

Do You Mind?

The Key to Psychology's Identity



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PROFESSOR: Welcome to our lesson titled "Do You Mind." In this lesson, we'll extend our previous discussion as we prepare for our upcoming conversation on human nature. Before we begin, I'd like to draw your attention to the warning at the bottom of the slide. Please take this warning seriously. All of our course information is owned and protected by the Pennsylvania State University. Violators put themselves at risk for harsh sanctions, which might include restitution, removal from the degree program, suspension, or a notation on the Penn State transcript. If you have any questions about this warning, please don't hesitate to ask your instructor.

Lesson Plan



- Introduce the “mind–body” debate and why it is important to the field of psychology
- Compare and contrast monism and dualism
- Discuss research on mind-body beliefs
- Explain how the debate continues to drive the field of psychology

In the previous lesson, we discussed how early religion, early philosophy, and early biology intersected in their interest of the mind, and how these ideas were related to beliefs about insanity, madness, and mental disorders. In this lecture, we'll introduce the mind-body debate and why it is important to the field of psychology. We'll compare monism to dualism, which are two ways of thinking about the mind, and discuss research on modern beliefs about the mind-brain connection. We'll also explain how the debate continues to drive the field of psychology forward today.

Please take a moment

Please take a moment to think about your body and your mind.

Find a comfortable place to relax, close your eyes, and focus on your breathing.

Let your mind wander, let thoughts intrude, and then move on from them.

Before we continue, let's do an activity. In this activity, we'll ask you to take a few minutes to think about your body and your mind. To begin, please find a comfortable place to relax and close your eyes. When you're ready, please pause the presentation and focus on your breathing. It's OK to let your mind wander and to let thoughts intrude. Just move on from them and let your mind continue to wander. You're welcome to do this for as long as you like, but please try it for at least two minutes.

How would you describe what you were just doing?

Thank you for participating in the exercise. We hope you found it enjoyable. Please take a minute to consider your answer to the question on the screen. How would you describe what you were just doing? Maybe you would describe your state of mind and say that you were meditating or thinking about things. Maybe you would say that you were trying to calm your mind. Maybe you would describe the state of your body and say that you were sitting, reclining, or resting. Which is a better way to describe what you were doing? Are you better represented by a description of your mind or of your body?

Thinking About the Mind



	# of Bodies		
# Minds	0	1	2
0	Normal		
1		Normal	
2			Normal

Let's consider minds and bodies further. Regardless of your answer to our exercise, you'll probably agree that what seems to be normal and natural is a one-to-one correspondence between bodies and minds. That is, if there is no body, there should be no mind. If there is one body, there should be one corresponding mind. If there are two bodies, there should be two corresponding and independent minds.

Thinking About the Mind



	# of Bodies		
# Minds	0	1	2
0	Normal	Zombie Robot	Zombies Robots
1	Spirit Ghost	Normal	
2	Spirits Ghosts		Normal



If that one-to-one correspondence breaks down, things become interesting. In fact, these cases are often the basis of horror movies or science fiction novels.

For example, if you have a mind without a body, you have some sort of ghost or spirit, either angelic or otherwise. If you have no bodies but multiple minds, you may have multiple ghosts or spirits, free-floating identities. However, if you have a body without a mind, you may have a thoughtless or mindless zombie, or perhaps a robot or a droid, depending on how you consider artificial intelligence.

If you have two bodies but no minds, you may have multiple zombies, robots, or droids.

Thinking About the Mind



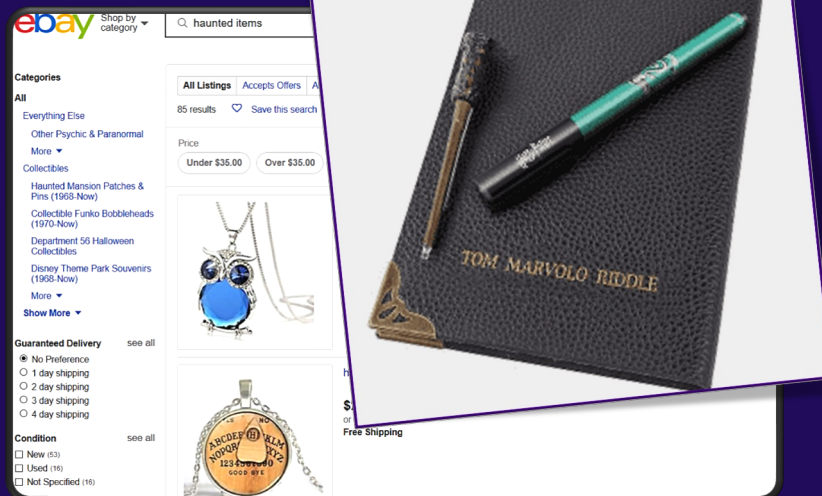
of Bodies

# Minds	0	1	2
0	Normal	Zombie Robot	Zombies Robots
1	Spirit Ghost	Normal	Battle Droids Borg
2	Spirits Ghosts	D.I.D. Demonic Possession	Normal

If you have two bodies but only one overarching mind or consciousness, you may have something like the battle droids in the Star Wars franchise or the Borg collective in the Star Trek franchise. If you have a single body but multiple minds, you have a current but general description of dissociative identity disorder, which is formally known as multiple personality disorder.

As we saw in the previous lesson, some people believe that demons could possess people resulting in a single body with multiple minds.

Haunted Items on eBay



Images from ebay.com, target.com

Beliefs about minds without bodies can be found in unexpected places. If you're interested, you may be able to purchase your very own "haunted" item from the online store eBay, which sells items that appear to contain a consciousness. For the Harry Potter fans out there, a Horcrux, like Tom Riddle's diary, is also an example of an artificial body serving as a container for someone's mind, consciousness, or identity.

Do you believe that...

- people have nonphysical spiritual bodies in addition to physical bodies?
- people can talk to the spirits of the dead?
- angels exist?
- ghosts can move physical objects?
- people have been possessed by demons?

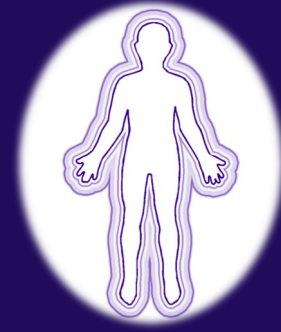


Image from pinclipart.com

As you can see, questions about the mind-body connection provide an extension to our previous discussion on early religious beliefs. Before we press on, please take a moment to consider your own spiritual views about the mind-body connection. Do you believe that people have non-physical spiritual bodies in addition to their physical bodies?

Do you believe that people can talk to spirits of the dead? Do you believe that angels exist? Do you believe that ghosts can move physical objects? Do you believe that people have been possessed by demons? If you said yes to one or more of these questions, you are not alone. Some of these questions come from the Paranormal Belief Scale, a scale designed to evaluate people's belief in paranormal psychology. If you're interested, you should be able to find the complete scale online.

René Descartes



- Descartes
 - What is real? Am I imagined? Is my body?
 - Is my reality constructed?
 - Consciousness = function of the mind
 - “Cogito ergo sum”



Many great thinkers throughout history have considered the mind-body connection. René Descartes, for example, struggled to figure out how he could know what was real. He wondered if his whole reality, including his body and his sensory experiences, were just a figment of his imagination constructed by his mind. Maybe, he wondered, he was living a dream and his physical presence was not real.

He determined that the only thing he knew for sure was that he was thinking. He was conscious. This led him to the famous statement "Cogito ergo sum," translated into "I think, therefore I am."

Mind-Body Debate



- What is the mind?
 - The soul?
 - Product of brain states?
- Are mind and brain connected? How?
- Ghost in the machine?
- Implications for psychology and behavior?

Descartes's ideas were part of the greater mind-body debate, the debate over the nature of the mind. What is the mind made of? Is it soul made up of spiritual stuff? Is it the product of brain states and part of our biology? If the mind and brain are separate things, are they connected? How?

Some people have argued that essentially we have an immortal soul or a mind that is contained within a mortal biological machine or body. Is that true? Does the mind or soul need to have a body to survive? If so, it sounds like humans are living Horcruxes without the associated evil. These are important questions for psychology majors because the answers have implications for understanding both psychology and behavior.

Mind-Body Debate



- Monism
 - Mono = from one thing
 - Mind and brain/body are same thing
 - Materialists = mind and brain are same physical material
 - Idealists/mentalists = mind and brain/body are same mental things (brain/body is illusion)

Maybe you believe that the mind and the brain or the soul and the body are inseparable. That would make you a monist. According to dictionary.com, "mono" comes from the Greek language and means from one thing. Monists believe that the mind and the body are the same thing. They are indivisible.

If the mind and the body are the same thing, one might wonder what that thing is. Some people, called "materialists," believe that the mind and the brain are the same physical or biological substance. Other people, called "idealists" or "mentalists," believe that the mind and the brain are made up of thought. Some of them believe that our lives are similar to dreams, they are mental constructions, and that our brains and bodies are just illusions or figments of our imagination.

Mind-Body Debate



- Dualism
 - Dual = from two things
 - Mind and brain/body are separate things
- Dualists are more likely to...
 - be religious
 - believe in an afterlife
 - believe in paranormal phenomena

Source: Ricki, Lindman, and Lipsman (2013)

Most people believe that the mind is separate or separable from the body, which makes them a dualist. According to dictionary.com, "dual" comes from the Latin language and relates to the idea of two things. People who are dualists are more likely to be religious, believe in the afterlife, and believe in paranormal phenomena. That makes sense. If the mind is separable from the body, it's possible for that mind to continue on without the body, perhaps as a ghost or a spirit.

Mind-Body Debate



- Dualism
 - How do mind/body interact?
 - Interactionists: each influences the other
 - Epiphenomenalists: brain causes mental states (mind)
 - Parallelists: experience causes simultaneous separate reactions in mind and body
 - Occasionalists: God = messenger between mind and body

Not all dualists have the same view of the mind-body relationship. Interactionists believe that the mind and the brain influence each other. That is, the mind can influence the body, and the body can influence the mind. Epiphenomenalists believe that the mind is an epiphenomenon, or byproduct of the brain. They believe that the brain causes mental states, but those mental states can't influence the brain. Parallelists believe that experiences cause separate but simultaneous reactions in both the mind and the brain. And occasionalists believe that God is the messenger between the body and the mind, passing information from one to the other as needed.

So which one is right? Although the debate continues, there's some evidence that the brain and mind can, at the very least, influence each other. Conditions like depression clearly show that people's biological states can influence their thoughts. And research into the effects of expectations show that strong expectations can influence the way the

brain functions. Findings like these across many research studies have led scientists to believe that the brain does many things, one of which is to create and regulate the mind.

Where are we now?



- We are natural dualists (interactionists)
 - Cultural beliefs (Bloom, 2004)
 - Double funerals
 - Exorcism
 - Reincarnation
 - 71% Americans believe in heaven
 - 72% Americans believe in angels (Newport, 2016)
- Uploading yourself into a computer (Whitwam, 2018)



In his book *Descartes' Baby*, Paul Bloom discusses our natural tendencies to believe in interactionist dualism. He writes about many cultural traditions that demonstrate a belief in the separation of the body and the mind. He points out that in some cultures, people celebrate double funerals, one for the body and another for the spirit. He discusses exorcism and reincarnation, both examples of spirits moving across bodies. And a recent Gallup poll showed that a little over 70% of Americans believe in heaven and angels.

Recently, technology has become part of the discussion, as a simple internet search on mind uploading will show. In fact, at least one company believes it can "back up your mind," presumably to download it into a suitable vessel later. This idea is different from the mind continuing in some automatic form, but the underlying idea is the same. And that is,

our bodies and our minds are two separate things.

Where are we now?



- Children are natural dualists
 - Mr. Alligator and brown mouse story
 - Mouse's biological processes ceased
 - Mouse's psychological processes continue (thinking, wanting, knowing)
 - Hamster duplication machine
 - Believed body more likely to duplicate than mind (memories)



Sources: Bering and Bjorklund (2004), Hood, Gjensoe, and Bloom (2012)

Research has shown that we develop dualist beliefs early in life. To investigate, researchers showed children a puppet show. In the puppet show, the children met two characters, Mr. Alligator and Mr. Mouse. After a brief story involving these characters, Mr. Alligator eats Mr. Mouse, ending Mr. Mouse's life. After watching the puppet show, the researchers asked the children what the mouse could and could not do after being eaten.

Generally, kindergarten-aged children thought that the mouse's brain stopped working and that he didn't need to eat food, showing their beliefs that the mouse's biology changed with death. However, they generally reported that at least some states of mind continued on after death. For example, most reported that the mouse still loved his mother, feared the alligator, and knew he was no longer alive.

Other researchers have also found that children have dualist beliefs. After convincing children that they had created an invention to clone things, researchers showed children a cloned hamster. Generally, children reported that the machine had successfully duplicated the hamster's body, but that it did not successfully duplicate the hamster's mind, reporting instead that the hamster's mind, and especially the hamster's memories, remained unique to the original hamster.

Where are we now?



- Dualism affects adults
 - Health choices
 - Primed with monism or dualism
 - Dualism prompt = more likely to consume unhealthy food
 - Relationship views
 - Stronger beliefs in dualism correlated with...
 - riskier views of consent
 - greater misconceptions of sexual availability



Sources: Fortmann, Burgmer, and Mussweiler, (2012), King and Peck (2016)

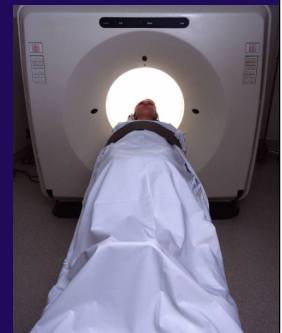
Image from publicdomainfiles.com

Other researchers have found that dualist beliefs can impact our health choices and our behaviors. For example, after prompting people to think about either monistic or dualistic views, researchers found that those who thought about dualistic views consumed more unhealthy foods than those who thought about monistic views. This makes sense. If you believe that you are your body, you might be more likely to take care of it than if you believe that you and your identity are different than your biological container. Extending these ideas, other researchers have found that stronger dualistic beliefs correspond to riskier views of romantic consent and greater misconceptions of sexual availability.

Where are we now?



- Continues to drive development of the field/related fields
 - Cognitive and Affective Neuroscience



So where are we now? As you saw in the previous lesson, questions about the relationship between the mind and the brain drove the early history of psychology. Those same questions, albeit vastly extended and refined, continue to drive the progress of psychology today. In fact, it would be challenging to find psychological research that is not, in some way, about the mind or the brain.

Since the 1990s, interest in brain research has grown markedly, along with the emergence of the area of psychology called cognitive and affective neuroscience. Cognitions have to do with thinking. Affect has to do with emotion. Together, they capture what most people think of when they consider the mind. Neuroscience has to do with the biology of the brain. In this way, this field directly represents the study of the mind-brain connection.

Where are we now?

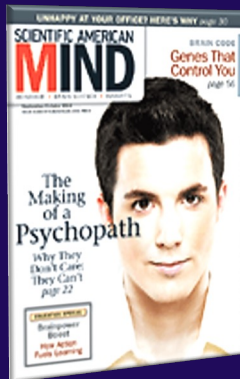


"It was a heretical idea. After all, we have had a long-standing deal with biology: whatever choices we make during our lives might ruin our short-term memory or make us fat or hasten death, but they won't change our genes—our actual DNA. Which meant that when we had kids of our own, the genetic slate would be wiped clean.

What's more, any such effects of nurture (environment) on a species' nature (genes) were not supposed to happen so quickly. Charles Darwin, whose *On the Origin of Species* celebrated its 150th anniversary in November, taught us that evolutionary changes take place over many generations and through millions of years of natural selection. But Bygren and other scientists have now amassed historical evidence suggesting that powerful environmental conditions (near death from starvation, for instance) can somehow leave an imprint on the genetic material in eggs and sperm. These genetic imprints can short-circuit evolution and pass along new traits in a single generation." (Cloud, 2010)

So what's next? Well, now that we've sequenced the genome, we've realized that we need to understand more about epigenetics, or genetic on-off switches. As you can see in the excerpt from the news story, some people believe this will alter the way we consider health and well-being and the influence of the environment on the brain and the mind.

Where are we now?



“A meticulously constructed atlas of the human brain reveals the molecular roots of mental illness- and of everyday behavior. ... The atlas may provide molecular cues to memory, attention, motor coordination, hunger, and perhaps emotions such as happiness or anxiety.” (Jones & Overly, 2010)

Other related news stories have suggested that the molecular understanding of neurological processes will reveal the biological basis for the mind. As you can see, questions about monism and dualism remain current, and will be for the foreseeable future.

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