

	Assign.	Grp.	Pre.	I.V.	Post.	
Quasi-experimental designs with Major Limitations						
One-group posttest-only design	NR	E:		X	O	
One-group pretest-posttest design	NR	E:	O	X	O	
Posttest-only nonequivalent groups design	NR	E:		X	O	
	NR	C:		~X	O	
Better Quasi-experimental designs						
Pretest-posttest nonequivalent comparison-group designs	NR	E:	O	X	O	
	NR	C:	O	~X	O	
Single-group time-series designs	NR	E:	OOO	X	OOO	
With temporary treatment						
With continuous treatment	NR	E:	OOO	XOXO	XOXO	
Multiple-group time-series designs	NR	E:	OOO	X	OOO	
With temporary treatment	NR	C:	OOO	~X	OOO	
With continuous treatment	NR	E:	OOO	XOXO	XOXO	
	NR	C:	OOO	O O	O O	
Randomized experimental designs						
Posttest-only control-group design	R	E:		X	O	
	R	C:		~X	O	
Pretest-posttest control group design	R	E:	O	X	O	
	R	C:	O	~X	O	
Solomon 4-group design	R	E <sub>1</sub> :	O	X	O	
	R	E <sub>2</sub> :		X	O	
	R	C <sub>1</sub> :	O	~X	O	
	R	C <sub>2</sub> :		~X	O	
Randomized experimental design with matching	M R	E:		X	O	
	M R	C:		~X	O	
		Order		Post 1	Post 2	
Within-subjects or crossover design	R	E <sub>1</sub>	X	O	~X	O
	R	E <sub>2</sub>	~X	O	X	O

Note. Assign. = assignment of participants to groups (NR = nonrandom, R = random, M R = matched then randomly assigned). Grp. = group or condition (E: = experimental, C: = control or comparison). Pre = pretest (O = an observation or measurement; a blank means there was no pretest for that group). I.V. = active independent variable (X = intervention, ~X = control, comparison or other treatment). Post = posttest (O = a posttest observation or measure).

**FIGURE 5.1**  
Summary of Specific Designs for Experiments and Quasi-Experiments.