

Research Ethics

Lecture 9

EFFECT OF SEVERE IMMOBILIZATION OF THE BODY ON INTELLECTUAL AND PERCEPTUAL PROCESSES¹

JOHN P. ZUBEK, M. AFTANAS, K. KOVACH, L. WILGOSH,
AND G. WINOCUR
University of Manitoba

IN A RECENT REVIEW ARTICLE on sensory and perceptual deprivation, Fiske (1961) stated that severe restriction of kinesthetic stimulation alone "may disrupt normal functioning as much as a similar degree of restriction in either the visual or auditory sphere." Unfortunately, experiments specifically designed to appraise the role of kinesthesia are rare. Most of the research in this area has usually employed various degrees of immobility *concurrent* with restriction of visual and auditory stimulation (Fiske, 1961). The purpose of this study, therefore, is to determine whether subjects who are immobilized but otherwise exposed to a normal and varied sensory environment will exhibit any of the typical deprivation phenomena, for example, intellectual deficits, perceptual changes, and hallucinatory-like experiences.

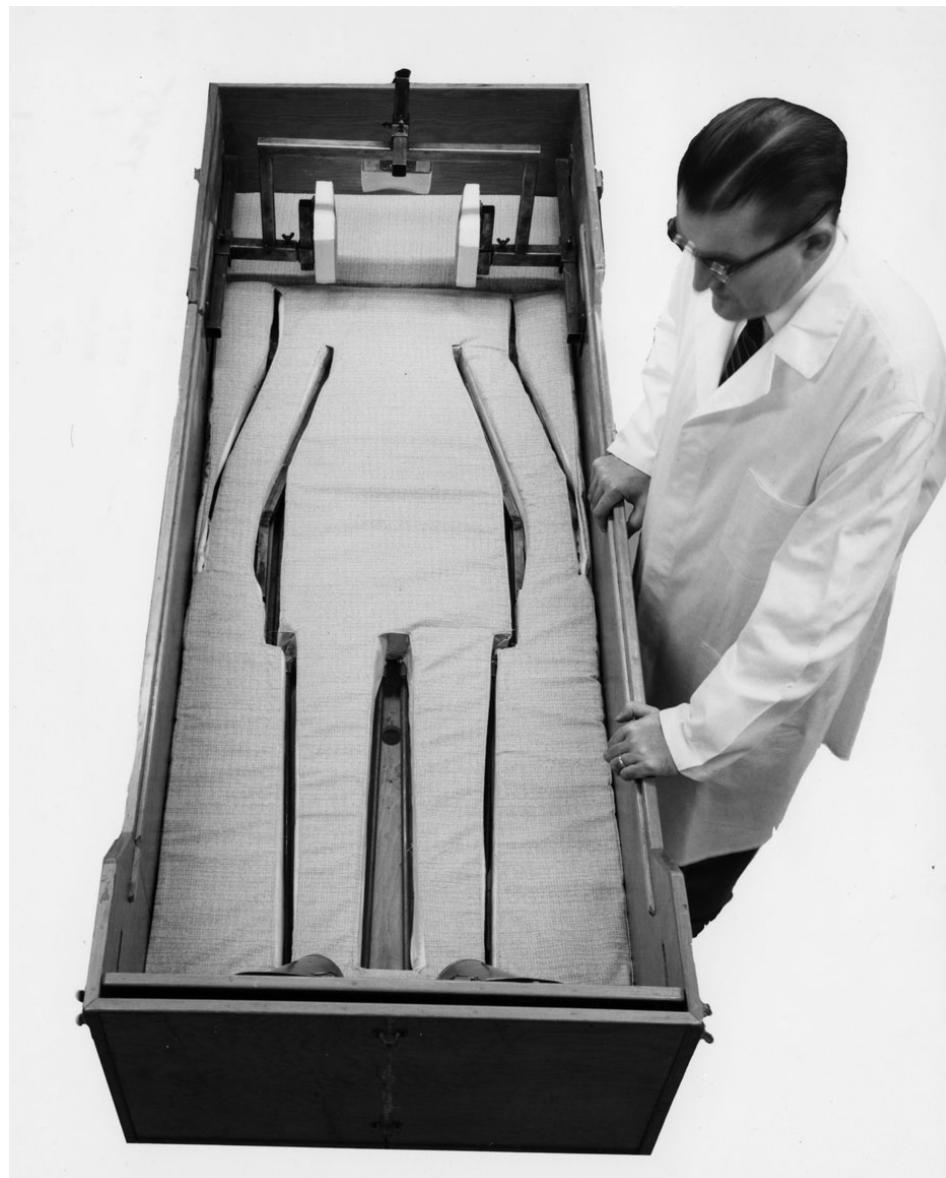
Questions

- Big Question: What happens to people when they are deprived of their senses?
- Specific question: What are the effects of prolonged immobilization (not being able to move) when people are not deprived of other senses.



Prior research used sensory deprivation chambers along with immobilization

- restricted vision
- restricted audition
- restricted tactile



Let's take a look at the paper

Results/Inferences?

It is concluded that reduction of kinesthetic stimulation alone can produce behavioural changes similar in many respects to those occurring under reduced visual and auditory stimulation. There are, however, a number of differences.

Was it worth it?

Research Ethics

Lecture 9

Moral Principle	Research Participants	Scientific Community	Society
Weighing Risks against Benefits			
Acting Responsibly and with Integrity			
Seeking Justice			
Respecting People's Rights and Dignity			

Historical development of Research Ethics

- Nuremberg Code (1947)
- Declaration of Helsinki (1964)
- Belmont Report (1978)
- APA code

Nuremberg Code

- a set of 10 principles written in 1947 in conjunction with the trials of Nazi physicians accused of shockingly cruel research on concentration camp prisoners during World War II.
- Provided a standard against which to compare the behavior of the men on trial
- Key Points
 - 1) Importance of weighing costs and benefits
 - 2) Importance of Informed Consent

Declaration of Helsinki

- a similar ethics code that was created by the World Medical Council in 1964.
- Key Points
 - 1) Importance of developing a written protocol for research that is evaluated by an independent body

Belmont Report

- In the United States, concerns about the Tuskegee study and others led to the publication in 1978 of a set of federal guidelines called the Belmont Report.

Tuskegee Study

- Tuskegee syphilis study was conducted by the US Public Health Service from 1932 to 1972 (Reverby 2009)
- The participants in this study were poor African American men in the vicinity of Tuskegee, Alabama, who were told that they were being treated for “bad blood.”

Tuskegee Study

- Although they were given some free medical care, they were not treated for their syphilis.
- Instead, they were observed to see how the disease developed in untreated patients. Even after the use of penicillin became the standard treatment for syphilis in the 1940s, these men continued to be denied treatment without being given an opportunity to leave the study.
- Discontinued following outcry when the study became public knowledge

Belmont Report

- <http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.htm#xrespect>
- Created on 18 April 1979 – named after the Belmont Conference Center in Elkridge, Maryland.
- Articulated three "basic ethical principles" relevant to research involving human participants
 - Respect for Persons
 - Beneficence
 - Justice

Respect for Persons

- Two Ideas:
 - Individuals should be treated as autonomous agents
 - Individuals with diminished autonomy are entitled to protection

Beneficence

- Acts of kindness or charity. In the Belmont report, beneficence is an obligation.
- Two general rules:
 - Do Not Harm
 - Maximize Benefits and Minimize Harms

Justice

- Who ought to receive the benefits of research and bear its burdens? An injustice occurs when an entitled benefit is denied or when a burden is imposed unduly.

Historical development of Research Ethics

- Nuremberg Code (1947)
- Declaration of Helsinki (1964)
- Belmont Report (1978)
- APA code

Institutional Review Board (IRB)

- The Federal Policy for the Protection of Human Subjects, mandates that:
- Universities, hospitals, and other institutions that receive support from the federal government must establish an institutional review board (IRB)—a committee that is responsible for reviewing research protocols for potential ethical problems.

Institutional Review Board (IRB)

- An IRB must consist of at least five people with varying backgrounds, including members of different professions, scientists and nonscientists, men and women, and at least one person not otherwise affiliated with the institution.
- IRB helps to make sure that the risks of the proposed research are minimized, the benefits outweigh the risks, the research is carried out in a fair manner, and the informed consent procedure is adequate.

IRB Process



Four controversies with the IRB

- Researchers legitimately object to nonspecialists passing judgment on procedures they may not understand
- On the other hand, poorly designed studies have ethical issues...results could be worthless, subjects could be harmed needlessly, time wasted

Four controversies with the IRB

- Concern that IRBs do not understand the relevance of basic psychological research (e.g., perception)
- Applied research may have a biased approval rate

Four controversies with the IRB

- Concern that IRBs are overzealous in their risk assessment
- Kimmel (2007) was unable to obtain IRB approval for presenting loud and soft tones over headphones. Switched into animal research

Four controversies with the IRB

- IRBs tend to overemphasize biological and medical science models
- Ask researchers to respond to requests that are time consuming and unrelated to their research

Assessing risk

- 3 basic levels of risk
 - at risk
 - minimal risk
 - no risk
- Assessment is based on the degree to which a subject would experience more or less risk than in normal daily life

Informed consent

- Central concept in APA ethics code
- Participants should be given enough information about the studies purpose and procedures to decide if they wish to volunteer
- Requirement for informed consent raises issues when researchers employ deception techniques
- Deception is allowed when it is required by the research, and approved by the IRB

Example consent form

Pattern Recognition Study

Researchers at CUNY are asking you to take part in a study on pattern recognition.

The researchers want to know how people recognize patterns, that is, how they can tell that they have seen a pattern before.

If you choose to take part, we will ask you to look at some patterns on a computer screen. You will see two patterns at a time. The patterns will be of differing colors. We will ask you to pay attention to only one of the color patterns. After you have seen all of the patterns, we will show you some more patterns and ask if you have seen any of them before.

Your responses to all of the questions will remain confidential.

We will not ask you to put your name on any of the response sheets.

Taking part is voluntary.

If you choose not to take part, there will be no penalty and you will receive the credit anyway. You may choose to stop at any time.

If you have questions about the study, please ask the experimenter or contact **Mary Doeswell at CUNY, phone ____-____.**

If you have questions about your rights as a volunteer, please contact **Ed Ethics**, Chair, CUNY IRB. Call him at ____-____ or visit him at (departmental office).

(Note: The readability of this Consent Form is 8th. grade. The text is only 226 words and ½ of a page, yet it meets all requirements for Consent Forms.)

Treating participants well

- Make sure participants are treated fairly and with respect during the session
- Ensure privacy and confidence
- Debrief or explain the purpose of the experiment was it is complete

Summary of ethical obligations

- Develop a study where the overall benefits outweigh the costs
- Cause no harm to participants
- Gain informed consent (most circumstances)
- Assure volunteers that they can quit the study at any time, without penalty
- Provide some form of debriefing
- Assure confidentiality and anonymity