

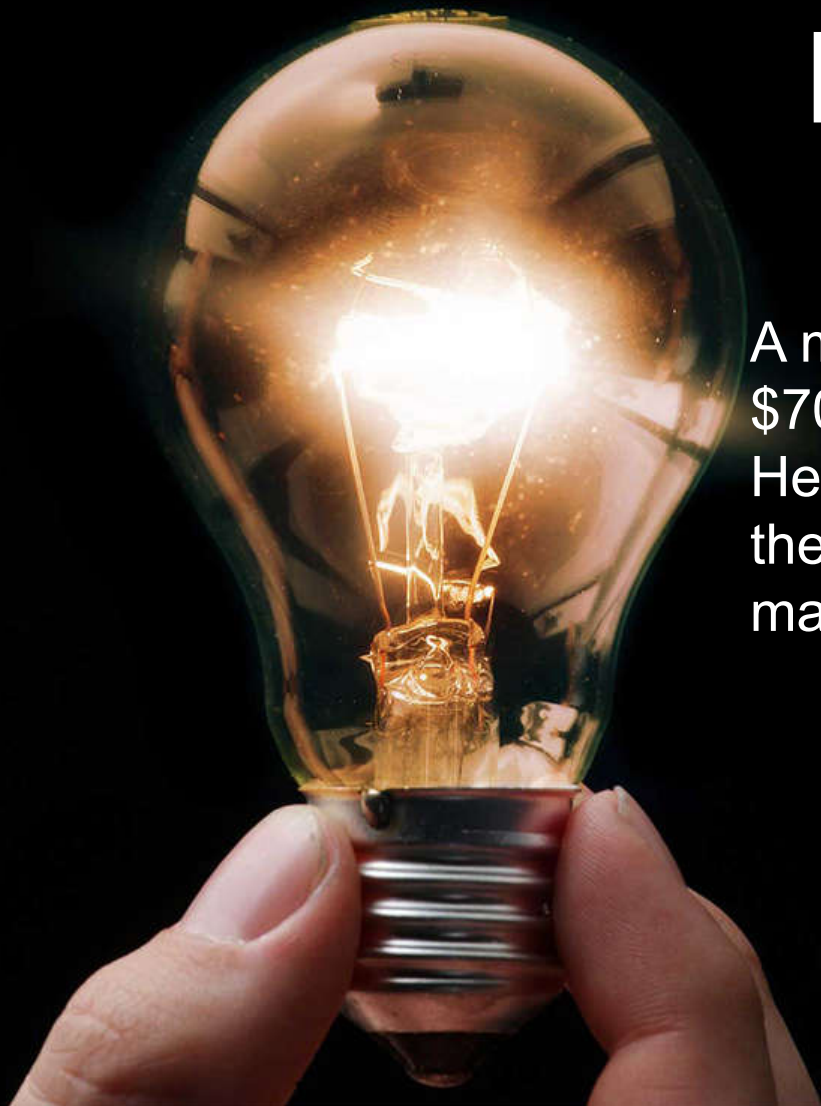


KONSEP DASAR STATISTIK

Aryan Eka Prastya Nugraha, S.E., M.Pd
2021



EXERCISE



A man buys a horse for \$60, then sells it for \$70.

He buys the horse back for \$80, and then sells the horse for \$90. How much money did he make or lose?



ANSWER



The man made \$20.

He made \$10 each of the two times he sold the horse.

Net cash

$$-\$60 + \$70 = +\$10$$

$$+\$10 - \$80 = -\$70$$

$$-\$70 + \$90 = +\$20$$



RESEARCH IN BEHAVIORAL SCIENCES

One of the main objectives of a behavioral scientist is to develop theories and principles which provide insights (wawasan) into human and organizational behavior.

These theories and principles have to be evaluated against actual observations. This is called the validation of theories by empirical research.

RESEARCH IN BEHAVIORAL SCIENCES



Broadly, research can be classified into two groups—qualitative research and quantitative research.

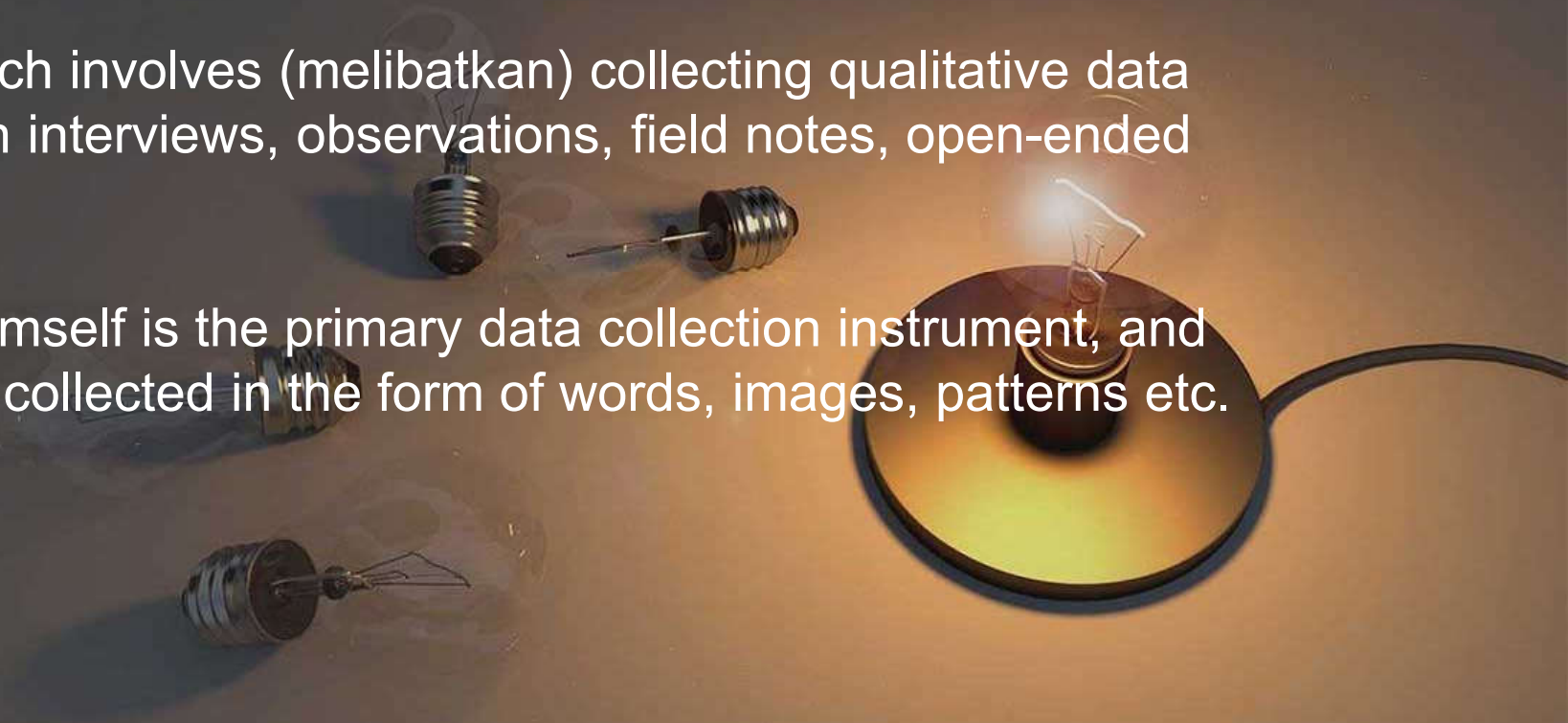




Qualitative Research

Qualitative research involves (melibatkan) collecting qualitative data by way of in-depth interviews, observations, field notes, open-ended questions etc.

The researcher himself is the primary data collection instrument, and the data could be collected in the form of words, images, patterns etc.

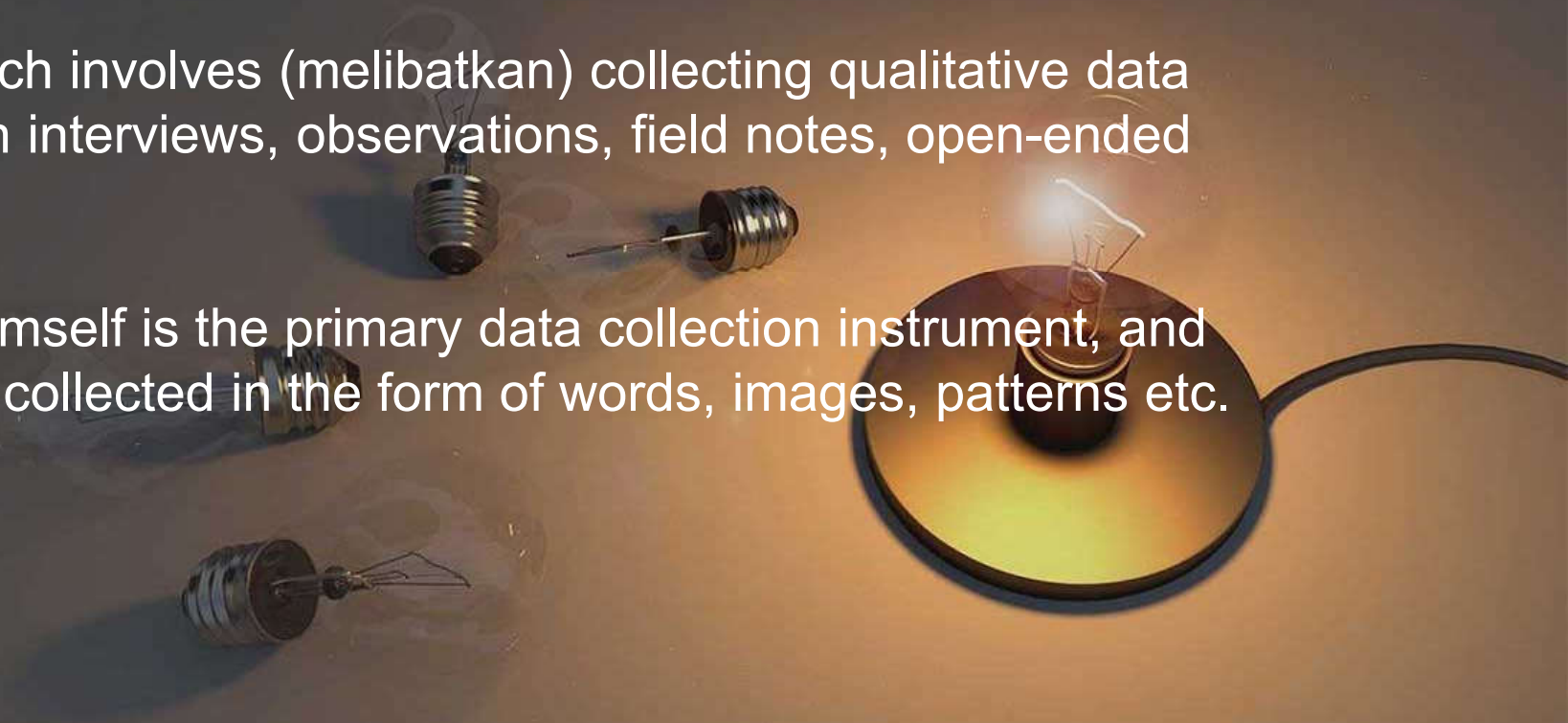




Qualitative Research

Qualitative research involves (melibatkan) collecting qualitative data by way of in-depth interviews, observations, field notes, open-ended questions etc.

The researcher himself is the primary data collection instrument, and the data could be collected in the form of words, images, patterns etc.

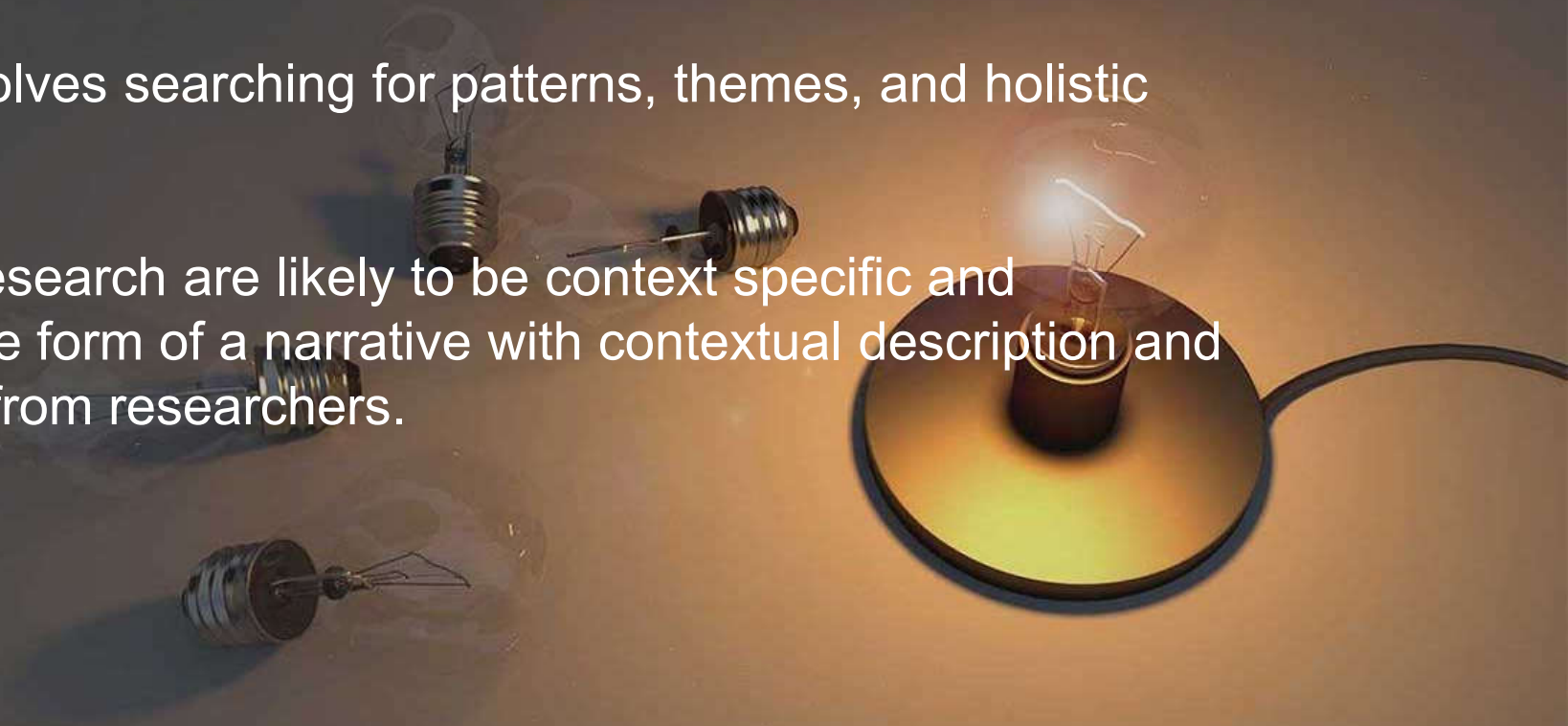




Qualitative Research

Data analysis involves searching for patterns, themes, and holistic features.

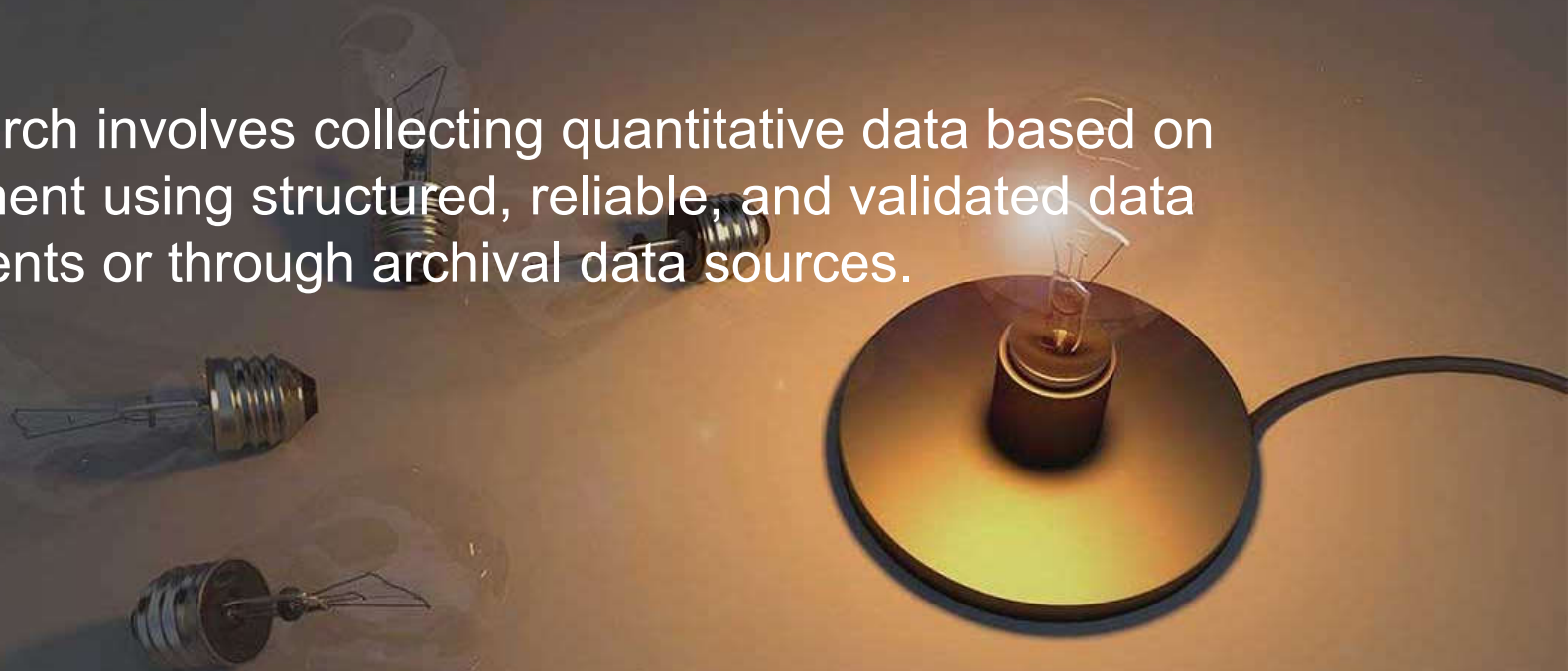
Results of such research are likely to be context specific and reporting takes the form of a narrative with contextual description and direct quotations from researchers.





Quantitative Research

Quantitative research involves collecting quantitative data based on precise measurement using structured, reliable, and validated data collection instruments or through archival data sources.

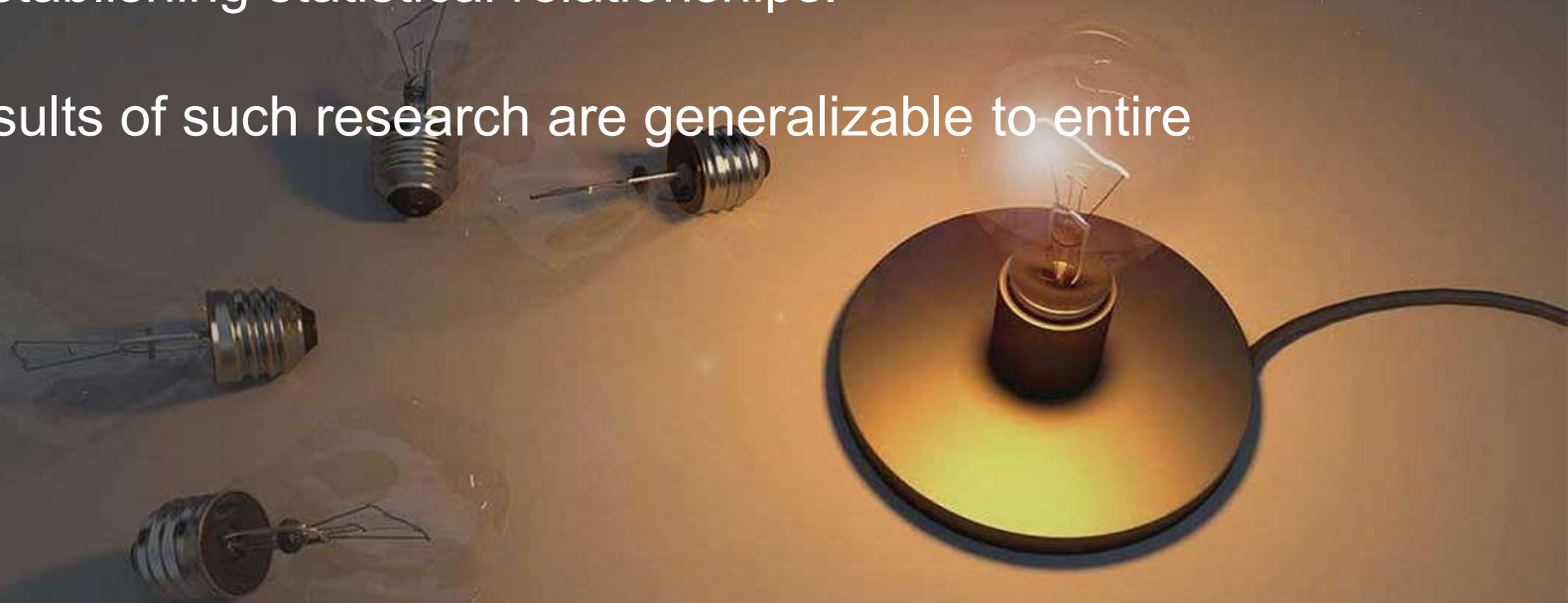




Quantitative Research

The nature of the data (sifat) is in the form of variables and data analysis involves establishing statistical relationships.

If properly done, results of such research are generalizable to entire populations.

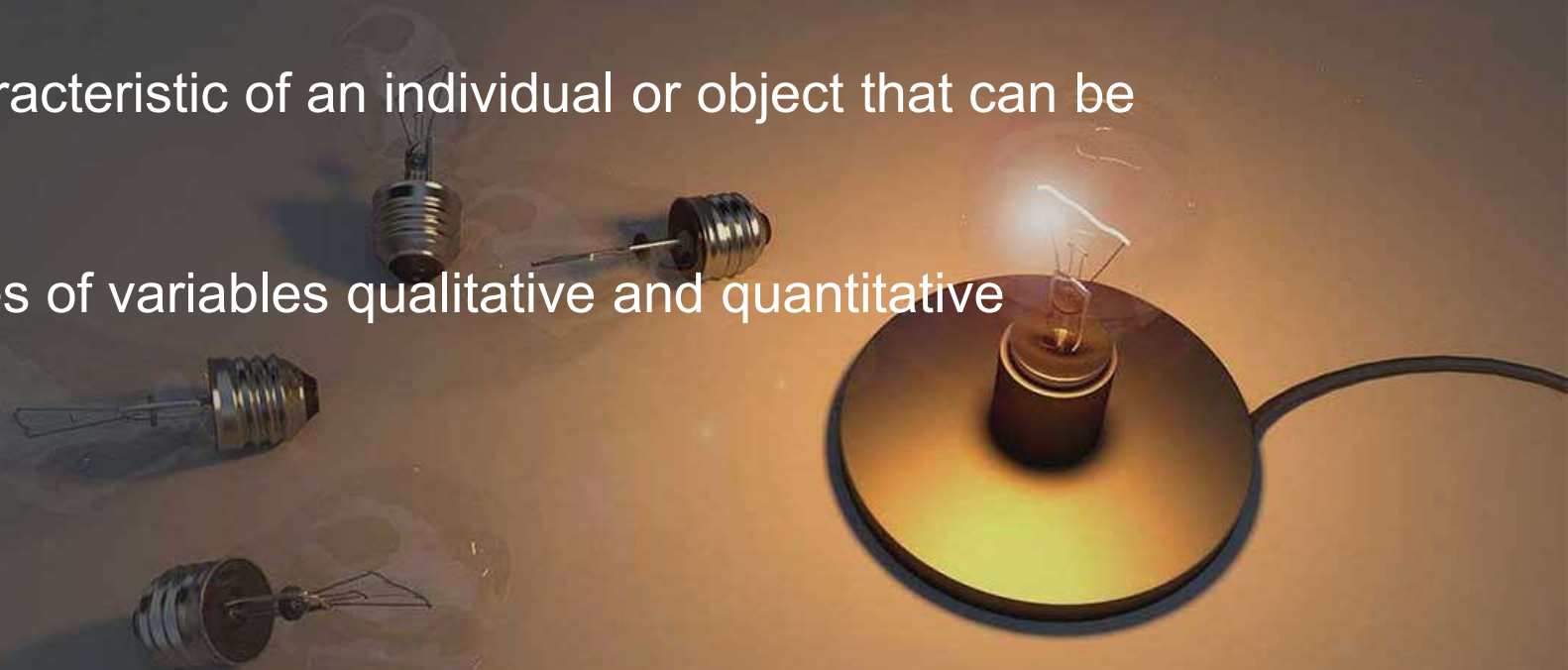




TYPES OF VARIABLES

A variable is a characteristic of an individual or object that can be measured.

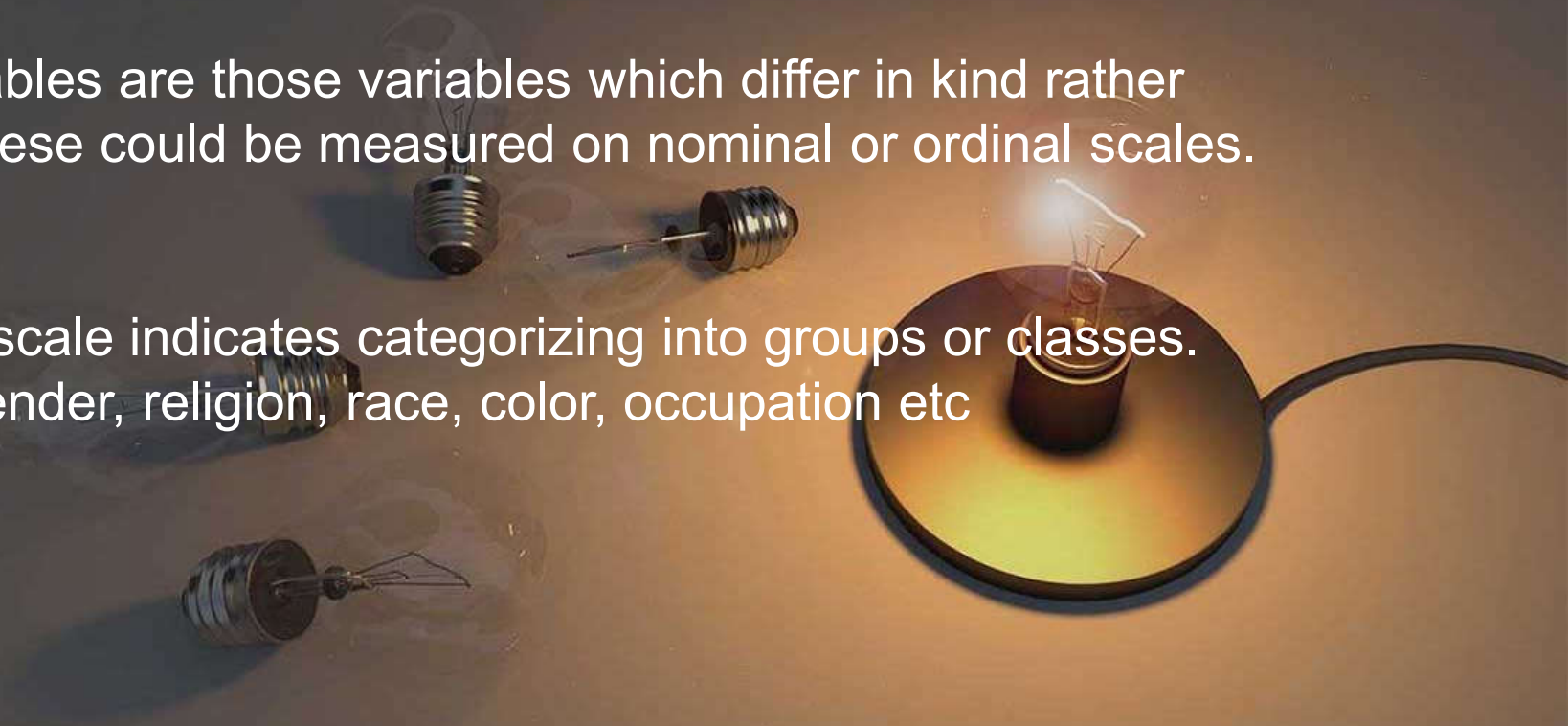
There are two types of variables qualitative and quantitative



Qualitative Variables

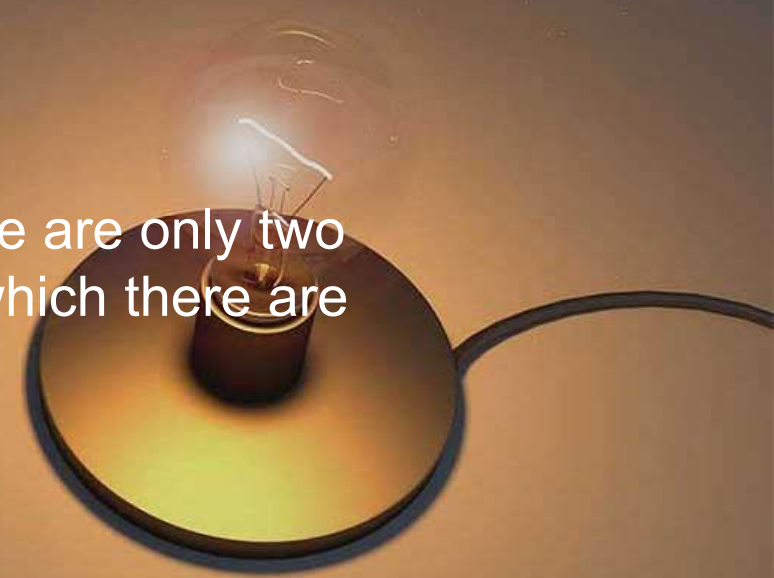
Qualitative variables are those variables which differ in kind rather than degree. These could be measured on nominal or ordinal scales.

1. The nominal scale indicates categorizing into groups or classes. For example, gender, religion, race, color, occupation etc



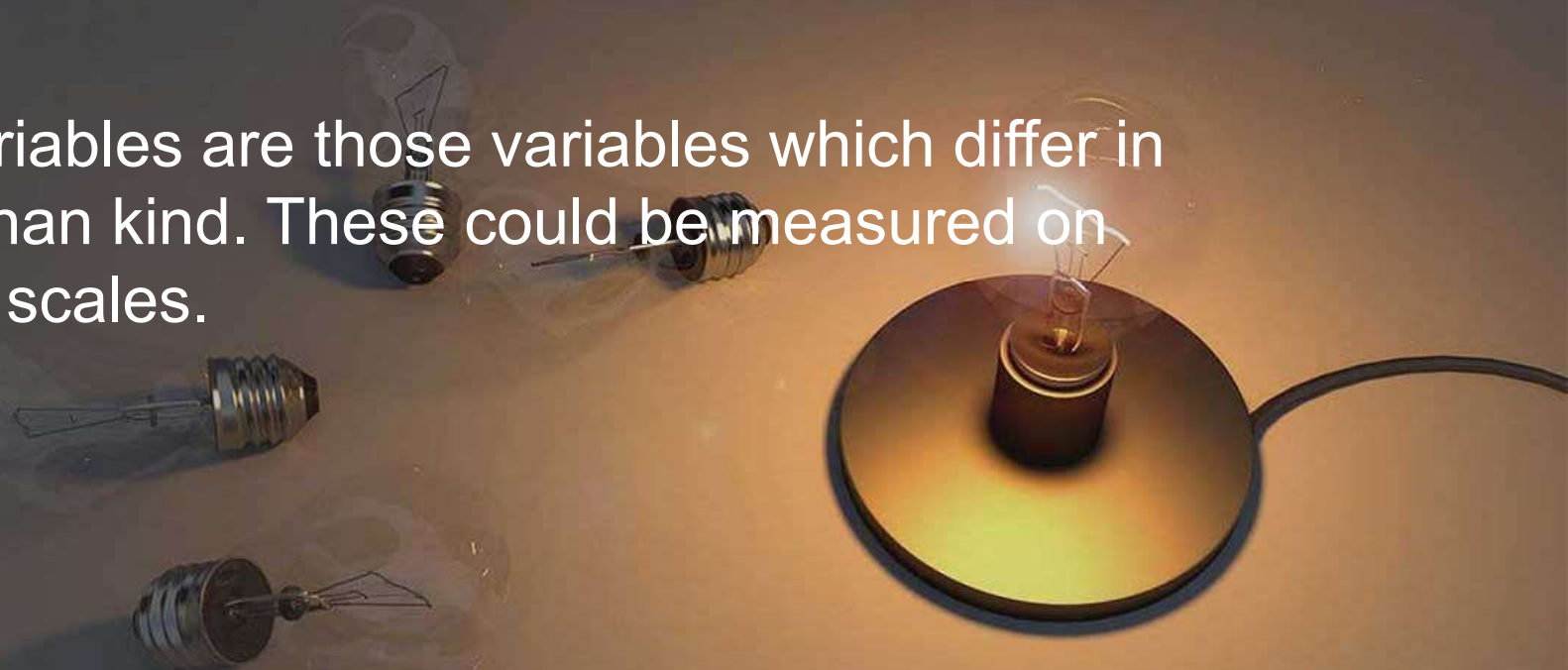
2. The ordinal scale indicates ordering of items.
For example, agreement disagreement scale
(1—strongly agree to 5—strongly disagree),
consumer satisfaction ratings
(1—totally satisfied to 5—totally dissatisfied) etc.

Qualitative data could be dichotomous in which there are only two
categories (for example, gender) or multinomial in which there are
more than
two categories (for example, geographic region)



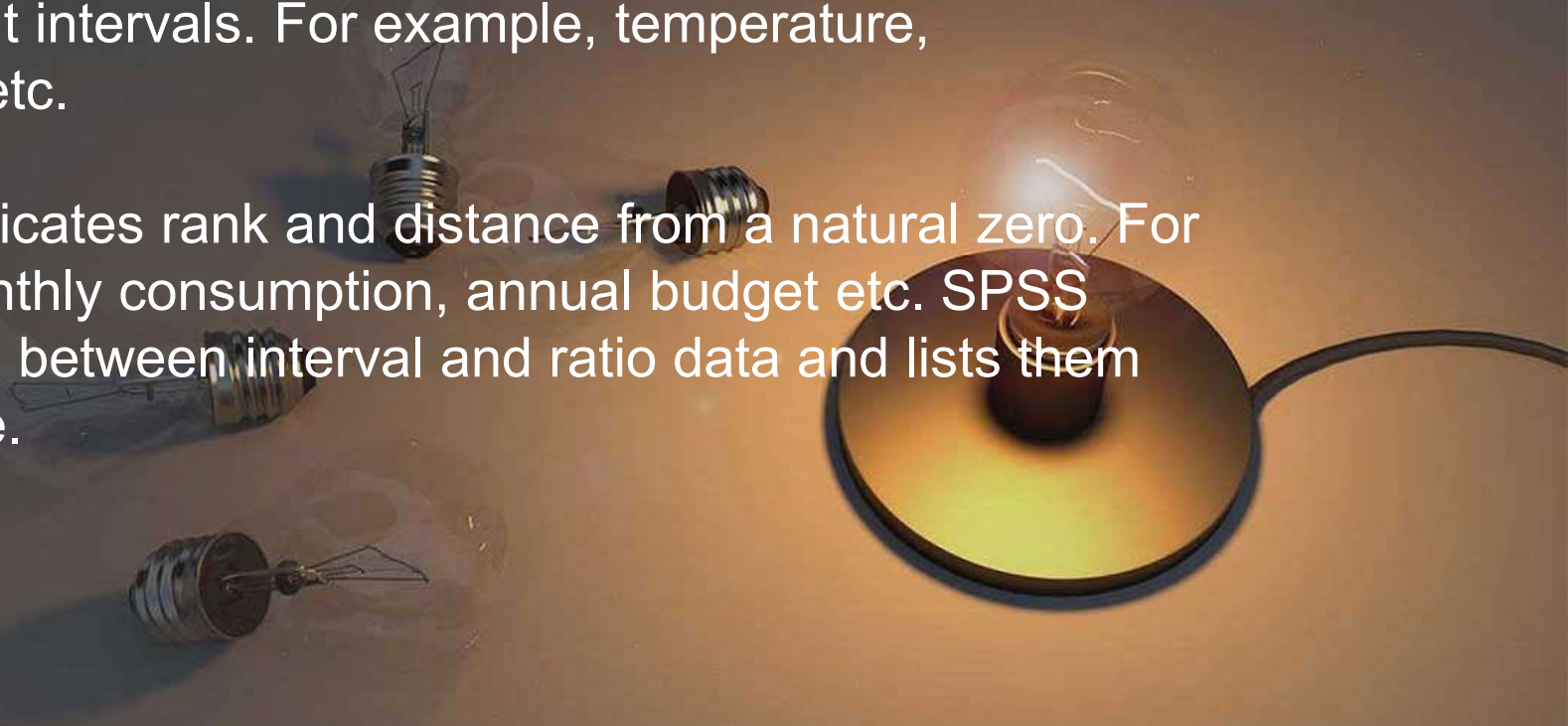
Quantitative Variables

Quantitative variables are those variables which differ in degree rather than kind. These could be measured on interval or ratio scales.



Quantitative Variables

1. The interval scale indicates rank and distance from an arbitrary zero measured in unit intervals. For example, temperature, examination scores etc.
2. The ratio scale indicates rank and distance from a natural zero. For example, height, monthly consumption, annual budget etc. SPSS does not differentiate between interval and ratio data and lists them under the label Scale.



REFLEKSI

1. Informasi penting hari ini
2. Manfaat penting dari informasi penting hari ini
3. Tindak lanjut yang dapat saudara lakukan





THANK YOU

Insert the Subtitle of Your Presentation