DESIGNING DATA COLLECTING TOOLS: OBSERVATOIN

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Annotation: Observation is a basic data collection method used in various scientific disciplines to gather accurate and reliable information about the natural world. This article aims to provide a comprehensive guide to designing data collection instruments for observational studies. It explores the key considerations and steps involved in developing effective observation protocols, ensuring high-quality data collection.

Key words: Design, participants, Structured observation, researcher, subjective experiences, understanding, ecological aspect.

Аннотация: Наблюдение — основной метод сбора данных, используемый в различных научных дисциплинах для сбора точной и достоверной информации о мире природы. Целью этой статьи является предоставление комплексного руководства по разработке инструментов сбора данных для наблюдательных исследований. В нем рассматриваются ключевые соображения и шаги, необходимые для разработки эффективных протоколов наблюдения, обеспечивающих сбор высококачественных данных.

Ключевые слова: Дизайн, участники, Структурированное наблюдение, исследователь, субъективные переживания, понимание, экологический аспект.

Annotatsiya: Kuzatish - bu tabiiy dunyo haqida aniq va ishonchli ma'lumotlarni to'plash uchun turli ilmiy fanlarda qo'llaniladigan asosiy ma'lumotlarni yig'ish usuli. Ushbu maqola kuzatuv tadqiqotlari uchun ma'lumotlar yig'ish vositalarini loyihalash bo'yicha to'liq qo'llanmani taqdim etishga qaratilgan. U samarali kuzatish protokollarini ishlab chiqish, yuqori sifatli ma'lumotlarni yig'ishni ta'minlash bilan bog'liq asosiy fikrlar va qadamlarni o'rganadi.

Kalit so'zlar: Loyihalash, ishtirokchilar, Strukturaviy kuzatish, tadqiqotchi, sub'ektiv tajribalar, tushuncha, ekologik jihat.

Observation plays an important role in scientific research, allowing researchers to directly observe and record phenomena of interest. A process involves regularly observing and documenting events, behaviors, or processes in their natural setting. Designing data collection tools for observation requires careful planning and consideration to ensure the validity and reliability of the data collected. This article presents a step-by-step approach to guide researchers in creating effective observation protocols.

Before designing a data collection instrument, researchers must determine the type of observation that best fits the research objectives. This section describes the different types of observation commonly used in scientific research, including naturalistic observation, participant observation, structured observation, and controlled observation. Each type has unique characteristics and applications that influence the design of data collection tools. This section highlights important considerations in designing observational data collection instruments, such as defining research objectives, defining the target population, selecting appropriate sampling techniques, and addressing ethical issues. Researchers must clearly define the variables of interest, select appropriate observational methods, and establish criteria for recording and analyzing data.

More information on the topic of designing observational data collection tools:

1. Types of tracking:

a. Natural observation: this type of observation involves the study of behavior

or phenomena in natural settings without any intervention or manipulation by the researcher. This provides a rich and authentic understanding of the subject, but may lack control over extraneous variables.

b. Participant Observation: In participant observation, the researcher enters the research environment and actively participates in the activities and interactions being observed. This method provides a deep understanding of the social dynamics and subjective experiences of the participants.

c. Structured Observation: Structured observation involves predefined categories or codes that guide the recording of specific behaviors or events. It provides a more standardized approach and enables systematic data collection and analysis.

d. Controlled Observation: Controlled observation is conducted in a controlled environment where the researcher manipulates variables to study their effects on behavior or events. This type of surveillance provides a high level of control, but may not be ecologically sound.

2. Key considerations in tool design:

a. Research Objectives: Clearly define the objectives of the study and the specific behaviors, events, or phenomena to be observed.

b. Target population: Define the population or sample to be followed, taking into account factors such as age, gender, location, or other relevant characteristics.

c. Sampling Techniques: Select appropriate sampling techniques such as random sampling or purposive sampling to ensure representativeness of the population being observed.

d. Ethical considerations: Ethical considerations, including informed consent, privacy, confidentiality and protection of vulnerable populations.

3. Development of monitoring protocols:

a. Observation Settings: Determine appropriate settings in which the observation will take place, taking into account factors such as accessibility, relevance to the research question, and participant comfort.

b. Tracking Schedules: Set the time and duration of tracking sessions.

Consider whether continuous or periodic follow-ups are required and whether multiple follow-up sessions are necessary.

c. Data collection guidelines: collect data including observation methods, recording techniques, and any guidelines or criteria for identifying and recording relevant behaviors or events develop specific instructions for the cloak.

d. Pilot testing: Conduct a pilot test of the tracking protocol to identify any potential problems or uncertainties and refine the protocol accordingly.

4.   Data recording methods:

a. Manual notation: The observer records observations in a field notebook or data sheet using written notes or sketches.

b. Coding systems: Behaviors or events are assigned numerical or categorical codes that represent specific categories or dimensions. This method facilitates systematic data analysis.

c. Checklists: Predefined checklists are used to determine the presence or absence of certain behaviors or events of interest.

d. Rating scale: Observers rate behaviors or events on a scale to determine their intensity, frequency, or other relevant measure.

e. Technological tools: Video or audio recording devices can be used to capture observations for later review and analysis. These tools provide more accurate and detailed information, but may raise ethical concerns.

5.   Increase authenticity and reliability:

a. Triangulation: Use multiple observers or data collection methods to increase the validity and reliability of observations.

b. Interobserver Agreement: Assess the level of agreement between different observers to ensure consistency in data collection. This can be done by comparing observations or performing reliability tests.

c. Established instruments or scales: Use existing validated instruments or scales whenever possible to increase the validity and reliability of the data.

d. Training of observers: Provide comprehensive training to observers to ensure they understand observation protocols, data recording methods, and criteria

for identifying relevant behaviors or events.

e. Quality control measures: Procedures to eliminate potential errors or inconsistencies in data collection

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