

John Joan Case Study and the Obedience Study

To answer questions about the human mind and behavior, psychologists employ various research methods. While scientific research can be a reliable source of information, researchers can make errors that lead to unreliable conclusions. While the findings by Milgram's and Money's studies were influential, the means they used to acquire the knowledge received much criticism. The criticism had as much to do with the validity of the findings as with ethical treatment of human subjects.

Replications of a study are necessary to ensure the reliability of findings in the study. Once the study is replicated, researchers examine the results to see if they have been duplicated. Replication is important in psychological research as it helps to reveal erroneous findings in the study. In the case of the John/Joan case study, the fact that the study was not replicated proved to be detrimental. By principle, a single case study cannot be used to generalize to other people, as a case study only involves one person, "which is a sample size of one, which surely is not large enough to derive broad principles that would apply to other [people]. (Weiten, 2007)" Therefore, replication to test the reliability of the finding is especially important in case studies when trying to obtain broad implications. In the John/Joan case, Money published the success of this study in numerous articles, which cause surgeons to change the way they treated intersex babies throughout the country. Replication could have shown that the John/Joan case study was not proof that children are born psychosexually undifferentiated (Colapinto, 1997). Replication would also have corrected for other apparent flaws in the study. One such flaw was Janet Reimer's apparent social desirability bias as she would only seize on "moments that Joan's behavior *could* be construed as stereotypically feminine" when writing to Money about Joan's

progress (Colapinto, 1997). Milgram, however, replicated his study in many different environments. He conducted the study not just on men, but on subjects outside of the Yale setting, on unpaid college student volunteers, and on women, finding similar results each time (Hock, 2005). He even expanded further on this study by conducting related experiments that had conditions that promoted or limited obedience and found similar results. The replication of his studies on different sample groups and in different settings made his findings more credible and generalizable to the public.

The generalizability of a study is the ability to reasonably apply the results to similar populations (S. Schrier, PSYCH 111 lecture, January 10, 2008). It is desirable to have generalizability because it increases the number of repeats of the study and the confidence in the findings. Money's findings in the study of John/Joan were, even if they had been accurate, not generalizable. There was an extreme case of sampling bias in this case for two reasons: one case study is never generalizable, and John/Joan, who was born with unambiguous genitalia, was used to make generalizations about intersex children. Milgram's *Obedience to Authority* research study result, however, is more debatable in its generalizability. Although Milgram conducted similar experiments on different groups of people, critics state that humans having a tendency to obey authority at immense ethical cost in the lab setting is not a statement that is generalizable to the real world (Hock, 2005).

The subject of deception is mentioned in Guideline 3 of the Ethics in Research, which states that deception is acceptable in research only if justified and if a debriefing is given afterwards. Often, it is necessary for scientists to use deception to manage methodological problems; however, it is also controversial as it essentially sets honesty in opposition to the advancement of knowledge. In Milgram's study, he uses deception by telling the subjects

initially that they will be participation in a learning study when in fact it is an obedience study. He also makes his subjects believe they are hurting the learner. This allows for a controlled and unbiased experiment. Subjects were fully debriefed after the experiment was over. Money's study also involved deception. Money ordered John/Joan's parents to secrecy, insisting that this would increase the chances for success. Due to the deception, the entire Reimer family suffered (Colapinto, 2004). Money never made it clear to the family that their case was an experiment and also never debriefed David, although he eventually found out through other means (Colapinto, 1997).

The APA Ethical Guidelines for Research outline the standards that psychologists must meet in doing research. The first guideline states that a subject's participation in a study should be voluntary, based on informed consent. They should also be free to withdraw at any time (Weiten, 2007). It is difficult to judge whether Milgram's study met the first guideline because the third guideline that allows deception directly conflicts with volunteering for a study based on informed consent. The subject's participation was voluntary and based on consent, but was not informed. Although the deception was necessary for the purposes of the study, it was so extreme that there is no guarantee the subjects would have willingly participated in such a study had they known the truth. It is also difficult to judge whether participants were permitted to withdraw from the study because a series of commands with the last being, "You have no other choice, you must go on," were given and embedded into the study (Hock, 2005). When the John/Joan case study began, the subject was a minor, and, according to the Society for Research in Child Development (SRCD), required parental consent. The parents never offered "informed consent." Janet Reimer recalls asking Money if the procedure had been done before, and him saying, "Yes, it had been successful." In addition, Money never revealed that it was an experiment and the first

of its kind (Nova, 2001). Against SRCD guidelines, the children were also coerced into participating, as Money suggested the parents offer extraordinary incentives, such as trips to Disneyworld to cooperate in the children's visits (Colapinto, 1997).

The second guideline states that participants should not be exposed to harmful or dangerous research procedures, physically or psychologically (Weiten, 2007). While participants in Milgram's study were not exposed to electric shock, this is not to say that they were not exposed to harmful research procedures. Milgram's study allowed the participants to believe that they were physically harming someone to the point of death. This could have resulted in immense emotional discomfort as well as psychological harm. However, this problem was slightly mitigated by the fact that the researchers helped to alleviate anxiety by debriefing the participants and offering a friendly reconciliation with the learner. While critics say that the study produced deep discomfort in the subjects, Milgram counteracted by doing a follow-up survey in which he found 84% of the participants glad that they had participated in the survey (Hock, 2005). Money's research produced obvious psychological harm to the twins and the entire family, as is evidenced by their testimonies on Dateline and Nova. Tragically, David Reimer's eventual suicide is most likely linked to the traumatic phase in his life when he was forced to identify as a girl (Colapinto, 2004).

The fourth guideline states the subjects' rights to privacy should never be violated (Weiten, 2007). Money, on one hand, did a good job of respecting privacy when asked for interviews by the media. On the other hand, Money did not respect the subject's privacy when he did not inform them that the procedure was an experiment and wrote about the case in scientific journals. Assuming that Milgram informed the subjects that information collected from the study,

including a video of the subjects would be released before consent, Milgram would have followed the fourth guideline. Any practice less than such could be seen as a violation.

References

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