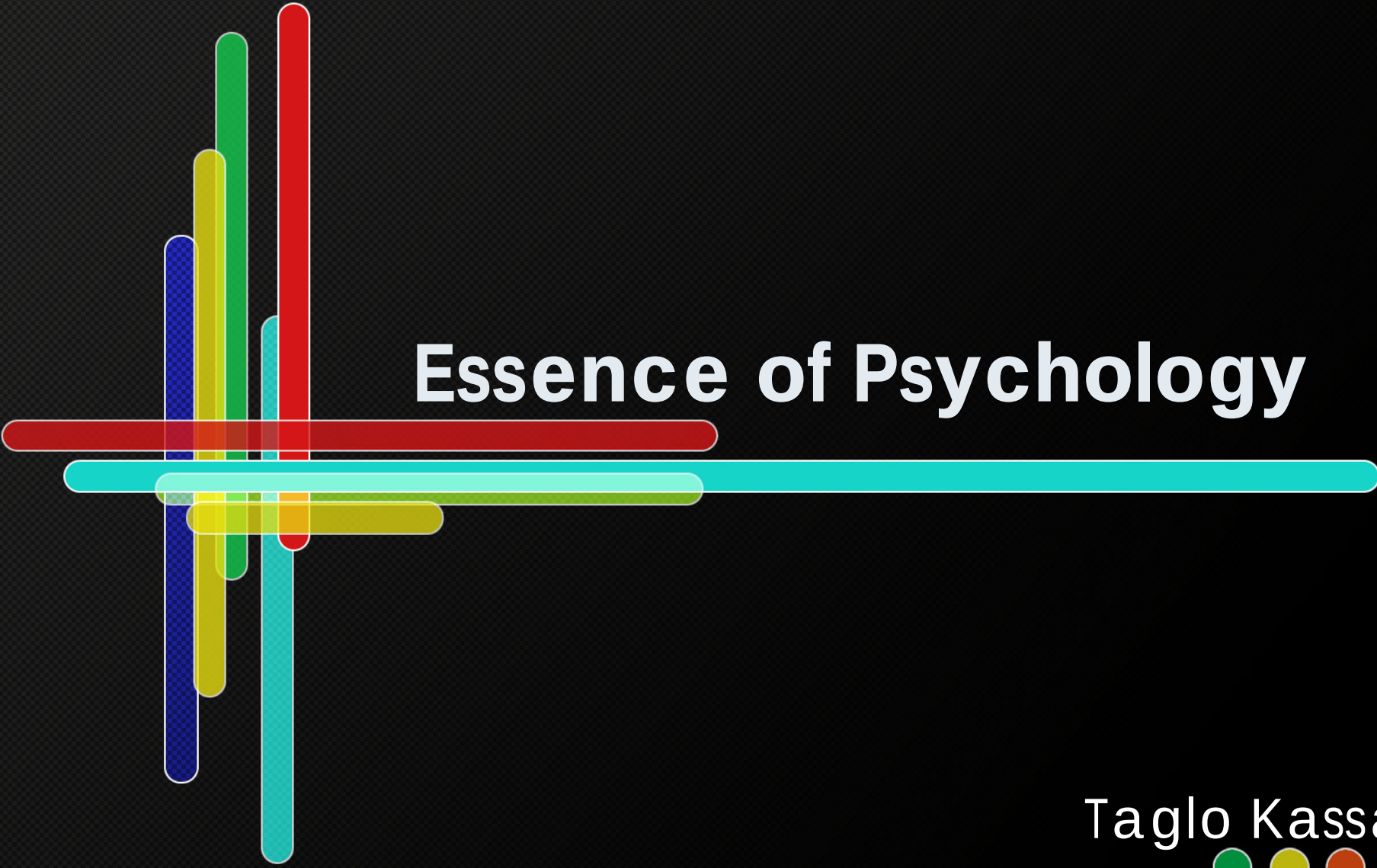


An abstract graphic on the left side of the slide consists of several overlapping, semi-transparent, rounded rectangular bars in various colors: red, green, yellow, blue, and cyan. These bars are arranged in a way that they intersect to form a cross-like shape. The red bar is the most prominent, extending both horizontally and vertically. Other bars in green, yellow, blue, and cyan are layered on top of or behind it, creating a sense of depth and complexity. The colors are vibrant and contrast sharply with the dark background.

Essence of Psychology

Taglo Kassa

Three small, solid-colored circles are positioned below the name 'Taglo Kassa'. From left to right, the colors are green, yellow, and red. They are arranged horizontally and are of equal size.

What is *Science* ?

- Ψ Is *science* just a word for all complicated stuff people learn in their biology, chemistry, and physics classes?
- Ψ Science isn't a body of knowledge.
- Ψ It's a systematic *approach* to evidence.

What is *Science* ?

- Ψ Science consists of a set of attitudes and skills designed to prevent us from fooling ourselves.
- Ψ Scientific knowledge is almost always tentative and potentially open to revision.

What is *Science* ?

- Ψ The best scientists hear a little voice in their heads that keeps repeating the same words: “but I might be wrong.”
- Ψ Such terms and phrases as *suggests*, *appears*, and *raises the possibility that* are widespread in scientific writing.

Steps in Scientific Method

Step 1

Problem Identification

Identify a problem or issue that needs to be resolved.

Step 2

Formulating Hypothesis

Prediction of a possible answer to the problem or question.

Step 3

Hypothesis Testing

Collect and analyze data to accept or reject the proposed hypothesis.

Steps in Scientific Method

Step 4

Conclusion:

Include a statement that accepts or rejects the hypothesis. Make recommendations for further study and possible improvements to the procedure.

Step 5

Communicate the Results:

Present the project to an audience.

Major Research Methods

Ψ Three major types of research methods:

- ★ Descriptive,
- ★ Correlational, and
- ★ Experimental research methods.

Major Research Methods

- Ψ **Descriptive research:** Most frequently used to answer 'what', 'who', 'where', 'how much' and 'how many' questions.
- Ψ Descriptive research methods include naturalistic observation, case studies, and surveys.

Major Research Methods

Ψ **Descriptive research:**

- i. *Naturalistic observation*: Observing subjects in their natural environment.
- ii. *Case study*: A detailed description of an individual or a group.
- iii. *Survey*: Used to collect data that cannot be observed directly.

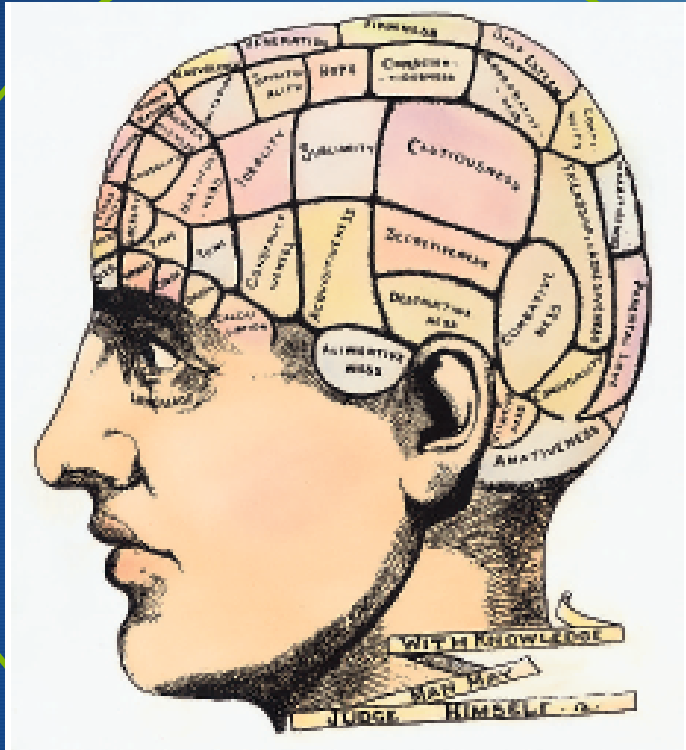
Major Research Methods

- Ψ **Correlational research:** Measures the relationship between two or more variables.
- Ψ Correlation tells strength and direction of relationship between variables.
- Ψ The relationship can be: Positive, negative, or zero (no correlation).
- Ψ N.B. *Correlation doesn't prove causation.*

Major Research Methods

- Ψ **Experimental Research:** Focuses on the cause and effect relationship between variables.
- Ψ Experiments involve at least one independent and dependent variable.
- Ψ Experiments also involve randomly assigned experimental and control groups.

Psychology ?



- From the Greek:

Psyche + *logos*

↑ ↑
(mind/soul) + (study)

- Represented by the Greek letter Ψ (psi)

What is Psychology?

- Ψ Psychology is a scientific study of behavior and mental processes.
- Ψ Behavior is anything we do.
 - Overt or observable behavior, actions and reactions
- Ψ Mental processes (Covert behavior) cannot be directly observed or measured, but inferred from overt behavior.
 - thoughts, feelings, memories...

Goals of Psychology

1. **Description** – What occurred
2. **Explanation** – Why something occurred
(examine causes)
3. **Prediction** – Under what conditions is the
phenomenon likely to occur again?
4. **Control** – How to increase desired outcomes
and decrease negative outcomes

Applications of Psychological Research

- Ψ The color of fire trucks: Bright red to lime-yellow.
- Ψ Brake lights: Two to three.
- Ψ Magazine advertisements: Human faces on the left than the right side of pages.
- Ψ Simultaneous to sequential lineups of crime suspects.

Fields of Psychology

