- CP^1 = Client's Problem at Intake

- CP^2 = Client's Problem at End of Intervention

- $CP^1 - CP^2 = \Delta CP$ (Change in the Client's Problem)

$$\Delta CP = X + Y$$

- X = Intervention of the Social Worker

- Y = Random error outside the worker's control

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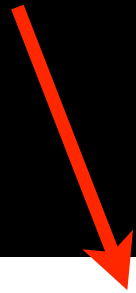
$$\Delta CP = f(x_i) + f(E_j) + f(I_l) + e$$

"the function of..."

$$\Delta CP = f(x_i) + f(E_j) + f(I_l) + e$$

Change in the
client's problem

$$\Delta CP = f(x_i) + f(E_j) + f(I_l) + e$$

Intervention

$$\Delta CP = f(x_i) + f(E_j) + f(I_l) + e$$

$$\Delta CP = f(x_i) + f(E_j) + f(I_l) + e$$

Represents number
of interventions

External or environmental factors

$$\Delta CP = f(x_i) + f(E_j) + f(I_l) + e$$

Internal or
individual factors

$$\Delta CP = f(x_i) + f(E_j) + f(I_l) + e$$

Random error in measurement

$$\Delta CP = f(x_i) + f(E_j) + f(I_l) + e$$

Ways that social workers are involved in research

1. As a research PRODUCER.

   - Showing the effectiveness of interventions with a group or describing a group.

   - Evaluating the effectiveness of interventions with an individual client.

2. As a research CONSUMER.

3. As a research PARTICIPANT.

Research Strategies

- Descriptive research

- Explanatory research

- Exploratory research

Types of Questions

- Practice Evaluation

  Evaluate the effectiveness of individual practice

- Program Evaluation

  Evaluate the effectiveness of the program

- Needs Assessment

  Describe the characteristics and extent of a social problem

Practice Evaluation Studies

- Involve one case, subject, or client system

- Often called single-case design, n=1, or case studies

- Requires use of specific criteria and methods in monitoring practice case

Program Evaluation

- Formative (Process) Evaluation

  Describes a program's planning development and implementation

- Summative Evaluation

  Determines if the program's goals and objectives were met

Needs Assessments

- Describes characteristics and extent of social problem

- Assists in determining the most appropriate response

- Often done in a specific community or in a specific population of clients

Social Work Research

Basic Training

Variable

- Characteristics of a phenomenon; something that varies and subsequently has different values.

- What are some of the variables you would want to measure if you were doing a complete psychosoical assessment?

Measurement in Social Work Research

- Operationalize – a means of specifying the manner by which the variable is to be measured. (example: SES)

- Operational definition – a definition for a variable written in terms of how it is measured.

Naming the Variables and Values

- Variables = a characteristic of a phenomenon that varies

- Value = different qualities of variables

Levels of measurement

- The extent to which a variable can be quantified and subsequently subjected to mathematical or statistical procedures.

- Four levels of measurement:
  1. Nominal
  2. Ordinal
  3. Interval
  4. Ratio

Nominal

- Measures that clarify observations into mutually exclusive categories with no ordering to the categories

- Examples:
  - Race/Ethnicity
  - Marital Status
  - Gender
  - Depressed/Not Depressed

Ordinal

- Measures that classify observations into mutually exclusive categories with an inherent order (but no inherent value).

- Examples:
  - hi functioning, normal functioning, low functioning
  - strongly agree, agree, disagree, strongly disagree
  - first place, second place, third place, fourth place…
  - very religious, somewhat religious, not at all religious

Likert scale

- A common type of ordinal measurement consisting of a series of statements with five response alternatives.

a	b	c	d	e
Strongly Agree	Agree	Neutral or No Opinion	Disagree	Strongly Disagree

INSTRUCTOR EVALUATION

1. The instructor has a thorough knowledge of the subject matter.   a b c d e

2. The instructor's course presentations were well organized.   a b c d e

3. The instructor had office hours posted and was available during those hours.   a b c d e

Interval

- Measures that classify observations into mutually exclusive categories in an inherent order and with equal spaces between the categories.

- Examples:
  - Test scores
  - IQ scores
  - Any "score" that does not have an *absolute zero*

Ratio

- Measures that classify observations into mutually exclusive categories with an inherent order and equal spacing between the categories and with an absolute zero reference point.

- Examples:
  - years of age
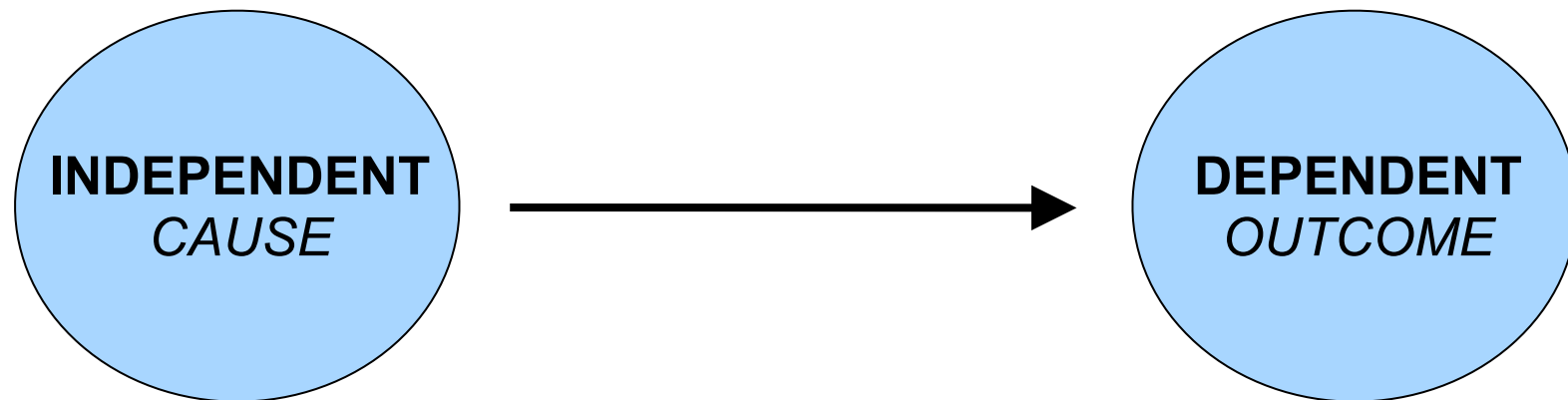 - number of days in in-school suspension

Dependent variable

- The **outcome** variable that has been presumably affected by the independent variable.

Independent Variable

- The presumed **causal** variable in a relationship.

Independent & Dependent Variables

INDEPENDENT
CAUSE

⟶

DEPENDENT
OUTCOME

More on variables

- Many studies do not specify independent and dependent variables.

Differential effects of support providers on adolescents' mental health.

- Examines the effects of parent, teacher and peer social support on depression and self-esteem of adolescents.

The effect of health on retirement saving among older workers.

- Investigates the association between health and retirement saving. Effect of health on the probability that a person nearing retirement age will contribute to an individual retirement account.

Effects of a cognitive-behavioral, school-based, group intervention with Mexican American pregnant and parenting adolescents.

- Presents a study which evaluated a cognitive-behavioral school-based group intervention for Mexican American pregnant and parenting adolescent girls using a randomized experimental design, pretest, posttest and follow-up.

Social work treatment of sleep disturbance in a 5-year-old boy: a single-case evaluation.

- A social work intervention with sleep disturbance in a family comprising a mother and her 5-year-old son used a behavior-analytic approach. Sleep disturbance is a common childhood problem that can adversely affect family functioning, parental relationship, and child development, but in general, social workers do not deal with the problem. Baseline assessment was conducted followed by a descriptive analysis. Intervention techniques included parent training, positive reinforcement, and a behavioral-collaborative approach. The child learned to settle when sent to bed and to sleep through the night. The social work intervention was effective in empowering the mother to effect change with her child in the home setting.

Perspectives from Chicago's homeless youths: a needs and service use assessment.

- This article investigated what five homeless youths in Chicago, Illinois, perceived as their primary and secondary service needs and their awareness, use, and assessment of services designed to meet those needs. For the purpose of sampling, homeless youths were considered those teenagers or young adults who had no permanent address for any length of time, no parents or family to rely on for daily support, and no regular source of income, food, or shelter, except through homeless shelters and food pantries. The respondents were administered a survey designed by the investigator to elicit both qualitative and quantitative data.

Antecedents to retention and turnover among child welfare, social work, and other human service employees

- This study involves a metanalysis of 25 articles concerning the relationship between demographic variables, personal perceptions, and organizational conditions and either turnover or intention to leave. It finds that burnout, job dissatisfaction, availability of employment alternatives, low organizational and professional commitment, stress, and lack of social support are the strongest predictors of turnover or intention to leave.
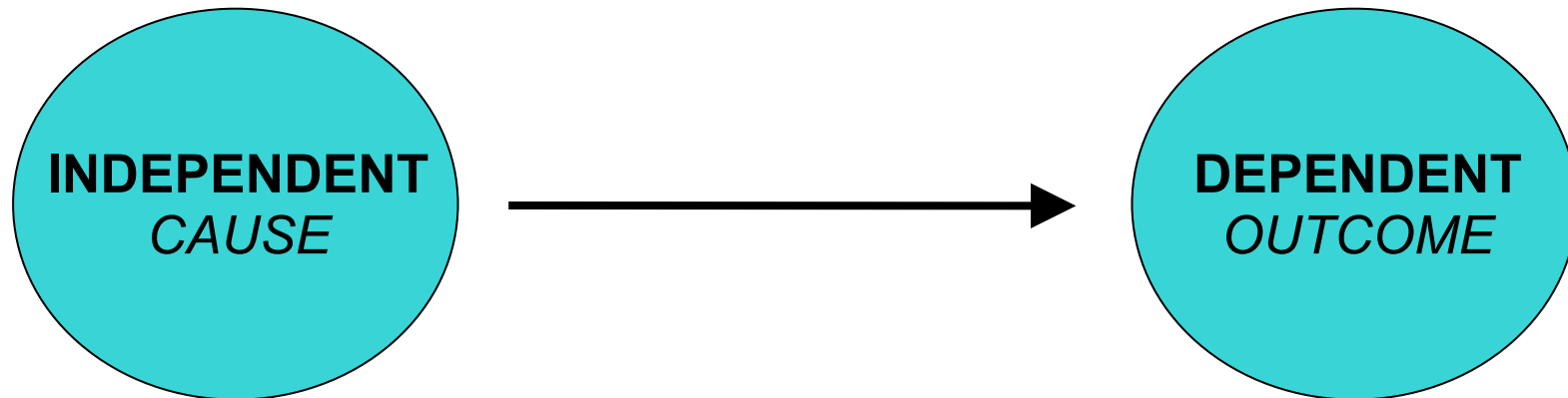
Social Work Research

Asking Research Questions

Independent & Dependent Variables

INTERNAL VALIDITY (of a research design) – the extent to which the changes in the dependent variable are a result of the independent variable rather than other factors.
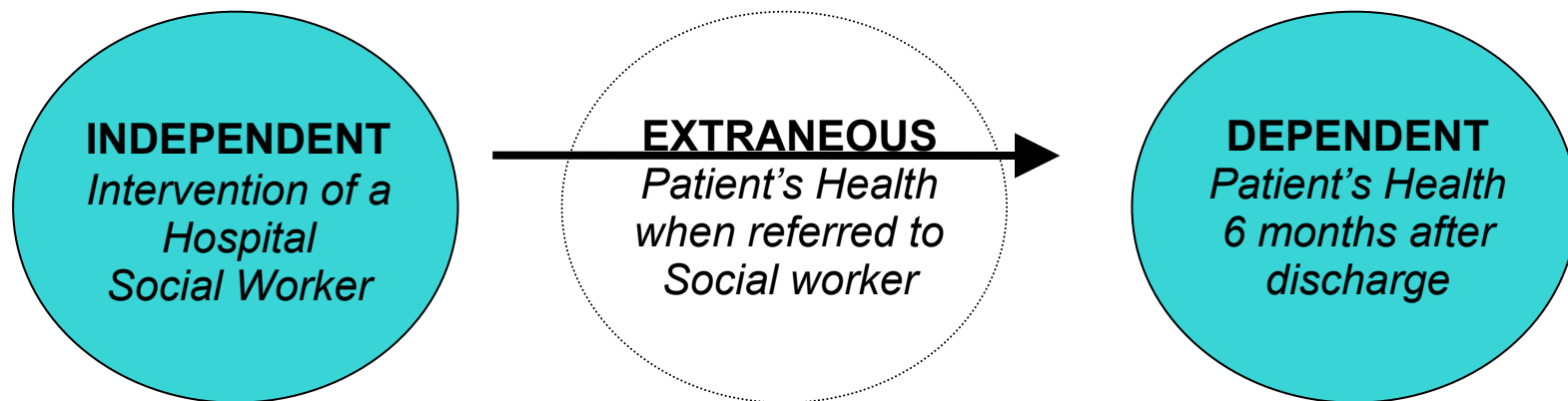
INDEPENDENT
CAUSE

→

DEPENDENT
OUTCOME

Independent & Dependent Variables

EXTRANEOUS VARIABLE – any variable that may explain changes in the dependent variable better than the proposed independent variable. Also called intervening variables.

INDEPENDENT
INCOME

EXTRANEOUS
MEDICAL CARE

DEPENDENT
LONGEVITY

Independent & Dependent Variables

EXTRANEOUS VARIABLE – any variable that may explain changes in the dependent variable better than the proposed independent variable. Also called intervening variables.
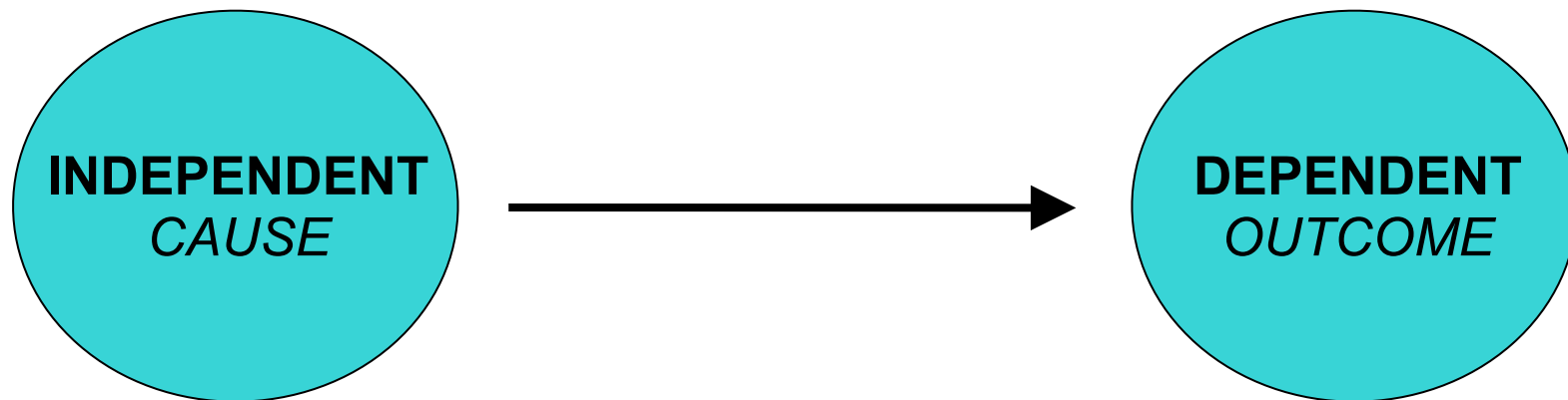
INDEPENDENT
Intervention of a Hospital Social Worker

EXTRANEOUS
Patient's Health when referred to Social worker

DEPENDENT
Patient's Health 6 months after discharge

Independent & Dependent Variables

INDEPENDENT
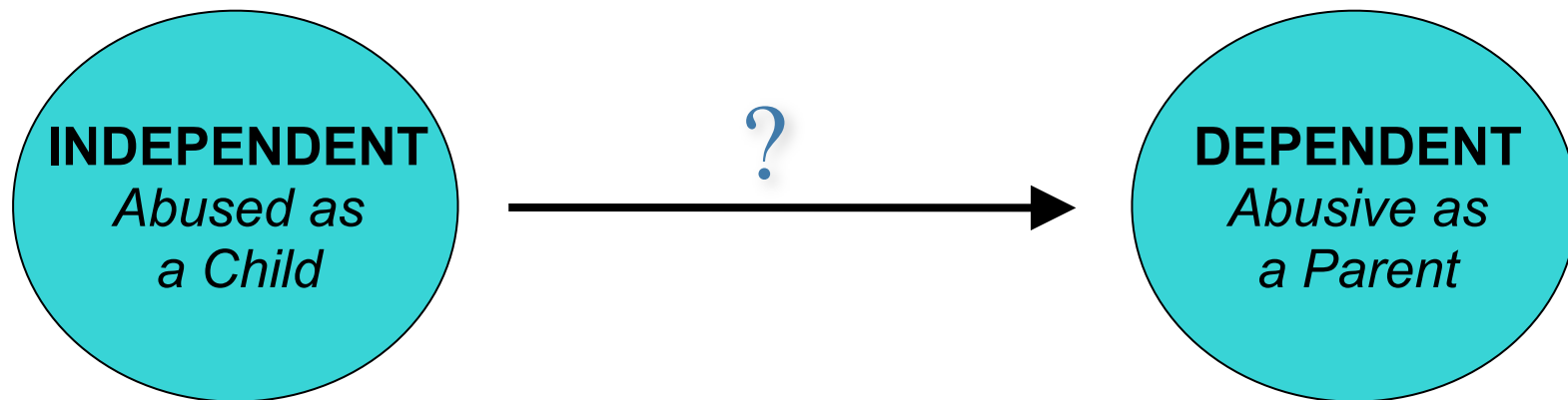*CAUSE*

→

DEPENDENT
OUTCOME

Research Question

- Are the majority of parents who abuse their children former victims of child abuse themselves?

Independent & Dependent Variables

INDEPENDENT
Abused as a Child

?

DEPENDENT
Abusive as a Parent

Hypothesis

- A tentative answer to a research question.

- A proposed probability statement about the relationships among certain variables.

From Question to Hypothesis

- Research Question: Are the majority of parents who abuse their children former victims of child abuse themselves?

- Hypothesis: Parents who were abused as children are more likely (probability), than parents who were not abused as children, to abuse their own children.

- Null or Alternative Hypothesis: Parents who were abused as children are just as likely (probability), as parents who were not abused as children, to abuse their own children.

A hypothesis is not always needed

- A hypothesis is only necessary when you have reason to predict (based on previous research) that a relationship does exist between variables. (Predictive, Prescriptive, Evaluation, or Explanatory Research)

- Other times, only a question is needed. No prediction is necessary. (Descriptive or Exploratory Research)

Getting a sample to study

- The next step after selecting your research question is determining who or what will be studied in an attempt to answer your question.

Unit of Analysis (subjects, elements)

- The situation or person that is the object of the research study.
    1. Individuals
    2. Groups
        a. Families
        b. Organizations/Agencies/Businesses
        c. Other social groups
    3. Social artifacts – such as documents – etc.