The case study method

- Research method originated in clinical medicine (the case history, i.e. the patient's personal history (idiographic method)
- Description of the symptoms, the diagnosis, the treatment and eventual outcome (descriptive method) but also in newer research explanatory case studies
- Uses the person's own memories, the memories of friends and relatives, or records of various types such as diaries, photographs etc.
- Often combines interviews and observations.
- In-depth investigation of experiences that allow to identify interactions and influences on psychological processes
- Opens up and explore aspects of human experience that can be investigated using other types of research methods (qualitative study/inductive research)

The case study method often involves simply observing what happens to, or reconstructing 'the case history' of a single participant or group of individuals (such as a school class or a specific social group), i.e. the idiographic approach. Case studies allow a researcher to investigate a topic in far more detail than might be possible if they were trying to deal with a large number of research participants (nomothetic approach) with the aim of 'averaging'.

The case study is not itself a research method, but researchers select methods of data collection and analysis that will generate material suitable for case studies such as qualitative techniques (semi-structured interviews, participant observation, diaries), personal notes (e.g. letters, photographs, notes) or official document (e.g. case notes, clinical notes, appraisal reports). The data collected can be analysed using different theories (e.g. grounded theory, interpretative phenomenological analysis, text interpretation (e.g. thematic coding) etc. All the approaches mentioned here use preconceived categories in the analysis and they are ideographic in their approach, i.e. they focus on the individual case without reference to a comparison group.

Intrinsic versus instrumental case studies[1]

Intrinsic case studies represent nothing but themselves. The cases in intrinsic case studies are chosen because they are interesting in their own right. The researchers want to know about them in particular, rather than about a more general problem or phenomenon.

Instrumental case studies constitute exemplars of a more general phenomenon. They are selected to provide the researcher with an opportunity to study the phenomenon of interest. The research question identifies a phenomenon (e.g. stress, bereavement, fame etc) and the cases are selected in order to explore' how the phenomenon exists within a particular case'. In this design, individuals who are experiencing the phenomenon under investigation are all suitable cases for analysis.

[1] Willig, Carla (2001) Introducing qualitative research in psychology. Buckingham: Open University Press, page 73 ff.

What is a case?[2]

A single case doesn't have to mean just one single person. It might be a family, a social group, or even a single organisation. A case study can involve dealing with quite a number of individuals, actually. For example, a case study may involve interviewing staff in a small but growing computer company, on the social psychological aspects of managing staff (Hayes & Lemon, 1990). This information could then be used to compare with other larger companies, in terms of how they had tackled staff management issues at a similar stage in their history. The table below lists five different types of case, which could be the subject of a case study, ranging from an in-depth study of a single individual to the study of an organisation or an event.

Table 1. Types of case study

Person	The study of one single individual, generally using several different research methods.
Group	The study of a single distinctive set of people, such as a family or small group of friends.
Location	The study of a particular place, and the way that it is used or regarded by people.
Organisation	The study of a single organisation or company, and the way that people act within it.
Event	The study of a particular social or cultural event, and the interpretations of that event by those participating in it.

The main characteristics of the case study

1. **A descriptive study**
    a. (I.e. the data collected constitute descriptions of psychological processes and events, and of the contexts in which they occurred (qualitative data).
    b. The main emphasis is always on the construction of verbal descriptions of behaviour or experience but quantitative data may be collected.
    c. High levels of detail are provided.
2. **Narrowly focused.**
    a. Typically a case study offers a description of only a single individual, and sometimes about groups.
    b. Often the case study focuses on a limited aspect of a person, such as their psychopathological symptoms.
3. **Combines objective and subjective data**
    a. i.e. the researcher may combine objective and subjective data: All are regarded as valid data for analysis, and as a basis for inferences within the case study.
        i. The objective description of behaviour and its context
        ii. Details of the subjective aspect, such as feelings, beliefs, impressions or interpretations. In fact, a case study is uniquely able to offer a means of achieving an in-depth understanding of the behaviour and experience of a single individual.

[2] Hayes, N. (2000) Doing Psychological Research. Gathering and analysing data. Buckingham: Open University Press. p. 134.

4. **Process-oriented.**
    a. The case study method enables the researcher to explore and describe the nature of processes, which occur over time.
    b. In contrast to the experimental method, which basically provides a stilled 'snapshot' of processes, which may be continuing over time like for example the development of language in children over time.

Uses of the case study

The case study method permits the collection of detailed descriptive data, which are usually qualitative in nature. It may provide information on the unique features of particular individuals. For example, the method is used widely in clinical psychology, where 'classic cases' such as Freud's cases are often described. The approach plays a major role in diagnosis and in the planning of therapy or treatment. Alternatively, case studies may be made of the typical representatives of groups.

Examples which illustrate the uses of case studies include some of the following

Effects of isolation in young children[3]

Mason (1947) The case study of Isabelle who had been kept in isolation in a dark room with her mother who was deaf and without speech gives insight into the development of children by an extraordinary case. Isabelle had not been given an adequate diet and had severe rickets. During her isolation she communicated with her mother using gestures. The mother escaped from the isolation when Isabelle was about six years old. On her admission to hospital Isabelle behaved like a wild animal and only made croaking sounds. After one week in the hospital she started to make speech sounds and seemed to pass rapidly through the normal stages of speech. After 18 months she had a vocabulary of over 2000 words, could read and write, and could compose imaginative stories.

Koluchova (1976) This case study involves Czechoslovakian, male, identical twins whose mother died after giving birth. The twins went to a children's home for eleven months, then spent six months with their aunt, and then went to live with their father and stepmother. The father was of low intelligence and the stepmother was exceptionally cruel. The boys were never allowed out of the house and were kept either in a small unheated closet or in a cellar. They were discovered at the age of seven, and they could hardly walk, had acute rickets, were very fearful and their spontaneous speech was very poor. After placement in a hospital and later in a foster home excellent gains were made. The children are now adults and appear well adjusted and cognitively able.

Curtiss (1977) Genie was found when she was 13 years old. Her history was one of isolation, severe neglect and physical restraint; she was kept strapped to a child's potty in an attic. Her father punished her if she made any sound. On discovery her appearance was of a six-or seven-year-old child. She was described by Curtiss as 'unsocialised, primitive, and hardly human'; she made virtually no sounds and was

[3] Cardwell,M. et al. (1996) Psychology for A level. London:Collins Educational p.380)

hardly able to walk. Genie has not achieved food social adjustment or language despite intervention and being placed in a foster home.

Corkin (1984) H.M. was 27 when brain surgeons removed most of his hippocampus and part of the amygdala in a last attempt to relieve the patient's severe and life-threatening epilepsy. The operation did achieve its goal, because the seizures were milder and could be managed with medication. His memory, however, had been affected dramatically. Although H.M. could recall most of the events that had occurred before the operation, he could no longer remember new experiences for much longer than 15 minutes. The declarative memories (i.e. memories of facts and events) vanished like water down the drain. With sufficient practice, H.M. could acquire new skills, such as solving a puzzle or playing tennis (this kind of memory is called procedural memories), but he could not remember learning these skills. Nor could he learn new words, songs, stories, or faces. H.M.'s doctors had to reintroduce themselves every time they saw him. It seems that H.M.'s terrible memory deficits involve a problem in transferring explicit memories from short-term storage into long-term storage in the first place. He would read the same issue of a magazine over and over again without realising it. He could not recall the day of the week, the year, or even his last meal. Today, many years later, H.M. will occasionally recall unusually emotional evens, such as the assassination of someone named Kennedy. He sometimes remembers that both his parents are dead, and he knows he has memory problems. But according to Suzanne Corkin, who has studied H.M. extensively, these "islands of remembering" are the exceptions in a vast sea of forgetfulness. He still does not know the scientists who have studied him for decades. Although he is now in his seventies, he thinks he is much younger. This good-natured man can no longer recognise a photograph of his own face; he is stuck in a time warp from the past.

Case studies of individual psychological problems (e.g. Freud's case study of Little Hans)

Freud (1909) Analysis of a phobia in a five-year-old boy. Hans, a small boy four years old, had developed a phobia of horses. His family lived opposite a busy coaching inn, which meant that Hans was unhappy about leaving the house, because he saw many horses as soon as he went out of the door. When he was first asked about his fear Hans said that he was frightened that the horses would fall down and make a noise with their feet. He was most frightened of horses, which were drawing heavily laden carts and, in fact, Hans had seen a horse collapse and die in the street one time when he was out with his nurse. It was pulling a horse-drawn bus carrying many passengers and when the horse collapsed Hans had been frightened by the sound of its hooves clattering against the cobbles of the road.

Freud interpreted Hans' phobia as symptomatic of his Oedipus complex. He saw the fact that Hans was reluctant to leave the house as indicating that he would rather stay at home with his mother and he considered that the horses, being large and powerful, symbolised his father. When the father, instructed by Freud, suggested to Hans that he was actually frightened that the horse would bite him, Hans insisted at first that it was because he was frightened about it making a noise with its feet but later accepted his father's suggestion. Freud considered that this represented a disguised form of castration threat anxiety.

Advantages of the case study method (Searle 1999)[4]

1. **Stimulating new research.** A case study can sometimes highlight extraordinary behaviour, which can stimulate new research. For example, Luria's study of the memory man "S" enabled researchers to begin to investigate cases of unusual memory abilities, and the cognitive mechanisms, which made such phenomena possible. Without the case study, it is unlikely that this area of research would have been opened up in the same way.
2. **Contradicting established theory.** Case studies may sometimes contradict established psychological theories. Searle cites the case study of severely deprived Czechoslovak twins, and the remarkable recovery they showed when placed in a caring social environment, as an example of a case study which challenged the established theory of the early years of life being a critical period for human social development.
3. **Giving new insight into phenomena or experience.** Because case studies are so rich in information, they can give insight into phenomena, which we could not gain in any other way. For example, the case of S.B., a blind man given sight in adulthood, gave researchers a particularly detailed insight into the processes and experiences of perception, highlighting aspects of the experience, which had not yet previously been suspected.
4. **Permitting investigation of otherwise inaccessible situations.** Searle claimed that the case study gives psychological researchers the possibility to investigate cases, which could not possibly be engineered in research laboratories. One example of this is the case of Genie, the severely deprived child whose case enabled researchers to study the effect of extreme social deprivation continued from infancy to puberty. To create such a situation for research purposes would be totally unethical and not possible but when Genie was discovered by social workers, the use of case-study methodology permitted much deeper insights into the mechanisms, processes and consequences of her experience and recovery.

Disadvantages of the case study method

Searle (1999) identified a number of disadvantages to case study research.

1. **Replication not possible.** Uniqueness of data means that they are valid for only one person. While this is strength in some forms of research, it is a weakness for others, because it means that findings cannot be replicated and so some types of reliability measures are very low.
2. **The researcher's own subjective feelings may influence the case study (researcher bias).** Both the collection of data and the interpretation of them. This is particularly true of many of the famous case studies in psychology's history, especially the case history reported by Freud. In unstructured or clinical case studies the researcher's own interpretations can influence the way that the data are collected, i.e. there is a potential for researcher bias.
3. **Memory distortions.** The heavy reliance on memory when reconstructing the case history means that the information about past experiences and events may be notoriously subject to distortion. Very few people have full documentation of all

[4] Hayes, N. (2000) Doing Psychological Research. Gathering and analysing data. Buckingham: Open University Press. p. 133.

various aspects of their lives, and there is always a tendency that people focus on factors which they find important themselves while they may be unaware of other possible influences.

4. **Not possible to replicate findings.** Serious problems in generalising the results of a unique individual to other people because the findings may not be representative of any particular population.