# APA Style JARS Supplemental Glossary

This glossary provides supplemental information on terms used in APA Style JARS and is meant to supplement Chapter 3 of the *Publication Manual of the American Psychological Association, Seventh Edition*. It is not an exhaustive list of all terms employed in quantitative, qualitative, or mixed methods research, nor does it include all possible definitions for each term; definitions in addition to or different from those reported in this glossary may be found in other sources.

| Term | Definition |
|---|---|
| **accidental sampling** | see “convenience sampling” |
| **adverse event** | in research, typically research involving an evaluation of a treatment or an intervention, an event that has an injurious, harmful, or otherwise undesirable effect on participants. Researchers are obliged to disclose adverse events and note how frequently they occurred during institutional review and in their research reports. |
| **approach to inquiry** | a set of philosophical assumptions that describes research traditions or strategies underpinning research goals. It is sometimes referred to as a researcher’s epistemological beliefs, worldview, paradigm, strategies, or approach to problems. Examples include constructivist, critical, feminist, interpretive, postpositivist, postmodern, pragmatic, and psychoanalytic approaches to inquiry. Qualitative researchers are encouraged to consider whether their approaches to inquiry are coherent with their studies’ research design and methods of analysis. |
| **approximate replication** | a replication into which researchers incorporate alternative procedures and additional conditions. |
| **back-translation** | a text is translated, usually by a bilingual person, from the source language to the target language, and then is translated independently by a different bilingual person back into the source language. Researchers can compare the original text with the back-translated text to see if anything important was changed in the translation to ensure that the two are equivalent enough that the results can be compared. |
| **Bayesian technique** | an inferential statistical procedure in which researchers estimate parameters of an underlying distribution based on the observed distribution. In this approach to statistical inference and probability, previously known (a priori) information about a population characteristic of interest is incorporated into the data analysis. Estimated quantities are based in part on empirical data (i.e., what was actually observed) and in part on collective or individual knowledge about what to expect in the population (as captured in a prior distribution). |
| **bootstrapping** | a statistical technique used to estimate the variance of a parameter when standard assumptions about the shape of the data set are not met. For example, bootstrapping may be used to estimate the variance of a set of scores that do not follow a normal distribution. In this procedure, a subset of values is taken from the data set, a quantity (e.g., the mean) is calculated, and the values are reinserted into the data. This sequence is repeated a given number of times and, from the resulting set of calculated values (e.g., the set of means), the summary value of interest is calculated (e.g., the standard deviation of the mean). |
| **case study** | an in-depth report of analyses or observations obtained while working closely with an individual, group, community, or organization. Case studies are used to illustrate a problem in depth, often using multiple types of data (e.g., psychological, physiological, biographical, environmental); indicate a means for solving a problem; and/or shed light on needed research, clinical applications, or theoretical matters. Although case studies allow for intensive analysis of an issue, they are limited in the extent to which their findings may be generalized. |

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| Term | Definition |
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| **case-control study** | a research investigation that evaluates the effects of one or more health-related interventions on health outcomes by prospectively and randomly assigning people to experimental conditions. ***Also known as "case-control design," "case-clinical trial," "case-referent study."*** |
| **case-referent study** | see "case-control design" |
| **coherence** | in qualitative research, describes the need to assist readers in understanding findings that might seem to contradict or disconfirm other findings. Examples include detailing the relation among discrepant findings to help readers understand when and how differences occur or discussing study implications in a way that reflects on and integrates discrepant findings. |
| **cohort sampling** | a method of sampling data in which one or more groups sharing a similar characteristic, such as year of birth, are identified and observed. |
| **cohort study** | a nonexperimental design that can be prospective or retrospective. In a prospective cohort study, participants are enrolled before the potential causal event has occurred. In a retrospective cohort study, the study begins after the dependent event occurs. ***See also "longitudinal study."*** |
| **cohort-sequential design** | an experimental design in which multiple measures are collected over a period of time from two or more groups of different ages (birth cohorts). These designs combine aspects of longitudinal design and cross-sectional design. |
| **conceptual replication** | a replication into which researchers introduce different techniques, manipulations, or measures to gain theoretical information and evaluate whether the underlying relationships between the variables hold. |
| **confidence interval (CI)** | a range of values for a population parameter that is estimated from a sample with a preset, fixed probability (known as the confidence level) that will contain the true value of the parameter. For example, a confidence interval for the population mean could be calculated with data obtained from a sample and provide an estimated range of values within which the actual population mean is believed to lie. The width of a confidence interval provides information about the precision of the estimate, such that a wider interval indicates relatively low precision and a narrower interval indicates relatively high precision. A confidence interval often is reported in addition to the point estimate of a population parameter (e.g., the mean). |
| **constructivist approach to inquiry** | a set of beliefs about research that holds that there may be multiple valid understandings of a phenomenon and that researchers and participants codevelop findings together through the inquiry process. A goal is to study the process by which meanings are formed and shared. |
| **constructivist reporting** | writing from a perspective that centralizes the researchers' role in codeveloping findings and the influence of interpersonal and contextual factors in shaping an understanding. Researchers stress the context of their findings and work to situate quotes, findings, and implications of their work. Tends to include these elements: centralizing the researchers in the reporting of the research process, using language that makes transparent how a particular conclusion was reached, using terminology that suggests that the research is describing findings that are meaningful within certain contexts and perspectives, reporting information that better situates the researchers and describes how they dealt with their expectations in the course of a study, and describing the purpose of procedures incorporated into the research. |
| **contextualization** | in qualitative research, refers to the importance of reporting contextual information that situates findings. Can include providing contextual information for quoted or excerpted materials or specifying limitations and/or the context of findings. |
| **control design** | a type of nonexperimental design in which a group of individuals that differ on an outcome are compared to one another (e.g., a group diagnosed with a disease is compared to a group of individuals without the disease), specifically with regard to the proportion of people in each group who were exposed to a certain risk factor to see if some past event correlates with the outcome(s). |

| Term | Definition |
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| **convenience sampling** | any process for selecting a sample of individuals or cases that is neither random nor systematic but rather is governed by chance or ready availability. For example, interviewing the first 50 people to exit a store. Data obtained from convenience sampling do not usually generalize to the larger population because there may be significant sampling bias and sampling error cannot be estimated. |
| **convergent design** | a mixed methods design that uses both qualitative and quantitative components concurrently in order to strengthen understanding of the results of each component. |
| **correlational study** | a study in which researchers observe participants, ask them questions, or collect records on them from archives. The data gathered are then correlated (or subjected to data analyses) to see how they relate to one another. The key is that data are collected in naturalistic circumstances with no experimental manipulation. |
| **critical approach to inquiry** | a set of beliefs and practices that structures the use of research to promote liberation, transformation, and social change. This purpose overtly guides data analysis and reporting of results. Goals include documenting, unmasking, and disrupting privilege, power, and oppression. |
| **data-analytic strategy** | the procedure or procedures used to analyze data. These strategies may be informed by established quantitative or qualitative methods. They may also be creatively combined in response to the specific goals of a research project, such as researchers generating their own design by assembling procedures to best meet the goals and characteristics of that research project. |
| **data-collection strategy** | the procedure or procedures used to gather data; examples include archival research, focus groups, interviews, ethnographic observation, fieldwork, and survey, scale, or questionnaire administration. |
| **direct replication** | a replication in which researchers repeat a study with different data under similar conditions or by conducting several different studies with the same data. The replication study varies from the original study only in that it is done at a different time, in a different place, or with different participants, researchers, and/or data collectors. This form of replication is useful for establishing that the findings of the original study are reliable. |
| **discursive approach to method** | a set of approaches that involves using qualitative methods to closely examine the functions of discourse and social practices. |
| **diversity sampling** | a purposive approach to participant recruitment and selection in which researchers deliberately seek to engage participants who bring diverse experiences and identities to the research so that the research can be as comprehensive as possible within the scope of the study question(s). |
| **effect size** | any of various measures of the magnitude or meaningfulness of a relationship between two variables. Often effect sizes are interpreted as indicating the practical significance of a research finding, that is, the degree to which the phenomenon is present in the population or the degree to which the null hypothesis is false. Additionally, in meta-analyses, effect sizes allow for the computation of summary statistics that apply to all the studies considered as a whole. |
| **epistemological beliefs** | a set of philosophical beliefs and values concerned with studying the nature of knowledge. These beliefs indicate what researchers hold as important about knowledge claims and their justification. |
| **equality of variance** | see “homogeneity of variance” |
| **ethnography** | the descriptive study of a culture or society, typically based on direct observation and participation in that culture or society by the researcher. |
| **exact replication** | a replication in which researchers use procedures that are identical to the original experiment, or duplicated as closely as possible. |

| Term | Definition |
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| **experimental design** | see “research design” |
| **experimental manipulation** | in an experiment, the manipulation of one or more independent variables in order to investigate their effect on a dependent variable. An example would be the assignment of a specific treatment or placebo to participants in a research study in order to control possible confounds and assess the effect of the treatment. |
| **explanatory sequential design** | mixed methods design that begins with a quantitative component and then uses a qualitative component to help interpret the quantitative findings. |
| **exploratory sequential design** | mixed methods design that begins with a qualitative component and then uses a quantitative component to further explore ideas initially developed by the qualitative component or to evaluate those ideas. |
| **external replication** | replication that occurs when researchers conduct a study that is a repetition of one or more previously published or archived studies. That is, new data are collected from different samples or in different locations and by different researchers. |
| **feminist approach to inquiry** | a set of beliefs and practices used to examine experiences of power, oppression, and privilege. A type of critical approach to inquiry. |
| **fidelity** | the process by which researchers select procedures that develop and maintain allegiance to the phenomenon or subject matter under study as it is conceived within their approach to inquiry (e.g., the phenomenon might be understood as a social construction). ***See also “methodological integrity.”*** |
| **focus group** | a small set of people who share characteristics and are selected to discuss a topic of which they have personal experience. A leader conducts the discussion and keeps it on target while also encouraging free-flowing, open-ended discussion and debate. Originally used in marketing to determine consumer response to a product and now used for determining typical reactions, adaptations, and solutions to any number of issues, events, or topics and associated particularly with qualitative research. |
| **grounded theory approach to method** | a set of beliefs and practices used to develop theories, understandings, and descriptions of individual and social experiences. Includes realist, constructivist, and critical variants. Based on a process of constant comparison (i.e., comparing each unit of data with every other unit of data) and grouping data into categories that are organized hierarchically. |
| **groundedness** | in qualitative research, involves reporting data in a way that makes clear to readers that findings are based on the data. Examples include providing quotes and excerpts to illustrate the analytic process or illuminate the data in a more concrete manner. |
| **homogeneity of variance** | the statistical assumption of equal variance, meaning that the average squared distance of a score from the mean is the same across all groups sampled in a study. This condition must be fulfilled in statistical methods that use a single term to represent how widely scores vary across groups, as with analysis of variance, multiple regression analysis, and other procedures. ***Also known as “homoscedasticity.”*** |
| **imaginative variation** | a set of beliefs and practices used to examine experiences of power, oppression, and privilege. A type of critical approach to inquiry. |
| **inclusion–exclusion criteria** | criteria used to determine which participants, items, or studies to include in a study. In clinical research, inclusion and exclusion criteria are used to determine which individuals are eligible and ineligible to participate in a study. |

| Term | Definition |
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| **inferential statistics** | a broad class of statistical techniques that allow inferences about characteristics of a population to be drawn from a sample of data from that population while controlling (at least partially) the extent to which errors of inference are made. These techniques include approaches for testing hypotheses, estimating the value of parameters, and selecting among a set of competing models. ***Also known as "inferential tests," "inductive statistics."*** |
| **internal replication** | replication that occurs through cross-validation of analyses within the same sample or the use of resampling techniques, such as bootstrapping, in order to recombine or generate cases to estimate the precision of specific results. |
| **interpretive approach to inquiry** | a set of beliefs about research methods in which the goal is to uncover meanings and illuminate the meaning-making process while being transparent about the interpretive processes that occur throughout analysis. |
| **journal article reporting standards (JARS)** | standards that provide guidelines for authors on what information to include, at minimum, in journal articles. Although related to the way studies are designed and conducted, reporting standards do not prescribe how to design or execute studies and they are not dependent on the topic of the study or the particular journal in which the study might be published. |
| **literal replication** | see "exact replication" |
| **literature review** | a narrative summary and evaluation of the findings or theories within a literature base. ***Also known as "narrative literature review."*** |
| **longitudinal study** | a study that involves the observation of a variable or group of variables in the same cases or individuals using the same set of measurements (or attributes) over a period of time (i.e., at multiple times or occasions). A longitudinal study that evaluates a group of randomly chosen individuals is referred to as a panel study, whereas a longitudinal study that evaluates a group of individuals possessing some common characteristic (usually age) is referred to as a cohort study. This multiple observational structure may be combined with almost any other research design—ones with and without experimental manipulations, randomized clinical trials, or any other study type. ***Also known as "longitudinal research," "longitudinal design."*** |
| **masking** | steps taken to ensure that participants, those administering the intervention or experimental manipulation, and those assessing the outcomes are unaware of which condition each participant is in. In an experiment, either only the participant or both the participant and the experimenter can be masked to which condition the participant is in. In the context of measurement, refers to the awareness of the person collecting the data directly from the participant or transferring or inputting the data. Masking is most likely to take place in circumstances in which knowledge of the study condition could itself influence the behavior of the participant or the person interacting with the participant. If a data collector knows the primary hypotheses of the study, they may alter the data collection in subtle (and sometimes unconscious) ways that influence participants' responses or the transcribed data. |
| **maximum variation** | a purposive approach to participant recruitment and selection in which researchers deliberately seek to engage participants who bring varied experiences and perspectives to the research so the research can be as comprehensive as possible within the scope of the research question. |
| **methodological article** | a report in which new approaches to research or practice, modifications of existing methods, or discussions of quantitative and/or qualitative data analysis are presented. Sufficient detail is provided for researchers to assess the applicability of the methodology and its feasibility for the research problem it is designed to study. |
| **methodological integrity** | in qualitative research, used to capture the underlying methodological basis of trustworthiness, independent of nonmethod qualities (e.g., reputation of authors, congruence with readers' own experiences and beliefs, cosmetic features of presentation). It can be evaluated through its two composite processes, fidelity and utility. ***See also "fidelity" and "utility."*** |

| Term | Definition |
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| **methodology** | in research and experimental design, refers to the techniques used to collect information; in statistics, refers to the procedures used to analyze the data. |
| **missing at random (MAR)** | when the probability of missing a value on a variable is not related to the missing value itself but may be related to other completely observed variables in the data set. When data are missing at random there is a danger of biasing the study results. |
| **missing completely at random (MCAR)** | when values of the missing variable are not related to the probability that they are missing or to their value or that of any other variable in the data set. |
| **mixed methods article** | a report of research that combines qualitative and quantitative empirical approaches. |
| **mixed methods research** | a research design that combines aspects of (i.e., collecting and analyzing) both qualitative and quantitative data, using rigorous methods for both, and integrating or "mixing" the two forms of data intentionally to generate new insights in order to understand the phenomenon of interest more fully. ***Also known as "mixed-methods research," "mixed models research."*** |
| **mixed-effects model** | any statistical procedure or experimental design that uses one or more independent variables whose levels are specifically selected by the researcher (fixed effects; e.g., gender) and one or more additional independent variables whose levels are chosen randomly from a wide range of possible values (random effects; e.g., age). Some variance in the model is assumed to be systematic (associated with the moderator variable) and some is assumed to be random (attributed to truly chance factors). |
| **modified replication** | see "approximate replication" |
| **multimethods research** | a research design that uses multiple methods from the same approach for measuring the characteristic or construct of interest. ***Also known as "multimethod approach."*** |
| ***N*-of-1 study** | an empirical research design in which the unit of study is a single entity (usually a person, but can also be a family, class, school, company, etc.). The single unit is tracked in depth and over time. In some *N*-of-1 studies, several individual results will be described, and the consistency of results may be a central point of the discussion. It will, however, never be the case that results from several cases are combined or averaged. Such studies are useful for generating ideas for broader studies and for focusing on the microlevel concerns associated with a particular unit. However, data from these studies need to be evaluated carefully given the many potential threats to internal validity; there are also issues relating to the sampling of both the one unit and the process it undergoes. ***Also known as "N-of-1 design," "N=1 design, "single-case design," "single-participant design," "single-subject (case) design," "single-case design."*** |
| **narrative approach to method** | an approach that involves focusing on the ways people construct and organize understandings in stories. Narrative is viewed as a rhetorical device through which people represent experiences to both themselves and others in a manner situated in time and positioned in terms of cultural and relational dynamics. |
| **natural history study** | a research design in which researchers collect data over time on an issue, often a disease or psychological condition, in order to create a description of how the issue changes or emerges over time. It is hoped that the progression of the changes will provide insight into how and when it might be best to the treat or address the issue. |
| **nonexperimental design** | a research design in which researchers do not experimentally manipulate independent variables, randomly assign participants to treatment conditions, or control the influence of extraneous variables and instead observe the behavior of participants without any attempt at intervention or manipulation of the behaviors being observed. The purpose is to observe, describe, classify, estimate, and/or analyze naturally occurring relationships between variables of interest. Examples include single-group designs, natural-group comparisons, observational studies, correlational studies, and natural history studies. ***Also known as "nonexperimental manipulation study."*** |

| Term | Definition |
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| **normality** | in statistics, the condition in which a data set presents a normal distribution of values. |
| **not missing at random** | when the probability of observing a given value for a variable is related to the values the missing variable can take. ***Also known as "missing not at random."*** |
| **null hypothesis significance testing (NHST)** | in hypothesis testing, a set of procedures used to determine whether the differences between two groups or models are statistically significant (i.e., unlikely to arise solely from chance). In its most common form, significance testing is used to decide whether the null hypothesis of no effect should be rejected. A comparison of the probability statistic obtained from the test to the chosen significance level determines whether an observed effect may be due to chance variance and hence whether the null hypothesis is or is not likely to be correct. This approach may also be used to differentiate between two models that differ in terms of the number of parameters specified in them (as in multiple regression analysis). ***Also known as "significance testing."*** |
| **observational study** | a research design in which researchers watch participants and measure the variables of interest without attempting to influence participants' behavior in any way. The status of a participant is determined by their naturally occurring characteristics, circumstances, or history as not affected (at least not intentionally) by the researchers. ***Also known as "observational design," "observational research."*** |
| **opportunity sampling** | see "convenience sampling" |
| **panel study** | observations on multiple phenomena collected over multiple time periods from the same group of individuals or other units. Repeated observations permit the researcher to study the dynamics of change. ***See also "longitudinal study."*** |
| **participatory approach to method** | an approach to research in which researchers deliberately include participants and researchers who are from communities they are investigating to bring those perspectives to the research. Researchers often use qualitative methods along with quantitative methods and other processes, because their distinct goals center on social justice, institutional change, and empowerment. |
| **phenomenological approach to method** | a set of beliefs and practices developed for the study of lived experiences. Includes descriptive, interpretive, and narrative variants. |
| **phenomenological bracketing** | a strategy developed by phenomenological research method founders often adopted in varied qualitative research designs. Refers to the setting aside of theories, hypotheses, and assumptions in order to adopt an attitude of openness in the research process. |
| **postmodern approach to inquiry** | a set of beliefs related to research methods that are grounded in postmodern philosophical approaches and question modernist assumptions about identity, history, language, art, and culture. |
| **postpositivist approach to inquiry** | a set of beliefs grounded in an objectivist approach to analysis in which researchers attempt to minimize error and biases in their observations to best represent a reality, while recognizing methodological limitations. Goals may include rejecting or confirming theories, providing explanations, making observations, and enabling predictions. |
| **power analysis** | the process of determining the number of cases, participants, or observations a study would need to achieve a desired level of power with a certain effect size and a certain significance level to reject the null hypothesis. Conducting a power analysis involves deciding a priori (a) what the expected effect size will to be or what effect size will be meaningful based on what was found in past research or theoretical or practical importance, (b) what p level will be used to reject the null hypothesis, and (c) what likelihood will be sufficient to reject the null hypothesis if there truly is a relationship in the population (the power of the study). A power analysis is important because it enables researchers to plan what resources will be needed to enroll or select the desired number of individuals for the study. |

| Term | Definition |
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| **pragmatic approach to inquiry** | a set of beliefs in which researchers tend not to identify with philosophical assumptions about the research process but rather to use methods to achieve various practical aims. The goal is often to solve certain problems to the benefit of a specific group or groups. |
| **precision** | a measure of accuracy; in statistics, an estimate with a small standard error is regarded as having a high degree of precision. |
| **primary research** | research that has not been previously formally published. ***Also known as "original research."*** |
| **prospective sampling** | a sampling method in which cases are selected for inclusion in experiments or other research based on their exposure to a risk factor. Participants are then followed to see if a condition of interest develops. |
| **psychoanalytic approach to inquiry** | a theory-driven or ideological approach to inquiry in which researchers use a psychoanalytic perspective to frame their analysis of data. |
| **purposive sampling method** | a sampling method that focuses on specific characteristics of the units or individuals chosen. For example, a researcher investigating a specific type of amnesia may select only those individuals who have specific lesions in their brains. Although the final subset of cases is extreme and not random, valuable information may still be obtained. |
| **qualitative article** | a report of original, empirical, qualitative research. |
| **qualitative meta-analysis** | a form of inquiry in which qualitative research findings about a process or experience are aggregated or integrated across research studies. Aims can involve synthesizing qualitative findings across primary studies, generating new theoretical or conceptual models, identifying gaps in research, or generating new questions. |
| **qualitative research** | approaches to research used to generate knowledge about human experience and/or action, including social processes. These research methods typically produce descriptive (non-numerical) data, such as observations of behavior or personal accounts of experiences. The goal of gathering qualitative data is to examine how individuals perceive the world from different vantage points. Qualitative methods share four central characteristics:<br>1) Involve the analysis of natural language and other forms of human expression rather than the translation of meaning into numbers<br>2) Centralize an iterative process in which data are analyzed and meanings are generated in a circular and self-correcting process of checking and refining findings<br>3) Seek to present findings in a manner that emphasizes the study's context and situation in time<br>4) Recursively combine inquiry with methods that require researchers' reflexivity (i.e., self-examination) about their influence upon the research process<br>***Also known as "qualitative design," "qualitative inquiry," "qualitative method," "qualitative study."*** |
| **quantitative article** | a report of original, empirical, quantitative research. |
| **quantitative meta-analysis** | a technique for synthesizing the results of multiple studies of a phenomenon by combining the effect size estimates from each study into a single estimate of the combined effect size or into a distribution of effect sizes. Effect size estimates from individual studies are the inputs to the analyses. Although meta-analyses are ideally suited for summarizing a body of literature in terms of impact, limitations, and implications, they are limited by having no required minimum number of studies or participants. Information of potential interest may also be missing from the original research reports upon which the procedure must rely. |

| Term | Definition |
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| **quantitative research** | approaches to research in which observed outcomes are numerically represented. These research methods rely on measuring variables using a numerical system, analyzing measurements using statistical models, and reporting relationships and associations among the studied variables. The goal of gathering quantitative data is to understand, describe, and predict the nature of a phenomenon, particularly through the development of models and theories. ***Also known as "quantitative design," "quantitative inquiry," "quantitative method," "quantitative study."*** |
| **quasi-experimental research** | see "nonexperimental research" |
| **random assignment** | in experimental design, the assignment of participants or units to the different conditions of an experiment entirely at random, so that each unit or participant has an equal likelihood of being assigned to any condition. In clinical trials, random assignment decreases the likelihood of confounding the treatment factor with other factors by making the treatment and control groups approximately comparable in all respects except for the treatment. ***Also known as "random allocation," "randomization."*** |
| **randomized clinical trial** | an experimental design in which patients are randomly assigned to a group that will receive an experimental treatment, such as a new drug, or to one that will receive a comparison treatment, a standard-of-care treatment, or a placebo. The random assignment occurs after recruitment and assessment of eligibility but before the intervention. There may be multiple experimental and comparison groups, but each patient is assigned to one group only. ***Also known as "randomized controlled trial."*** |
| **reflexivity** | in qualitative research, the self-referential quality of a study in which the researcher reflects on the assumptions behind the study and especially the influence of their own motives, history, and biases on its conduct. |
| **replication** | the repetition of an original experiment or research study in order to verify or reapply methodology from the previous investigation and bolster confidence in its results. The aim of a replication study is to test whether results from the original study remain the same or similar over variations in sample, location, measure, procedures, and so forth. |
| **research design** | the combination of approaches to inquiry, data collection, and data analysis selected for use in a given study. It is a strategic plan of the procedures to be followed during a study in order to reach valid conclusions, with particular consideration given to participant selection and assignment to conditions, data collection, and data analysis. Research designs may take a variety of forms, including experiments, quasi-experiments, observational studies, longitudinal designs, surveys, focus groups, and other nonexperimental methods. |
| **retrospective sampling** | a technique in which participants or cases from the general population are selected for inclusion in experiments or other research based on their previous exposure to a risk factor or the completion of some particular process. Participants are then examined in the present to see if a particular condition or state exists, often in comparison to others who were not exposed to the risk or who did not complete the particular process. |
| **saturation** | a strategy developed out of grounded theory methods and often adopted in qualitative research designs that indicates the point at which additional data no longer seem to bring new understanding to the qualitative analysis, signaling that data collection can be halted because the analysis is comprehensive. |
| **quantitative article** | a report of original, empirical, quantitative research. |

| Term | Definition |
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| **single-case design** | an empirical research design in which the unit of study is a single entity (usually a person, but can also be a family, class, school, company, etc.). The single unit is tracked in depth and over time. In some N-of-1 studies, several individual results will be described, and the consistency of the results may be a central point of the discussion. The results from several cases will not, however, be combined in a single-case design. Such studies are useful for generating ideas for broader studies and for focusing on the microlevel concerns associated with a particular unit. However, data from these studies need to be evaluated carefully given the many potential threats to internal validity; there are also issues relating to the sampling of both the one unit and the process it undergoes. ***Also known as "single-participant design," "single-subject (case) design." Also see "N-of-1 study," "N-of-1 design," "N=1 design."*** |
| **snowball sampling** | a technique to identify and recruit candidates for a study in which existing participants recommend additional potential participants, who themselves are observed and asked to nominate others, and so on until a sufficient number of participants is obtained. Researchers generally use snowball sampling if the population of interest is hard to locate, rare, or otherwise limited. ***Also known as "snowball selection."*** |
| **stopping rule** | a criterion stated at the outset of a research project for ending the study early. For example, a stopping rule might be applied when one treatment clearly has been shown to be more effective than another. |
| **structural equation modeling (SEM)** | a family of statistical techniques, including factor analysis and path analysis, that involves the specification of a structural or measurement model. These multivariate analytic methods include steps to examine variances and covariances in order to find interrelationships among latent variables, estimate effects represented in the model (parameters), and evaluate the extent of correspondence between the model and data. |
| **systematic replication** | the process of conducting a study again but with certain consistent differences, often to extend the original research to different settings or participants. For example, a systematic replication could refine the design (e.g., by using more participants) or the methodology (e.g., by using more standardized procedures or objective measures). |
| **theoretical article** | a report that draws on the existing research literature to advance theory by tracing the development of a theory to expand and refine theoretical constructs, presenting a new theory, analyzing an existing theory, or pointing out flaws or advantages of one theory over another. |
| **theoretical sampling** | a strategy developed by grounded theory method founders and often adopted in qualitative research designs that involves the purposive sampling of further data while a theoretical framework is still under construction. To gain a deeper understanding of the constructs involved, researchers strategically seek out samples from new research sites, cases, incidents, time periods, or data sources and compare them with those that have already been studied. In this way, researchers build a provisional theory from their initial data while continuing to select new samples to expand and elaborate on that theory. |
| **transparency** | the belief that, in their reporting, researchers should articulate their a priori expectations and hopes about the research outcome, the ways they influenced the research design, and their related actions and processes within the research process. |
| **trustworthiness** | in qualitative research, the idea that the evaluation of the worth of a research presentation is based in (a) the judgments of its readers and (b) the ability of the researchers to present the research in a convincing manner so that readers can discern whether the claims made in a project are warranted. |
| **utility** | in achieving qualitative research goals, the process by which researchers select procedures that usefully answer their research questions and address their aims (e.g., raising critical consciousness, developing theory, deepening understanding, identifying social practices, developing local knowledge). ***See also "methodological integrity."*** |

**For more information on the terms included in this glossary, please consult the following APA sources:**

American Psychological Association. (n.d.). *APA dictionary of psychology.* https://dictionary.apa.org/

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