are, that their everyday thinking often departs from these normative rules of rationality?
- 39 01:05:02:21 >> Well, actually it doesn't take very complicated questions.
- 40 01:05:05:18 We use quite simple questions about which people have some intuitions and impressions.
- 41 01:05:09:21 And we can compare the way the people approach these questions to the way that they should approach them.
- 42 01:05:15:21 >> ZIMBARDO: And while you try to solve the problems, we'll also show you some of the responses of people we taped earlier.
- 43 01:05:22:00 Okay, first we have two questions which have to do with making judgments.
- 44 01:05:26:13 Number one, are there more words in the English language that begin with the letter K or words in which K is the third letter?

- 45 01:05:35:06 K first or K third?
- 46 01:05:37:27 >> I think that there's probably more words with the letter K as the third letter.
- 47 01:05:43:17 >> I think it's more of the first letter.
- 48 01:05:45:26 >> I'll go for the first letter.
- 49 01:05:47:14 >> I would assume they begin with K.
- 50 01:05:49:10 >> ZIMBARDO: Okay, question number two: Imagine that you are about to spend a month in the Middle East.
- 51 01:05:55:05 Which would you worry about more: a terrorist attack or a traffic accident?
- 52 01:06:00:18 >> Terrorist attack.
- 53 01:06:02:01 >> Terrorist attack.
- 54 01:06:03:06 >> Terrorist attack.
- 55 01:06:04:24 >> ZIMBARDO: Danny, are they right?
- 56 01:06:06:14 >> No, they're actually wrong in both cases.
- 57 01:06:08:15 There are twice as many English words that have K in the third position than words that begin with a K.
- 58 01:06:15:04 And if you go to the Middle East, you should really be *much* more worried about getting hurt in a traffic accident than getting hurt by a terrorist attack.
- 59 01:06:23:18 There are simply many, many more of those.
- 60 01:06:25:22 >> The responses to these questions illustrate a very general principle that people use in reasoning under a condition of uncertainty, which we call the availability heuristic.
- 61 01:06:38:01 Obviously people do not know how many English words start with the letter K as opposed to words that have K in the third position.
- 62 01:06:46:01 So how would they answer a question of that kind?
- 63 01:06:48:11 What they do, we suggest, is they try to imagine examples of words that start with a K, such as "key," what have you, and

try to think about words that have K in the third position.

- 64 01:07:01:01 Now, because it's much easier to think of a word that starts with a given letter than a word that has that letter in the third position, they come with the impression that there are many more of them.
- 65 01:07:12:16 >> ZIMBARDO: Danny, how does this notion of the availability heuristic help us understand the Middle East example?
- 66 01:07:17:23 >> Well, again, it's the same thing.
- 67 01:07:20:06 We assess the probability of the likelihood of an event by the ease with which instances come to mind.
- 68 01:07:26:01 When you think of the Middle East, you think of terrorist attacks and you don't think of traffic accidents.
- 69 01:07:30:23 And as a result, you are quite likely to worry much more about terrorist attacks than about traffic accidents, which is probably quite unjustified.
- 70 01:07:40:18 >> ZIMBARDO: Okay, here's another problem, this one about making inferences from evidence.
- 71 01:07:45:24 Here's a brief description of a woman named Linda.
- 72 01:07:48:14 We'll ask you some questions about her.
- 73 01:07:51:07 Linda is 31, single, outspoken, and very bright.
- 74 01:07:55:12 She majored in philosophy in college.
- 75 01:07:59:02 As a student, she was deeply concerned with racial discrimination and other social issues, and participated in antinuclear demonstrations.
- 76 01:08:06:25 Now, which statement about Linda is more likely?
- 77 01:08:10:00 Linda is a bank teller, or Linda is a bank teller and active in the feminist movement?
- 78 01:08:15:22 >> Bank teller and active, B.
- 79 01:08:18:12 >> The second one.
- 80 01:08:20:01 Linda's a bank teller and active in the feminist movement.

- 81 01:08:23:09 >> That Linda's a bank teller and active in the feminist movement.
- 82 01:08:27:08 >> Well, actually, about 90% of the people who are asked this question believe that Linda is more likely to be a feminist bank teller than to be a bank teller.
- 83 01:08:36:17 And the reason they do this is that they apply a kind of reasoning that we call reasoning by representativeness, or by similarity.
- 84 01:08:45:21 They ask themselves how similar Linda is to their stereotype of a bank teller, and she's not; and how similar she is to the stereotype of an active feminist, and she is quite similarly representative of that stereotype.
- 85 01:08:58:22 And then they use that thinking about similarity, or representativeness, to make a judgment of probability.
- 86 01:09:04:14 As it happens, however, that judgment is incorrect.
- 87 01:09:07:13 >> It's incorrect because it violates a very basic principle of logic, namely, that the more inclusive event is necessarily more probable than a more specific event.
- 88 01:09:17:28 That is, the set of people who are bank tellers certainly includes the set of people who are both feminists and bank tellers.
- 89 01:09:25:17 Therefore, the set with the larger extension necessarily defines the more probable event.
- 90 01:09:31:15 >> ZIMBARDO: All right, here's another question we asked.
- 91 01:09:34:01 Is the Mississippi River longer or shorter than 500 miles?
- 92 01:09:38:15 Then we asked people to guess the actual length.
- 93 01:09:41:19 Here are their responses.
- 94 01:09:43:16 >> Longer.
- 95 01:09:44:17 >> And how long do you think it is?
- 96 01:09:47:15 >> Must be close to a thousand miles.
- 97 01:09:49:07 >> Longer.
- 98 01:09:49:28 Maybe 1,200.

- 99 01:09:51:25 >> Longer than 500 miles.
- 100 01:09:52:21 About 700 miles.
- 101 01:09:55:05 >> ZIMBARDO: Then we asked another group of people a similar question.
- 102 01:09:58:21 Is the Mississippi River longer or shorter than 5,000 miles?
- 103 01:10:03:11 We also asked them to guess the actual length.
- 104 01:10:07:07 >> I think it's shorter.
- 105 01:10:08:16 Probably about 2,500 miles long.
- 106 01:10:11:11 >> Shorter.
- 107 01:10:12:05 About 2,000.
- 108 01:10:14:07 >> Shorter.
- 109 01:10:15:20 Between 2,000 and 3,000 miles.
- 110 01:10:19:15 >> ZIMBARDO: The actual length of the Mississippi is 2,348 miles.
- 111 01:10:25:00 When we asked longer or shorter than 500 miles, the average answer was only about 1,000 miles.
- 112 01:10:32:10 Longer or shorter than 5,000 miles, the average was 2,000 miles.
- 113 01:10:37:26 How typical is it to get such divergent answers to problems such as that?
- 114 01:10:42:24 >> This is quite a common pattern.
- 115 01:10:44:23 This phenomenon may be described as an "anchoring effect," in which the initial number, even though it's not a very credible estimate of the quantity in question, pulls the estimate, the final estimate, in this direction.
- 116 01:10:59:13 >> ZIMBARDO: Danny, is this anchoring bias limited to estimates of numbers, or does it hold for things that don't involve numbers at all?
- 117 01:11:05:23 >> Oh, it's not limited to numbers.
- 118 01:11:08:04 The general psychological principle here, that when you

have information or an impression floating in your head, even when it's discredited or you don't quite believe it, it tends to have the weight of a suggestion and to pull your impressions toward itself, and that's the essence of the anchoring phenomenon.

- 119 01:11:24:13 So if, for example, you once believed something or you were given information about an individual, say, or about yourself, which later turns out to be false, you don't completely wipe the slate and start afresh.
- 120 01:11:38:13 Some residue of the initial impression is still there.
- 121 01:11:41:10 So the anchoring effect is much broader than a numerical thing.
- 122 01:11:45:15 >> ZIMBARDO: Our last example takes you into the arena of risky choices.
- 123 01:11:50:09 Do you follow a risk-seeking strategy or a risk-averse strategy?
- 124 01:11:54:28 Let's see in the following example.
- 125 01:11:57:09 Which would you choose if you were gambling?
- 126 01:12:00:29 A, You have an 85% chance to win \$100.
- 127 01:12:06:08 B, You have a sure gain of \$85.
- 128 01:12:10:20 >> I'd take the sure win.
- 129 01:12:11:20 >> Sure gain of \$85.
- 130 01:12:12:16 >> A sure gain of \$85.
- 131 01:12:14:19 >> People generally prefer \$85 for sure over the gamble with the same expected actuarial value, and this pattern has been known as risk aversion.
- 132 01:12:26:09 It's an aversion to a risky prospect.
- 133 01:12:29:10 >> ZIMBARDO: Now, suppose you have a 100% chance of losing \$85 or an 85% chance of losing \$100.
- 134 01:12:38:29 Which would you choose?
- 135 01:12:40:01 >> Then I would take the chance.

- 136 01:12:41:04 >> I would take the 85% chance of losing.
- 137 01:12:43:28 >> I'd take the 85% chance to lose.
- 138 01:12:46:15 >> In this case, people seem to prefer the gamble over the sure loss, and that again is a very characteristic pattern.
- 139 01:12:54:00 Notice that in this problem, just as in the one before, the gamble and the sure thing have... are equal in some sense.
- 140 01:13:02:00 You have... you can either lose \$85 for sure or have a gamble which has an expected value of losing \$85.
- 141 01:13:09:23 But here, unlike the previous case, people very generally prefer the gamble.
- 142 01:13:15:26 >> The notion of accepting a dead loss is unthinkable for people.
- 143 01:13:21:11 And the significance of the pattern that Danny just described is that people are willing to take often a very unreasonable risk of a much greater loss in order to avoid that sure loss.
- 144 01:13:32:22 >> ZIMBARDO: So, Danny, how would you sum up the practical implications of all we've been talking about?
- 145 01:13:36:21 >> What this analysis suggests is that under some conditions, and the conditions unknowable, we should not trust our intuitions because we are liable to predictable errors and predictable biases.
- 146 01:13:49:03 And it's not a matter that some people are much worse at it than other people; it is very much like perceptual illusions.
- 147 01:13:56:19 Those are situations in which most people are likely to make errors, which can be known in advance.
- 148 01:14:03:10 And the fact that we can predict in advance when intuition might falter gives us some hope of implementing procedures to avoid those errors or implementing or improving some educational practices at least to make people aware of the risks of error that they are running when they run them.
- 149 01:14:23:08 >> ZIMBARDO: There are, of course, other psychological factors that affect our judgments.
- 150 01:14:27:13 For instance, there's the "dread" factor.

- 151 01:14:29:29 If risks are unfamiliar and potentially catastrophic, people tend to judge them as greater than risks that are familiar and/or have delayed consequences.
- 152 01:14:40:16 You may be terrified by the possibility of a nuclear accident and yet never think twice about jaywalking, although the odds of a nuclear accident are only a tiny fraction of the odds of getting hurt while jaywalking.
- 153 01:14:54:08 (*car horn honking*) And what if we make our judgments and decisions in a group?
- 154 01:14:59:14 Will that help ensure the rationality of our choices?
- 155 01:15:02:28 What if we assemble a group of the brightest people around?
- 156 01:15:05:16 What then?
- 157 01:15:09:13 In 1960, President John F.
- 158 01:15:11:08 Kennedy gave the go-ahead to the disastrous Bay of Pigs invasion of Cuba.
- 159 01:15:15:28 Fidel Castro and his government resoundingly defeated the U.S.- backed invasion.
- 160 01:15:21:20 It was a terrible embarrassment for the new Kennedy administration.
- 161 01:15:26:05 Psychologist Irving Janis studied the records of the cabinet meetings in which the decision to invade Cuba was made, and found examples of the distorted reasoning he calls "group think."
- 162 01:15:39:27 >> In this particular decision, the dominant decision rules seem to be preserve the harmony of the group, don't make waves, don't raise any critical questions, don't express your doubts.
- 163 01:15:52:21 And that gets me to one of the main symptoms of group think, which is self-censorship of doubts.
- 164 01:15:58:25 And another such symptom is a sense of unanimity of the group that's based on the false assumption that silence means consent.
- 165 01:16:09:07 So if nobody's raised any objections, the assumption is that

everybody's going right along with it.

- 166 01:16:14:15 There are a number of other important symptoms, like the "illusion of invulnerability," as I call it, which refers to the tendency of the members of the group to feel, "Well, it may be a difficult problem that we've got on our hands here, but we're powerful enough and clever enough so that where others may fail, we'll certainly succeed."
- 167 01:16:36:08 There's finally one other very important symptom that I call "mind guarding," and that involves various members of the group taking on the role of guarding the president and other members of the group from any of the information that might get them to change their mind or at least raise questions about what they're planning to do.
- 168 01:16:56:24 >> ZIMBARDO: Group think is not inevitable, however.
- 169 01:16:59:12 It can be avoided.
- 170 01:17:01:03 Irving Janis has outlined a number of procedures that decision makers can implement to promote more rational judgments.
- 171 01:17:08:04 >> One of the suggested ways of preventing group think involves having a devil's advocate appointed by the leader.
- 172 01:17:17:29 Another idea that emerges very clearly from the situation of isolation of the group is to have the leader deliberately bring in members of the government or others in the organization who have some information to convey to be present at various meetings and to encourage them to raise whatever objections or ideas occur to them.
- 173 01:17:48:08 >> ZIMBARDO: We can't avoid making decisions.
- 174 01:17:50:23 But we can try to avoid some of the pitfalls of bad decision making.
- 175 01:17:54:29 One of the newer fields of psychology is the psychology of negotiation, which attempts to avoid the sometimes fatal cost of bad decisions.
- 176 01:18:04:27 People negotiate over almost everything, from the price of new cars and the level of salaries to the lives of hostages and the fate of nations.
- 177 01:18:14:04 Recently psychologists have begun to study why many

- negotiations fail and how the process can be improved for the benefit of both sides.
- 178 01:18:24:22 Max Bazerman of Northwestern University has identified the five most common cognitive mistakes that negotiators make.
- 179 01:18:33:08 >> The five major mistakes that most negotiators make are: one, that they fail to consider the judgments of the other side in negotiation...
- 180 01:18:43:07 two, they tend to nonrationally escalate commitment to a previous course of action and escalate conflict; three, they tend to have a very limited frame in their perspective to conflict; four, they tend to be overconfident that they will prevail in disputing situations; and five, they tend to view negotiations very much in a zero-sum manner.
- 181 01:19:07:19 What you win, I lose, and vice versa, even when that's not objectively true.
- 182 01:19:13:03 >> ZIMBARDO: Business and government professionals come to workshops run by Bazerman and his colleague Lawrence Susskind to learn how to improve their negotiating skills.
- 183 01:19:24:12 >> Well, Robin, your attorney called me and said that you wanted to meet with me and see if we can, you know, discuss these problems and get them ironed out.
- 184 01:19:34:15 >> ZIMBARDO: Bazerman assigns exercises like this one.
- 185 01:19:36:20 One participant plays the owner of a small business; the other, her irate customer.
- 186 01:19:40:27 The task: negotiate a disputed bill.
- 187 01:19:45:01 >> The bill I have before me is this ridiculous bill of \$774.
- 188 01:19:49:03 >> Well, that I...I...I went back and...
- 189 01:19:50:28 >> Now, what's that bill?
- 190 01:19:51:27 >> Well, I went back and added the true cost of it after you stormed out.
- 191 01:19:55:21 You insulted me in front of a customer, potential customer, in front of some of my employees, and I just will not tolerate that kind of behavior from you.

- 192 01:20:03:10 And as a result of that...
- 193 01:20:04:11 >> Who insulted whom?
- 194 01:20:05:19 >> The two negotiators that we're watching fell victim to a variety of the biases that we talked about earlier.
- 195 01:20:12:20 Neither considers a perspective from the other side, and neither tries to identify what the whole problem looks like as a whole.
- 196 01:20:19:17 >> You're willing to say then that the bill that you gave me -- where is it here? -- \$774 is completely erroneous and fictitious and throw it out?
- 197 01:20:28:01 >> Most definitely not.
- 198 01:20:30:05 >> What we need to do in any negotiation is to think about what's acceptable to the other side as well as what we hope to get out of the negotiation.
- 199 01:20:37:18 By thinking about the other side, we can learn a whole lot that will improve our effectiveness in a negotiation situation.
- 200 01:20:44:05 >> There's no way that he's going to look at your bill and say that it has any credibility.
- 201 01:20:49:04 >> Well, I'll see you in court.
- 202 01:20:52:07 >> ZIMBARDO: The psychological story of decision making doesn't end, however, when a decision has been made.
- 203 01:20:57:21 The act of making a decision can trigger a flood of other processes.
- 204 01:21:02:00 According to psychologist Leon Festinger, whenever we choose to do something that conflicts with our prior beliefs, feelings, or values, a state of cognitive dissonance is created in us -- a tension between what we think and what we do.
- 205 01:21:17:09 When this tension makes us uncomfortable enough, we're motivated to reduce it in a number of ways.
- 206 01:21:22:25 We may change the way we think about the decision or try to change how others think about it so that they can support our decision.
- 207 01:21:30:10 Or we may change some aspect of our behavior so that our

decision seems more in character with us.

- 208 01:21:36:01 In other words, we try to reduce the dissonance between how we think we should act and how we actually act by changing one or the other.
- 209 01:21:46:28 In the mid-'50s, Leon Festinger and his colleague Merrill Carlsmith conducted a classic experiment in which students were engaged in very boring tasks.
- 210 01:21:56:26 The students were then given a request by one of Festinger's staff.
- 211 01:22:01:01 >> Okay, that's fine.
- 212 01:22:02:17 Let me tell you now what we're actually studying here.
- 213 01:22:05:11 It's the effect of preparatory mental set on performance.
- 214 01:22:08:21 The rest of the subjects are prepared by being told that the experiment will be very interesting and enjoyable, in fact, lots of fun.
- 215 01:22:16:05 Now I have a somewhat unusual request to make of you.
- 216 01:22:19:24 The next subject is waiting right outside, but the fellow who ordinarily gives the spiel isn't here.
- 217 01:22:25:17 I wonder if you could possibly take his place.
- 218 01:22:27:28 As a matter of fact, we figure we'll be needing someone in the future, so I'd like to offer you a \$20 retainer and have you remain on call for us.
- 219 01:22:36:24 Would that be all right?
- 220 01:22:38:01 >> \$20, that'd be fine.
- 221 01:22:39:24 >> ZIMBARDO: Half the students were randomly assigned to the group that received \$20 for lying that the experiment was fun.
- 222 01:22:46:23 The other half were given only one dollar for lying.
- 223 01:22:49:21 >> A dollar as sort of a retainer and have you remain on call with us.
- 224 01:22:53:29 Would that be all right with you?

- 225 01:22:56:23 >> Yes, that'll be all right.
- 226 01:22:58:29 >> ZIMBARDO: The cognitive dissonance came from the knowledge that the experiment was, in fact, boring and one dollar was insufficient reward for lying.
- 227 01:23:06:18 Many of the one-dollar subjects actually convinced themselves that the experiment was fun after they made their decision, to reduce the dissonance between their prior beliefs and their behavior.
- 228 01:23:17:23 They came to believe a big lie for a small incentive.
- 229 01:23:21:04 >> ...a girlfriend of mine who participated in the experiment last week, and she said it was very tedious.
- 230 01:23:26:28 >> Oh, I don't think that was the same experiment because this one wasn't boring at all.
- 231 01:23:31:07 I didn't think so.
- 232 01:23:34:06 >> ZIMBARDO: The \$20 subjects, on the other hand, felt no dissonance because they felt comfortable in lying just for the money.
- 233 01:23:41:06 >> He said it was pretty miserable and that I should do everything I could to get out of it.
- 234 01:23:47:08 >> I think maybe your friend was wrong.
- 235 01:23:49:02 Perhaps it's a different experiment, because this was a lot of fun.
- 236 01:23:52:05 It appeared to me as if it were a puzzle.
- 237 01:23:55:13 We, you know, had to turn these knobs, and I tried to figure out what we were doing it for, but I really couldn't figure it out.
- 238 01:24:00:09 Perhaps you'll have better luck.
- 239 01:24:02:13 >> Other theories might predict that the man who was paid most would have the highest motivation for enthusing over the dull task and would be most sold on it himself.
- 240 01:24:14:15 Cognitive dissonance theory leads to an exactly opposite prediction.
- 241 01:24:20:04 The man who is paid \$20 knows that the task is dull, but he

- also knows that he had sufficient justification for saying that it wasn't.
- 242 01:24:30:05 >> Did you enjoy working on the manual task?
- 243 01:24:32:18 >> Well, it really wasn't too enjoyable.
- 244 01:24:34:28 In fact, it was rather boring.
- 245 01:24:38:09 >> How about the man who is paid one dollar?
- 246 01:24:41:15 He knows the task is dull, but he has two discrepant thoughts.
- 247 01:24:46:22 He also knows that he did not have sufficient justification for saying that it wasn't.
- 248 01:24:52:27 For him there is dissonance.
- 249 01:24:56:06 Time after time we have seen what follows.
- 250 01:25:00:08 He reduces the dissonance by changing his opinion about the dullness of the task.
- 251 01:25:05:06 >> Did you enjoy working on the manual task?
- 252 01:25:08:05 >> Yes, I enjoyed it.
- 253 01:25:10:19 >> Would you like to participate in such an experiment again?
- 254 01:25:16:04 >> Yes, I think I would like to.
- 255 01:25:18:20 >> Any time there is insufficient reward, there will be dissonance.
- 256 01:25:23:13 The general principle seems to be that people come to believe in and to love the things they have to suffer for.
- 257 01:25:31:21 >> ZIMBARDO: By discovering how people actually behave and not how some theory says they ought to behave, psychology can provide guidelines to help us catch ourselves before we go astray, or redirect us once we do if we follow them.
- 258 01:25:46:18 In this program, we began in the cool cognitive climate of judgment.
- 259 01:25:51:19 As we moved to decision making with its motivational

dynamics, the climate warmed up considerably.

- 260 01:25:57:29 In our next program, we're going to head for some hotter venues, where motivation and emotion thrive.
- 261 01:26:04:15 How we're driven by appetite and passion, blocked by fear and guilt, made joyful and sad, next time.
- 262 01:26:12:20 I'm Philip Zimbardo.
- 263 01:26:18:02 [Captioned by The Caption Center WGBH Educational Foundation]
- 264 01:27:20:23 >> *Funding for this program is provided by Annenberg/CPB to advance excellent teaching .*
- 265 01:27:32:04 >> *For information about this and other Annenberg/CPB programs, call 1-800-LEARNER and visit us at www.learner.org .*