CYSE 201S Timothy Taylor Professor Yalpi 1/24/2024

Topic: Explain how the principles of science relate to cybersecurity.

There are eight scientific principles associated with the social sciences; this includes relativism, objectivity, parsimony, objectivity, skepticism, ethnic neutrality, determinism, and empiricism. I will be covering seven of the eight principles and how they relate to cybersecurity.

The principle of **relativism** encourages us to recognize that changes in any system will lead to changes in cybersecurity.

Objectivity allows us to view different standpoints on a topic to better handle a situation; to study with an objective stance.

Parsimony says we should keep our explanations simple so that our words maintain better clarity. In cybersecurity, we must note down how we solved a problem so that if the issue occurs again we may replicate the solution.

The principle 'empiricism' states that we can only study behavior which is real to the senses.

Ethical neutrality adheres us to the ethical standards in which research is conducted. In cybersecurity, for instance, we cannot steal the personal data from the users who rely on the company. It is morally wrong, and illegal!

Last but not least is the principle of **determinism**. Behavior is caused, determined, or influenced by preceding events. In cybersecurity, a hacker is going to exploit a weakness to commit a crime. If the integrity of the security is breached, that becomes the determining factor that causes the crime to be committed.