

Why is it we don't
think anymore?

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Goals of this Presentation

- Introduce several concepts important for understanding scientific evidence.
- Discuss the different types of scientific studies, their strengths and weaknesses.
- Encourage all of you to trust your own intuition and ability to reason, to judge things for yourself!

Scientific Proof

Students often say to me, “OK, I can feel the CranioSacral Rhythm, but where is the proof? How do I know this rhythm really exists?”

Scientific Proof

Scientific Proof Does Not Exist!

Science is not about proof, or even about truth, science is about models!

Scientific Method

- Observe a phenomenon.
- Construct a model that describes what was observed.
- Use the model to predict future outcome.
- Refine the model based upon results.
- If new data appears that contradicts the model, modify the model.

Scientific Models

- No model is perfect. Each model has only a limited region of validity.
- Models are judged on their elegance and simplicity, and their usefulness. (How well do they predict future outcome?)

The Goal of Science

- Science is a tool that helps us apply our ability to reason to the world around us.
- We don't need to do a scientific study to “prove” every single aspect of our lives.
- Instead, we should use science as a tool to help us think! Is this reasonable?

Probability and Statistics

- Statistics are used to calculate the probability that the experimental results could have occurred by pure chance.
- If this probability is very small, then it is a good assumption that the result is real.
- Statistics tell you nothing about the design of the experiment or any unconscious bias on the part of the researcher.

Probability

- Usually defined as the chance that a particular possible outcome will occur.
- For example, flip a perfect coin and there is a 50% chance it will come up heads and 50% chance it will come up tails. Right?

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WRONG!

Probability

What probability actually says is this:

If I flip the coin 1000 times and record how many times the coin lands heads up, and if I repeat that process 1000 times and plot the results, I will get a bell shape curve centered on 500 heads.

Probability

Probability theory says
nothing whatsoever about
any individual flip of the
coin.

Synchronicity

A non-causal relationship between two events, one external and physical, and one internal and psychic.
The event has meaning!

Synchronicity

Drawing the same card 4 times in a row:

There are 44 cards in the Animal deck.

Number of possible combinations in four draws = $44 \times 44 \times 44 \times 44 = 3,748,096$.

Probability of drawing the same card four times in a row = 1 in 3,748,096.

Synchronicity

In practical terms, what does 1 in 3,748,096 mean?

If I repeated this whole process once every minute, I would expect that particular combination to show up once every 7.13 years!

Synchronicity

If the level of activation of psychic energy is high enough, the outcome of an individual situation may be determined by intention and synchronicity, not by probability.

Synchronicity

Average
Situation

Individual
Situation



Probability

Synchronicity

Knowledge

Understanding

Knowledge vs. Understanding

- Knowledge is information about the average behavior of the system – the statistical ideal.
- Scientific studies give you knowledge.

Knowledge vs. Understanding

- Understanding is information about the individual as a unique entity, not as a representative of the group.
- Understanding is what you get by putting your hands on the client!

Knowledge vs. Understanding

Understanding is much
more useful in CST
than is knowledge!

Types of Scientific Studies

- Direct Physical Observation
- Single or Double Blind
Statistical Trials
- Clinical Outcome Studies
- Anecdotal Evidence

Direct Physical Observation

- Gives information about the physical structure of the system.
- But does not, in general, demonstrate the validity of a treatment modality.

Single and Double Blind

- Often used in drug trials.
- Designed to help eliminate unconscious bias on the part of the patient and the administering physician (placebo effect).
- Does nothing to eliminate unconscious bias on the part of the researcher.
- Inner Physician knows the difference between the real drug and the placebo!

Single and Double Blind

- Single Blind – Patient does not know if they are receiving the real drug or the placebo.

Single and Double Blind

- Single Blind – Patient does not know if they are receiving the real drug or the placebo.
- Double Blind – Physician also does not know if they are administering the real drug or the placebo.

How Would This Apply to CST?

- Single Blind – Patient does not know whether or not they are receiving authentic CST!

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- Single Blind – Patient does not know whether or not they are receiving authentic CST!
- Double Blind – Therapist does not know whether or not they are doing authentic CST!

Clinical Outcome Studies

- Most useful way to statistically demonstrate the validity of CST.
- Take 100 patients with migraines. Treat 50 with drugs and 50 with CST. See what happens.
- Vital to use the full power of the modality and treat each patient as an individual!

Anecdotal Evidence

- Most useful way to illustrate the power of CST.
- Most useful way to teach the work.

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But what are the scientific implications of anecdotal evidence?

Anecdotal Evidence Can Be Very, Very Threatening!

If there is a **single** anecdotal case that contradicts your model of the human body or of healing, you have to re-examine your entire world view!

Things to Remember

- People demanding scientific evidence of the validity of CST are often speaking from a place of fear.
- You are just as smart, just as capable of understanding the world around you as any scientist or researcher.
- Trust your ability to observe, Trust your ability to reason, Trust your intuition, and above all, Trust Your Hands!