

Marketing Research Session Number-1

Introduction to Marketing Research

What is Marketing Research:

Market research is the systematic and objective identification, collection, analysis and dissemination and use of information for the purpose of improving decision making related to the identification and solutions of problems and opportunities in marketing.

Classification of Marketing Research:

- 1) Problem identification research such as market potential research, market share research, image research, sales analysis research, forecasting research and business trends research.
- 2) Problem solving research: Segmentation research, product research, pricing research, promotion research and distribution research.

The Marketing Research Process:

It involves tasks to be accomplished in conducting a market research study.

- a) Problem Definition: Define the problem, Purpose of study, relevant background, information needed and how will it be used in decision making.
- b) Development of an approach to the problem: It involves developing objectives, theoretical framework, analytical models, research questions, hypothesis building.
- c) Research design formulations: Define information needed, Data sources- Primary, secondary, Method of data collection, Measurement technique, questionnaire designing, sampling and data analysis.
- d) Fieldwork/ Data Collection: Personal interviews could be conducted in the form of (in home, mall intercept, computer assisted). Personal interview could be form an office by telephone (Telephone, computer assisted telephone) Through mail (traditional mail and mail panel surveys with pre recruited survey) or electronically (email or internet). Proper selection, training, supervision and evaluation of the field.
- e) Data Preparation and Analysis: Data preparation includes the editing, coding, transcription and verification of data. Questionnaire are examined and incomplete questionnaires are discarded. Data is keypunched into computer and analysis is undertaken.
- f) Report Preparation and Presentation: Project is documented in a written report. It describes the research design and research findings. Findings are presented to management for decision making.

The role of marketing research in marketing decision making:

In order to satisfy customer needs information is required about customer, competitor and other forces. Manager also requires information about product and other market offerings and marketing tools.

Marketing Research role in context



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The task is to assess information need and provide management with reliable and actionable information.

Internal suppliers are located within the firm. External suppliers are outside marketing research companies hired to supply marketing research data or services.

Full service suppliers: Companies offering full range of marketing research services.

Syndicated services: Companies that collect and sell common pool of data designed to serve information needs shared by number of clients.

Customized services: Companies that tailor the research procedures to best meet the needs of each client.

Internet services: companies that have specialized in conducting market research on the internet.

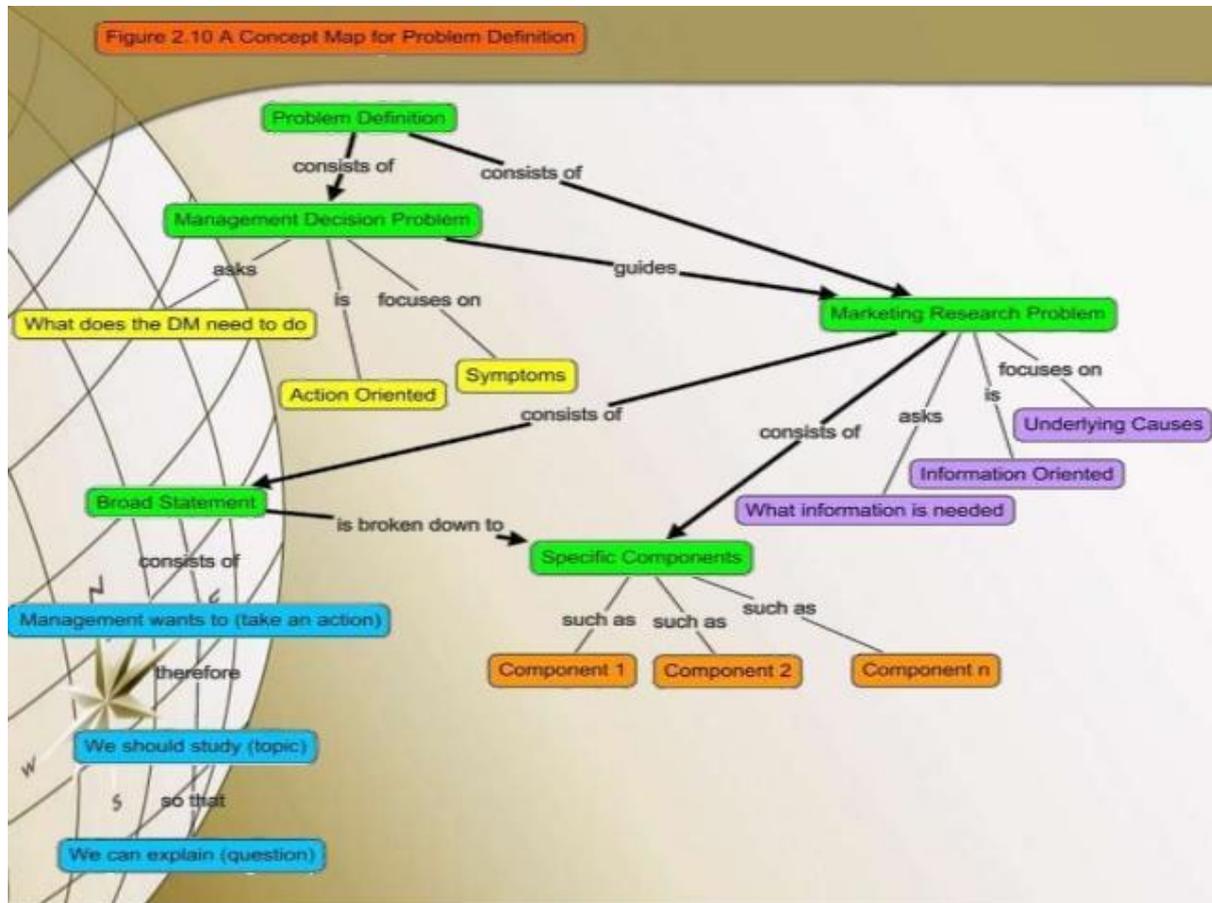
Limited service supplier: Companies that specialize in one or few phases of market research. Limited field services could also include focus group and qualitative services, technical and analytical services apart from field and other services.

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Introduction to Marketing Research

Defining the problem: A broad statement of general statement and identification of specific components of the market research problem. Problem could be defined with the help of discussion with decision maker, interview with experts, secondary data analysis, qualitative research.

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Research Approach: It requires defining objectives and theoretical foundation, analytical model, research questions, hypothesis building and specification of information need.

Research Design: A Framework or blueprint for conducting the marketing research project. It explains the details of the procedures necessary for collecting the information to structure and solve market research problem.

Research Design involves following components:

- a) Define the information needed.
- b) Design the exploratory, descriptive and causal phases of research.
- c) Specify the measurement and scaling technique.
- d) Construct and pretest the questionnaire.
- e) Specify the sampling process and sample size.

- f) Develop an analysis plan.

Types of Research Design:

Exploratory research design:

Insights and comprehension of the problem situation.

Descriptive research design:

Major objective is description of something.

Causal Research:

A type of conclusive research where objective is to obtain evidence regarding cause and effect.

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Secondary Data

Secondary data is the data that have been already collected by and readily available from other sources. Such data are cheaper and more quickly obtainable than the primary data and also may be available when primary data cannot be obtained at all.

Advantages of Secondary data

1. It is economical. It saves efforts and expenses.
2. It is time saving.
3. It helps to make primary data collection more specific since with the help of secondary data, we are able to make out what are the gaps and deficiencies and what additional information needs to be collected.
4. It helps to improve the understanding of the problem.
5. It provides a basis for comparison for the data that is collected by the researcher.

Disadvantages of Secondary Data

1. Secondary data is something that seldom fits in the framework of the marketing research factors. Reasons for its non-fitting are:-
 - a. Unit of secondary data collection-Suppose you want information on disposable income, but the data is available on gross income. The information may not be same as we require.
 - b. Class Boundaries may be different when units are same.

Before 5 Years	After 5 Years
2500-5000	5000-6000
5001-7500	6001-7000
7500-10000	7001-10000

- c. Thus the data collected earlier is of no use to you.
2. Accuracy of secondary data is not known.
3. Data may be outdated.

Evaluation of Secondary Data

Because of the above mentioned disadvantages of secondary data, we will lead to evaluation of secondary data. Evaluation means the following four requirements must be satisfied:-

1. **Availability-** It has to be seen that the kind of data you want is available or not. If it is not available then you have to go for primary data.
2. **Relevance-** It should be meeting the requirements of the problem. For this we have two criterion:-
 - a. Units of measurement should be the same.
 - b. Concepts used must be same and currency of data should not be outdated.

3. **Accuracy-** In order to find how accurate the data is, the following points must be considered: -
 - a. Specification and methodology used;
 - b. Margin of error should be examined;
 - c. The dependability of the source must be seen.
4. **Sufficiency-** Adequate data should be available.

Robert W Joselyn has classified the above discussion into eight steps. These eight steps are sub classified into three categories. He has given a detailed procedure for evaluating secondary data.

1. Applicability of research objective.
2. Cost of acquisition.
3. Accuracy of data.

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Secondary Data

Sources of Secondary Data

While primary data can be collected through questionnaires, depth interview, focus group interviews, case studies, experimentation and observation; The secondary data can be obtained through

1. Internal Sources - These are within the organization
2. External Sources - These are outside the organization

Internal Sources of Data

If available, internal secondary data may be obtained with less time, effort and money than the external secondary data. In addition, they may also be more pertinent to the situation at hand since they are from within the organization. The internal sources include

1. **Accounting resources-** This gives so much information which can be used by the marketing researcher. They give information about internal factors.
2. **Sales Force Report-** It gives information about the sale of a product. The information provided is of outside the organization.
3. **Internal Experts-** These are people who are heading the various departments. They can give an idea of how a particular thing is working
4. **Miscellaneous Reports-** These are what information you are getting from operational reports.

If the data available within the organization are unsuitable or inadequate, the marketer should extend the search to external secondary data sources.

External Sources of Data

External Sources are sources which are outside the company in a larger environment. Collection of external data is more difficult because the data have much greater variety and the sources are much more numerous.

External data can be divided into following classes.

- a. **Government Publications-** Government sources provide an extremely rich pool of data for the researchers. In addition, many of these data are available free of cost on internet websites. There are number of government agencies generating data. These are:
 - i. **Registrar General of India-** It is an office which generates demographic data. It includes details of gender, age, occupation etc.
 - ii. **Central Statistical Organization-** This organization publishes the national accounts statistics. It contains estimates of national income for several years, growth rate, and rate of major economic activities. Annual survey of Industries is also published by the CSO. It gives information about the total number of workers employed, production units, material used and value added by the manufacturer.

- iii. **Director General of Commercial Intelligence-** This office operates from Kolkata. It gives information about foreign trade i.e. import and export. These figures are provided region-wise and country-wise.
 - iv. **Ministry of Commerce and Industries-** This ministry through the office of economic advisor provides information on wholesale price index. These indices may be related to a number of sectors like food, fuel, power, food grains etc. It also generates All India Consumer Price Index numbers for industrial workers, urban, non manual employees and cultural labourers.
 - v. **Planning Commission-** It provides the basic statistics of Indian Economy.
 - vi. **Reserve Bank of India-** This provides information on Banking Savings and investment. RBI also prepares currency and finance reports.
 - vii. **Labour Bureau-** It provides information on skilled, unskilled, white collared jobs etc.
 - viii. **National Sample Survey-** This is done by the Ministry of Planning and it provides social, economic, demographic, industrial and agricultural statistics.
 - ix. **Department of Economic Affairs-** It conducts economic survey and it also generates information on income, consumption, expenditure, investment, savings and foreign trade.
 - x. **State Statistical Abstract-** This gives information on various types of activities related to the state like - commercial activities, education, occupation etc.
- b. **Non Government Publications-** These includes publications of various industrial and trade associations, such as
- i. The Indian Cotton Mill Association
 - ii. Various chambers of commerce
 - iii. The Bombay Stock Exchange (it publishes a directory containing financial accounts, key profitability and other relevant matter)
 - iv. Various Associations of Press Media.
 - v. Export Promotion Council.
 - vi. Confederation of Indian Industries (CII)
 - vii. Small Industries Development Board of India
 - viii. Different Mills like - Woolen mills, Textile mills etc
- The only disadvantage of the above sources is that the data may be biased. They are likely to colour their negative points.
- c. **Syndicate Services-** These services are provided by certain organizations which collect and tabulate the marketing information on a regular basis for a number of clients who are the subscribers to these services. So the services are designed in such a way that the information suits the subscriber. These services are useful in television viewing, movement of consumer goods etc. These syndicate services provide information data from both household as well as institution.
- In collecting data from household they use three approaches
- i. **Survey-** They conduct surveys regarding - lifestyle, sociographic, general topics.
 - ii. **Mail Diary Panel-** It may be related to 2 fields - Purchase and Media.
 - iii. **Electronic Scanner Services-** These are used to generate data on volume.
- They collect data for Institutions from
- iv. Whole sellers
 - v. Retailers, and
 - vi. Industrial Firms

Various syndicate services are Operations Research Group (ORG) and The Indian Marketing Research Bureau (IMRB).

Importance of Syndicate Services

Syndicate services are becoming popular since the constraints of decision making are changing and we need more of specific decision-making in the light of changing environment. Also Syndicate services are able to provide information to the industries at a low unit cost.

Disadvantages of Syndicate Services

The information provided is not exclusive. A number of research agencies provide customized services which suits the requirement of each individual organization.

- d. **International Organization-** These includes
 - i. **The International Labour Organization (ILO)-** It publishes data on the total and active population, employment, unemployment, wages and consumer prices
 - ii. **The Organization for Economic Co-operation and development (OECD)-** It publishes data on foreign trade, industry, food, transport, and science and technology.
 - iii. **The International Monetary Fund (IMA)-** It publishes reports on national and international foreign exchange regulations.

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Attitude Measurement

Measurement: The assignment of numbers of other symbols to characteristics of objects according to certain rules.

Scaling: The generation of a continuum upon which measured objects are located.

Primary scales of Measurement:

Nominal scale: A scale whose numbers serve only as label's or tags for identifying and classifying objects. When used for identification, there is a strict one-to-one correspondence between the numbers and the objects. Numbers identify the object and classify the object. Example are: Numbers of players, brand number, gender. Permissible statistics are percentage and mode.

Ordinal Scale: A ranking scale in which numbers are assigned to objects to indicate relative extent to which some characteristic is possessed. Numbers indicate the relative position of objects but not the magnitude of difference between them. Thus, it is possible to determine whether an object has more or less of a character than some other object. Examples are: quality rankings, market position and social class. Permissible statistics are Percentile and median.

Interval Scale: A scale in which the numbers are used to rate objects such that numerically equal distances on the scale represent equal distances in the characteristics being measured. Difference between objects could be compared and zero point is arbitrary. Examples are: attitude and opinion. Permissible statistics are mean, range and standard deviation.

Ratio Scale: The highest scale, it allows the researcher to identify or classify objects, rank order the objects and compare the intervals or differences. Zero point is fixed. Ratios of scale values could be computed. Examples: length, weight, sales and market share. Permissible statistics are Geometric mean and all

Classification of Scaling Techniques:

Comparative scales: Direct comparison of stimulus objects with one another.

Non comparative scales: Each stimulus object is scaled independently of the other objects in the stimulus set.

Comparative scales:

Paired comparison scaling: A comparative scaling technique in which a respondent is presented with two objects at a time and asked to select one object in the pair according to some criterion.

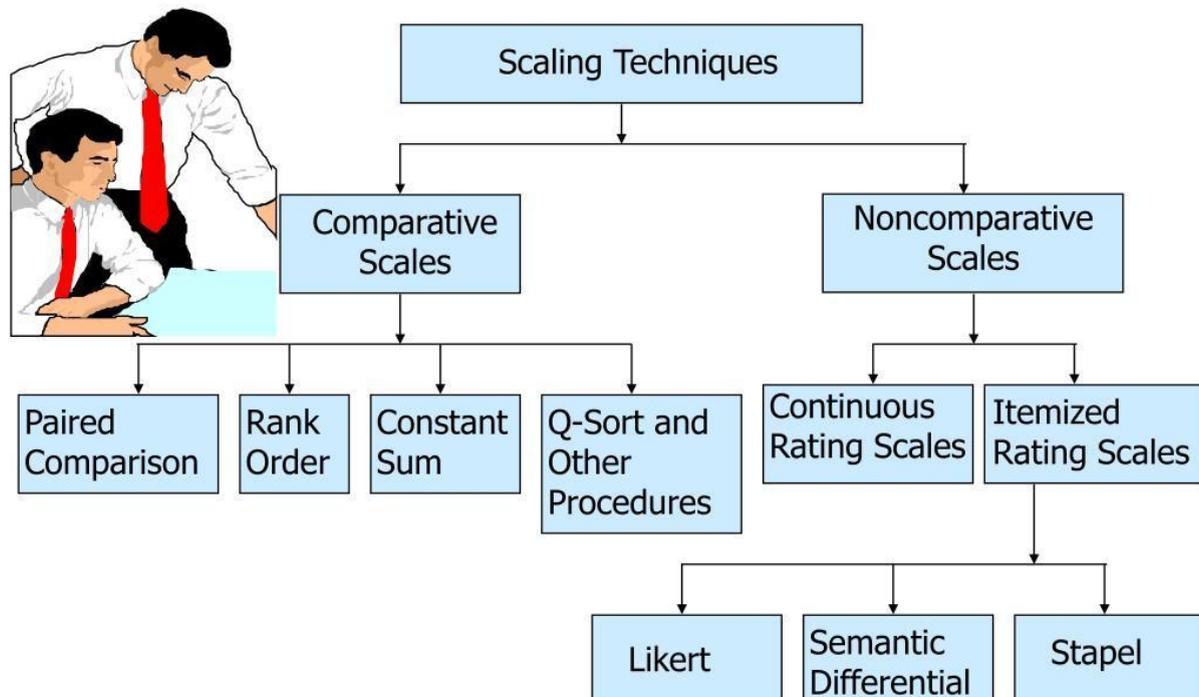
Rank order scaling: A comparative scaling technique in which respondents are presented with several objects simultaneously and asked to order or rank them according to some criterion.

Constant sum scaling: A comparative scaling technique in which respondents are required to allocate a constant sum of units such as points, dollars, chips, stickers among a set of stimulus objects with respect to some criterion.

Q-sort Scaling: A comparative technique that uses a rank order procedure to sort objects based on similarity with respect to some criterion.

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A Classification of Scaling Techniques



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Attitude Measurement

Non-Comparative Scales:

Each stimulus object is scaled independently of the other objects in the stimulus set.

Continuous rating scale also known as graphic rating scale. Respondent rate the object by placing a mark at the appropriate position on a line that runs from extreme of the criterion variable to the other. It's easy to construct. Example: reaction to TV commercial.

Itemized Rating scale: A measurement scale having numbers or brief descriptions associate with each category. The categories are ordered in terms of scale position.

Likert scale: A measurement scale with five response categories from strongly disagreement to strongly agree requires respondents to indicate a degree of agreement or disagreement with a series of statements related to stimulus object. Easy to construct, administer and understand. Examples: Measurement of attitude.

Semantic differential scale: A 7-point rating scale with end points associated with bipolar labels that have semantic meaning. Example: Measurement of brand, product and company images.

Stapel Scale: A Scale for measuring attitudes that consists of a single adjective in the middle of an even numbered range of values, from -5 to +5 without a neutral point. Measurement of attitudes and images.

Balanced scale: A scale with an equal number of favorable and unfavorable categories.

Multi item scales: A multi item scale consists of multiple items, where a single item is a single question or statement to be evaluated.

Scale Evaluation:

Reliability:

The extent to which a scale produces consistent results. If repeated measurement is made on the characteristics.

Test-Retest Reliability: An approach for assessing reliability in which respondents are administered identical sets of scale items at two different times under equivalent conditions as possible.

Internal consistency reliability: To check internal consistency of set of items when several items are summated to form a total score for the scale.

Validity:

The extent to which differences in observed scales scores reflect true differences among objects on the characteristics being measured.

Content validity: also known as face validity. It comprises of subjective and systematic evaluation of representativeness of the content of a scale.

Criterion validity: A type of validity that examines whether measurement scale performs as expected in relation to other variables.

Construct validity: A type of validity addressing the question of what construct or characteristic the scale is measuring.

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Experimental Research

Experimental research, often considered to be the “gold standard” in research designs, is one of the most rigorous of all research designs. In this design, one or more independent variables are manipulated by the researcher (as treatments), subjects are randomly assigned to different treatment levels (random assignment), and the results of the treatments on outcomes (dependent variables) are observed. The unique strength of experimental research is its internal validity (causality) due to its ability to link cause and effect through treatment manipulation, while controlling for the spurious effect of extraneous variable.

Experimental research is best suited for explanatory research (rather than for descriptive or exploratory research), where the goal of the study is to examine cause-effect relationships. It also works well for research that involves a relatively limited and well-defined set of independent variables that can either be manipulated or controlled. Experimental research can be conducted in laboratory or field settings. Laboratory experiments, conducted in laboratory (artificial) settings, tend to be high in internal validity, but this comes at the cost of low external validity (generalizability), because the artificial (laboratory) setting in which the study is conducted may not reflect the real world. Field experiments, conducted in field settings such as in a real organization, and high in both internal and external validity. But such experiments are relatively rare, because of the difficulties associated with manipulating treatments and controlling for extraneous effects in a field setting.

Experimental research can be grouped into two broad categories: true experimental designs and quasi-experimental designs. Both designs require treatment manipulation, but while true experiments also require random assignment, quasi-experiments do not. Sometimes, we also refer to non-experimental research, which is not really a research design, but an all-inclusive term that includes all types of research that do not employ treatment manipulation or random assignment, such as survey research, observational research, and correlational studies.

Basic Concepts

Treatment and control groups. In experimental research, some subjects are administered one or more experimental stimulus called a treatment (the treatment group) while other subjects are not given such a stimulus (the control group). The treatment may be considered successful if subjects in the treatment group rate more favorably on outcome variables than control group subjects. Multiple levels of experimental stimulus may be administered, in which case, there may be more than one treatment group. For example, in order to test the effects of a new drug intended to treat a certain medical condition like dementia, if a sample of dementia patients is randomly divided into three groups, with the first group receiving a high dosage of the drug, the second group receiving a low dosage, and the third group receives a placebo such as a sugar pill (control group), then the first two groups are experimental groups and the third group is a control group. After administering the drug for a period of time, if the condition of the experimental group subjects improved significantly more than the control group subjects, we can say that the drug is effective. We can also compare the conditions of the high and low dosage experimental groups to determine if the high dose is more effective than the low dose.

Treatment manipulation. Treatments are the unique feature of experimental research that sets this design apart from all other research methods. Treatment manipulation helps control for the “cause” in cause-effect relationships. Naturally, the validity of experimental research depends on how well the treatment was manipulated. Treatment manipulation must be

checked using pretests and pilot tests prior to the experimental study. Any measurements conducted before the treatment is administered are called pretest measures , while those conducted after the treatment are posttest measures .

Random selection and assignment. Random selection is the process of randomly drawing a sample from a population or a sampling frame. This approach is typically employed in survey research, and assures that each unit in the population has a positive chance of being selected into the sample. Random assignment is however a process of randomly assigning subjects to experimental or control groups. This is a standard practice in true experimental research to ensure that treatment groups are similar (equivalent) to each other and to the control group, prior to treatment administration. Random selection is related to sampling, and is therefore, more closely related to the external validity (generalizability) of findings. However, random assignment is related to design, and is therefore most related to internal validity. It is possible to have both random selection and random assignment in well-designed experimental research, but quasi-experimental research involves neither random selection nor random assignment.

Threats to internal validity. Although experimental designs are considered more rigorous than other research methods in terms of the internal validity of their inferences (by virtue of their ability to control causes through treatment manipulation), they are not immune to internal validity threats. Some of these threats to internal validity are described below, within the context of a study of the impact of a special remedial math tutoring program for improving the math abilities of high school students.

- History threat is the possibility that the observed effects (dependent variables) are caused by extraneous or historical events rather than by the experimental treatment. For instance, students' post-remedial math score improvement may have been caused by their preparation for a math exam at their school, rather than the remedial math program.
- Maturation threat refers to the possibility that observed effects are caused by natural maturation of subjects (e.g., a general improvement in their intellectual ability to understand complex concepts) rather than the experimental treatment.
- Testing threat is a threat in pre-post designs where subjects' posttest responses are conditioned by their pretest responses. For instance, if students remember their answers from the pretest evaluation, they may tend to repeat them in the posttest exam. Not conducting a pretest can help avoid this threat.
- Instrumentation threat , which also occurs in pre-post designs, refers to the possibility that the difference between pretest and posttest scores is not due to the remedial math program, but due to changes in the administered test, such as the posttest having a higher or lower degree of difficulty than the pretest.
- Mortality threat refers to the possibility that subjects may be dropping out of the study at differential rates between the treatment and control groups due to a systematic reason, such that the dropouts were mostly students who scored low on the pretest. If the low-performing students drop out, the results of the posttest will be artificially inflated by the preponderance of high-performing students.

Regression threat , also called a regression to the mean, refers to the statistical tendency of a group's overall performance on a measure during a posttest to regress toward the mean of that measure rather than in the anticipated direction. For instance, if subjects scored high on a pretest, they will have a tendency to score lower on the posttest (closer to the mean) because their high scores (away from the mean) during the pretest was possibly a statistical aberration. This problem tends to be more prevalent in non-random samples and when the two measures are imperfect

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Experimental Research

Hybrid Experimental Designs

Hybrid designs are those that are formed by combining features of more established designs. Three such hybrid designs are randomized blocks design, Solomon four-group design, and switched replications design.

Randomized block design. This is a variation of the posttest-only or pretest-posttest control group design where the subject population can be grouped into relatively homogeneous subgroups (called blocks) within which the experiment is replicated.

Solomon four-group design . In this design, the sample is divided into two treatment groups and two control groups. One treatment group and one control group receive the pretest, and the other two groups do not. This design represents a combination of posttest-only and pretest-posttest control group design, and is intended to test for the potential biasing effect of pretest measurement on posttest measures that tends to occur in pretest-posttest designs but not in posttest only designs.

Switched replication design . This is a two-group design implemented in two phases with three waves of measurement. The treatment group in the first phase serves as the control group in the second phase, and the control group in the first phase becomes the treatment group in the second phase. In other words, the original design is repeated or replicated temporally with treatment/control roles switched between the two groups. By the end of the study, all participants will have received the treatment either during the first or the second phase. This design is most feasible in organizational contexts where organizational programs (e.g., employee training) are implemented in a phased manner or are repeated at regular intervals.

Quasi-experimental designs are almost identical to true experimental designs, but lacking one key ingredient: random assignment. For instance, one entire class section or one organization is used as the treatment group, while another section of the same class or a different organization in the same industry is used as the control group. This lack of random assignment potentially results in groups that are non-equivalent, such as one group possessing greater mastery of a certain content than the other group, say by virtue of having a better teacher in a previous semester, which introduces the possibility of selection bias .

Separate pretest-posttest samples design . This design is useful if it is not possible to collect pretest and posttest data from the same subjects for some reason. There are four groups in this design, but two groups come from a single non-equivalent group, while the other two groups come from a different non-equivalent group. For instance, you want to test customer satisfaction with a new online service that is implemented in one city but not in another. In this case, customers in the first city serve as the treatment group and those in the second city constitute the control group. If it is not possible to obtain pretest and posttest measures from the same customers, you can measure customer satisfaction at one point in time, implement the new service program, and measure customer satisfaction (with a different set of customers) after the program is implemented. Customer satisfaction is also measured in the control group at the same times as in the treatment group, but without the new program implementation. The design is not particularly strong, because you cannot examine the changes in any specific customer's satisfaction score before and after the implementation, but

you can only examine average customer satisfaction scores. Despite the lower internal validity, this design may still be a useful way of collecting quasi-experimental data when pretest and posttest data are not available from the same subjects.

Nonequivalent dependent variable (NEDV) design . This is a single-group pre-post quasi-experimental design with two outcome measures, where one measure is theoretically expected to be influenced by the treatment and the other measure is not. For instance, if you are designing a new calculus curriculum for high school students, this curriculum is likely to influence students' posttest calculus scores but not algebra scores. However, the posttest algebra scores may still vary due to extraneous factors such as history or maturation. Hence, the pre-post algebra scores can be used as a control measure, while that of pre-post calculus can be treated as the treatment measure. This design is weak in internal validity, but its advantage lies in not having to use a separate control group.

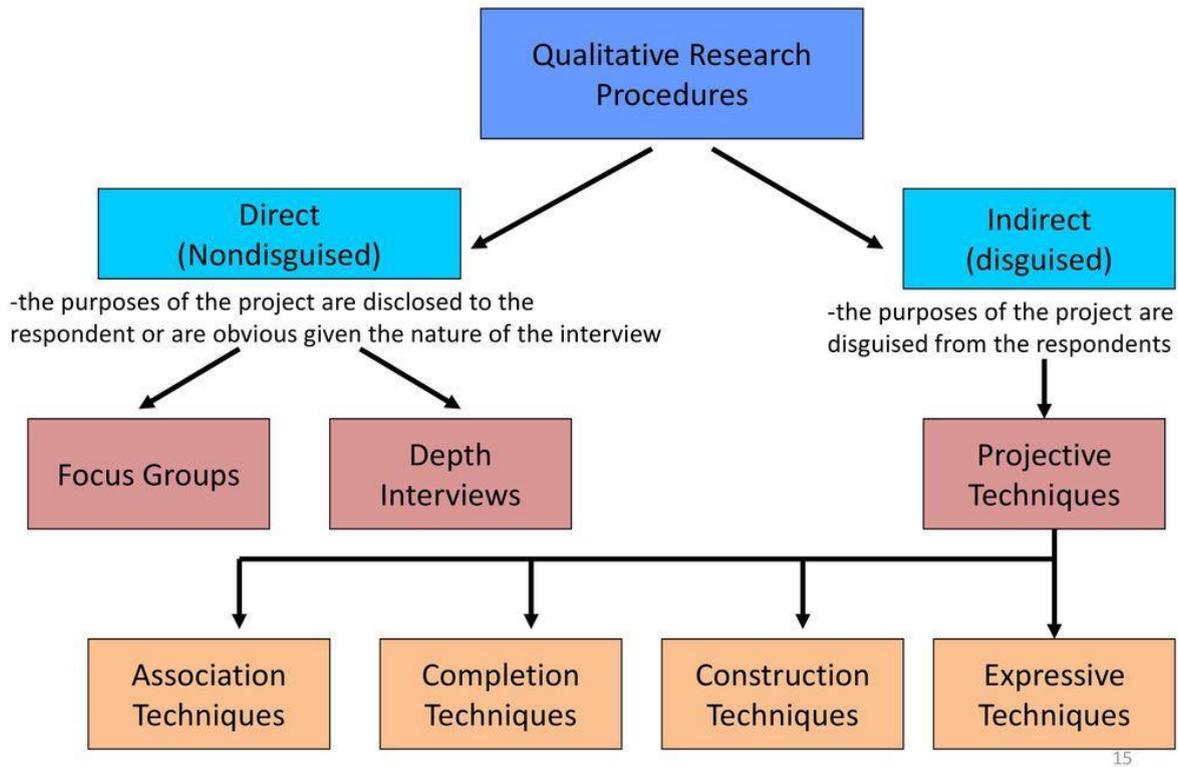
An interesting variation of the NEDV design is a pattern matching NEDV design , which employs multiple outcome variables and a theory that explains how much each variable will be affected by the treatment. The researcher can then examine if the theoretical prediction is matched in actual observations. This pattern-matching technique, based on the degree of correspondence between theoretical and observed patterns is a powerful way of alleviating internal validity concerns in the original NEDV design.

Session Number-9

Qualitative Research

An unstructured exploratory design methodology based on small samples that provides insights and understanding of the problem.

A Classification of Qualitative Research Procedures



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Direct Approach:

One type of qualitative research in which purpose of the project are disclosed to respondent. A direct approach is not disguised, purpose is disclosed to respondent or is obvious to them from the questions. Focus group and depth interviews are the major techniques.

Indirect approach:

Disguises the true purpose of the project. Projective techniques are indirect techniques consisted of word association, completion construction and expressive technique.

Procedure to plan FGD:

- Determine the objective of the marketing research project and define the problem
- Specify the objectives of qualitative research
- State the objectives /questions to be answered by the focus group
- Write a screening questionnaire
- Develop a moderator outline
- Conduct the focus group interview
- Review tapes and analyze the data
- Summarize the findings and plan follow up research or action

Table 6.3 Online Versus Traditional Focus Groups

Characteristics	Online Focus Groups	Traditional Focus Groups
Group size	4 – 6	8 – 12
Group composition	Anywhere in the world	Drawn from the local area
Time duration	1 – 1.5 hours	1 – 3 hours
Physical setting	Researcher has little control	Under researcher’s control
Respondent identity	Difficult to verify	Can be easily verified
Respondent attentiveness	Can engage in other tasks	Attentiveness monitored
Respondent recruiting	Easier. Flexible.	By traditional means
Group dynamics	Limited	Synergistic effect
Openness of respondents	Respondents more candid	Respondents candid, except for sensitive topics

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Qualitative Research

Depth interview: An unstructured direct, personal interview in which a single respondent is probed by a highly skilled interviewer or underlying motivations, beliefs, attitudes and feelings on a given topic.

Ethnography: Participating in a community or organization for an extended period of time to closely observe culture and behavior.

Projective techniques: is an unstructured, indirect form of questioning that encourages respondents to project their underlying motivations, beliefs, attitudes or feelings. In projective techniques, respondents are asked to interpret behavior of others rather than describing their own behavior.

Association techniques: A type of projective technique in which the respondent is presented with a stimulus and asked to respond with the first thing that comes to the mind.

Word Association: A projective technique which respondents are presented with a list of words, one at a time. After each word, they are asked to give the first word that comes to the mind.

Completion Technique: A projective technique that requires the respondent to complete an incomplete stimulus situation. It could be sentence completion or story completion.

Construction technique: A projective technique which the respondent is required to construct a response in the form of a story, dialogue or description.

Picture response technique: A projective technique in which the respondent is shown a picture and asked to tell a story describing it.

Cartoon test: Cartoon characters are shown in a specific situation related to the problem. The respondents are asked to indicate the dialogue that one cartoon characters might make in response to the comments of another character.

Expressive Techniques: Projective techniques in which the respondent is presented with a verbal or visual situation and asked to relate the feelings and attitudes of other people to the situation.

Role playing: Respondents are asked to assume the behavior of someone else.

Third party technique: A projective technique in which the respondent is presented with a verbal or visual situation and asked to relate the beliefs and attitudes of a third person to the situation.

Difference between Qualitative and Quantitative research:

	Qualitative Research	Quantitative Research
Focus	Quality (features)	Quantity (how much, numbers)
Philosophy	Phenomenology	Positivism
Method	Ethnography/Observation	Experiments/Correlation
Goal	Understand, meaning	Prediction, test hypothesis
Design	Flexible, emerging	Structured, predetermined
Sample	Small, purposeful	Large, random, representation
Data Collection	Interviews, observation, documents and artefacts	Questionnaire, scales, tests, inventories
Analysis	Inductive (by the researcher)	Deductive (by statistical methods)
Findings	Comprehensive, description detailed, holistic	Precise, numerical

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