

THE SCIENCE OF PSYCHOLOGY

Some students give psychologists a hard time when they talk about psychology being a Science with a capital “S”. What can be predicted? Can it be verified? Can anyone really believe that psychology is a Science in the same way physics and chemistry are Sciences? The only answer to those questions comes from comparing the predictions of the two fields under similar conditions.

Consider a ball rolling down a hill – how long does it take to reach the bottom? The physics major says it’s a snap to figure out. In the early seventeenth century Galileo arrived at the conclusion that the ratio of the distance (d) covered to the square of the time (t) elapsed, always equals a constant – one-half the acceleration (a) $d/t^2 = \frac{1}{2} a$. When the mass of the ball and the length and height of the inclined plane are known, everything can be calculated.

But explain to the physics major that you weren’t asking about a hypothetical ball rolling down a theoretical inclined plane, but a real ball rolling down a real hill. The hill has patches of grass, some soggy ground, some smooth rock and a few dips and depressions between the top of the hill and the bottom. Unfortunately the ball, although a true sphere, has a pebble finish on part of it, is smooth in places, and has sharp ridges on still other parts. A complicating factor is that it is raining on some of the hill and the wind is variable in direction with gusts up to 60 mph. The crowning blow is that there is no information about how large or how heavy the ball is or whether it was given a gentle nudge or a healthy shove to start it rolling. Now the question is, how long will it take for the ball to reach the bottom of the hill? (A good final exam question for Introductory Physics!).

Studying behavior is like predicting how long it takes for a real ball to roll down a real hill: There are many unknown and unmeasured variables. Even so, we want to try to understand and predict behavior. We do care about behavior – our behavior and the behavior of other people. That’s where this course will help you. You will learn about the variables which combine to influence and control behavior. And, you will learn some of the rules which can be used to predict, control, and understand behavior. It’s no snap - but you can learn the rules, and how to apply them to your advantage.

OAKLEY RAY