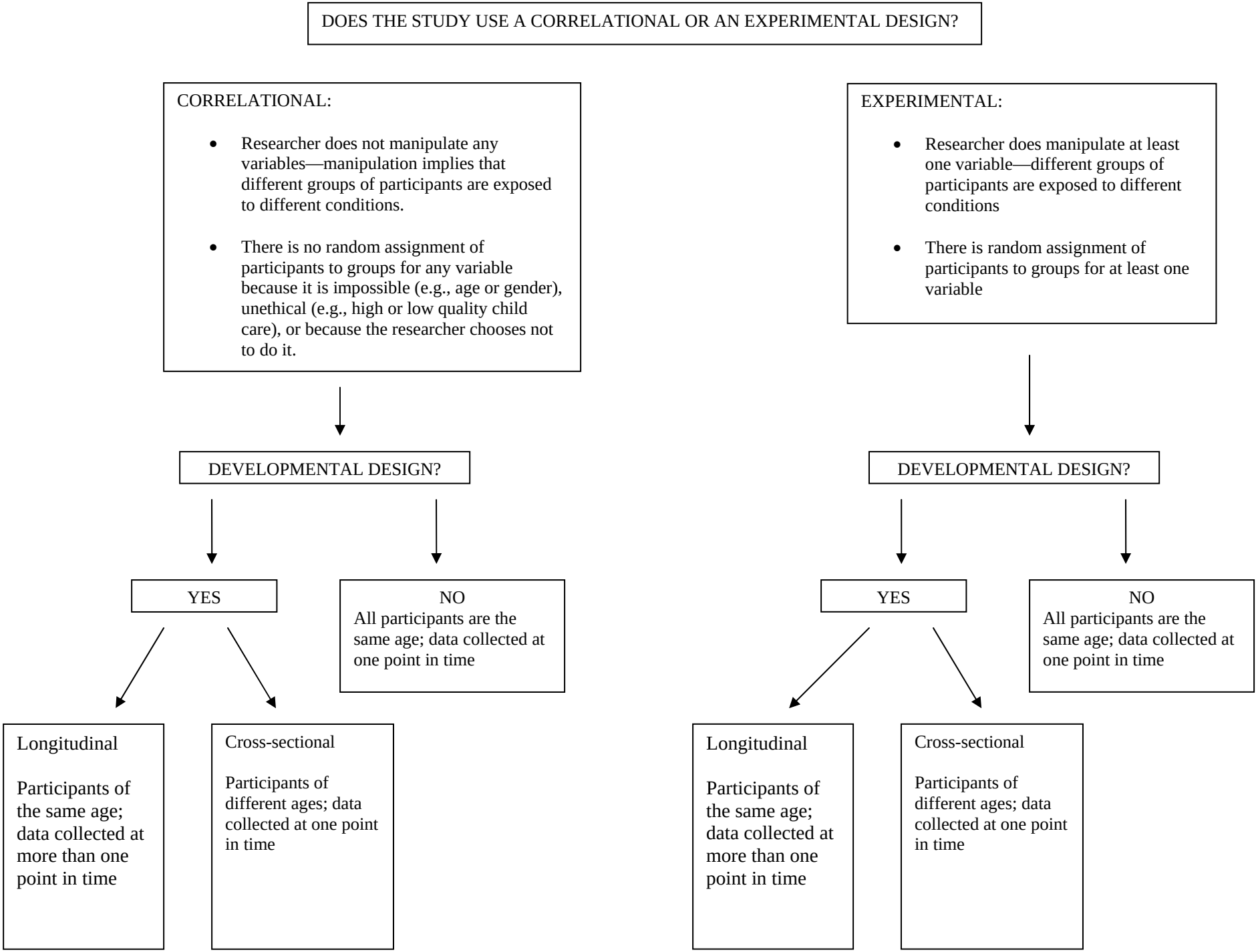
DOES THE STUDY USE A CORRELATIONAL OR AN EXPERIMENTAL DESIGN?
CORRELATIONAL:
Researcher does not manipulate any variables—manipulation implies that different groups of participants are exposed to different conditions.
There is no random assignment of participants to groups for any variable because it is impossible (e.g., age or gender), unethical (e.g., high or low quality child care), or because the researcher chooses not to do it.
EXPERIMENTAL:
Researcher does manipulate at least one variable—different groups of participants are exposed to different conditions
There is random assignment of participants to groups for at least one variable
DEVELOPMENTAL DESIGN?
DEVELOPMENTAL DESIGN?
YES
NO
All participants are the same age; data collected at one point in time
YES
NO
All participants are the same age; data collected at one point in time
Longitudinal
Participants of the same age; data collected at more than one point in time
Cross-sectional
Participants of different ages; data collected at one point in time
Longitudinal
Participants of the same age; data collected at more than one point in time
Cross-sectional
Participants of different ages; data collected at one point in time

Specific Examples

The following studies are examples of different types of general research designs (correlational or experimental) combined with different types of developmental designs (longitudinal, cross-sectional, or no developmental design).

General Research Design: Correlational

No developmental design:

A study (not discussed in class) examines the relationship between gender and aggressive behavior in children. The researcher wants to know if there is a difference in the frequency of aggressive behavior exhibited by 2-year-old boys and girls. She observes boys and girls in daycare centers and each child is observed once.

It is correlational because no variables are manipulated and the researcher cannot randomly assign children to be male or female. There is no developmental design because all of the participants are the same age and data are collected at one point in time.

Longitudinal Design:

A study (discussed in class) examined the relationship between children's experiences in high or low quality child care and their social competence. Data on children's social skills were collected when the children were age 4 and again at age 8.

It is correlational because the researchers cannot randomly assign children to high or low quality child care (for ethical reasons) and no variables were manipulated. It is longitudinal because data were collected from a group of children of the same age over time (specifically, at age 4 and again at age 8).

Cross-sectional Design:

A study (discussed in class) examined the relationship between children's ages and their responses to misleading questions about a past event. Kindergartners, second graders, and fourth graders were shown a videotape of two children arguing over a bicycle and then were asked a series of questions, including some misleading questions.

It is correlational because the researchers cannot randomly assign children to different age groups (because it's impossible!) and no variables were manipulated. It is cross-sectional because data were collected from children of different ages at one point in time.

General Research Design: Experimental

No developmental design:

A study (discussed in class) examined children's exposure to angry interactions and their aggressive behavior. Two-year-old children were randomly assigned to one of two groups/conditions--the experimental ("angry") condition, in which children were exposed to two adults having an argument, or the control ("friendly") condition, in which children were exposed to two adults having a friendly interaction. Children were observed immediately following these interactions and their aggressive behaviors were recorded.

It is experimental because the researcher does manipulate a variable (exposure to angry or friendly interactions) and randomly assigns children to one of the two groups/conditions. There is no developmental design because all of the children are the same age and data are collected at one point in time. Therefore, it is not possible to examine age-related or developmental change.

NOTE: All developmental designs include age as a variable. Age cannot be manipulated by the researcher and the researcher cannot randomly assign participants to different age groups. However, if there is another variable in a study that is manipulated by the researcher and there is random assignment of participants to conditions, the general research design of the study is experimental. Two examples are provided below.

Longitudinal Design:

A study (not discussed in class) examined whether eight-year-old children who are rejected by their peers (i.e., disliked by most of their classmates) could benefit from social skills training. Children who were all identified by teachers as "disliked" were randomly assigned to one of two groups/conditions, an experimental condition in which children were taught specific strategies for engaging in positive interactions with their peers, or a control condition in which children were taught strategies to solve math problems. After the training sessions ended, children's social skills were rated by teachers and parents. Two years later, when the children were ten, data on social skills were collected again.

It is experimental because the researcher manipulates a variable (social skills training versus math training) and randomly assigns participants to one of the two groups/conditions. It is longitudinal because children of the same age are followed over time--data are collected when the children are eight and again when they are ten.

Cross-sectional Design:

A study (not discussed in class) examines whether a particular preschool curriculum designed to teach children coping skills can reduce children's aggressive behavior. Three-year-old and 4-year-old children are randomly assigned to one of two preschool classrooms. In one classroom, children are exposed to a curriculum that teaches coping skills related to negative emotions (for example, what to do when you're angry at someone). In the other classroom, children are exposed to a "normal" preschool curriculum that includes nothing about coping skills. After children have been exposed to the curricula, observers rate the children's aggressive behavior in the classroom at one point in time.

The study is experimental because the researcher manipulates a variable (exposure to different curricula) and randomly assigns children to one of two groups (in this case, one of two different classrooms). It is cross-sectional because the children are of different ages and all the data are collected at one point in time.