



Educational Topic

Human Factors Researcher

Related Job Titles:

Research Psychologist, Research Associate, Human Performance Researcher, Human Physiology Researcher

Job Description:

This type of work within aviation ranges from studying pilots in the cockpit as they relate to the cockpit controls all the way to studying sleep physiology in order to improve safety for pilots during flight operations of long duration. A Human Factors Researcher uses the scientific method to develop a hypothesis and set up an experiment to test the theory. After lengthy and repeated trials, the results would be presented and enacted in a trial of the new methodology being suggested by the study. The researcher would have to be able to develop and perform scientifically-based experiments and document the results. Such studies might occur over a long period of time, other studies might cover a few weeks or days with others lasting no more than an hour. The researcher must be a keen observer with excellent note taking skills as well as fine writing skills with which to develop detailed reports.

Interests / Abilities:

- Do you like to take things apart and see how they work?
- Are you fascinated with the human body and how it works? Would you be interested to see how it operates especially in extreme or unusual situations?
- Would finding a better way to make a machine or assembly line work more efficiently be a fun challenge?
- Do you enjoy studying people and how they interact with machines?

Suggested School Subjects / Courses:

- Mathematics: Algebra and Statistics
- Psychology
- Sociology (the study of human relationships)
- Physiology (the study of body systems and their interactions)
- Kinesiology (the study of human movement and mechanics)
- Biology

Education / Training Needed:

To perform the lab work would require a bachelor's degree from an accredited college or university in the field(s) of Biology, Psychology or Physiology. To oversee some research projects would require a master's degree in a complimentary subject. To manage a research program would require a Ph. D. Depending upon what specialty you go into, a license might be required which would mean you have to take a licensing exam.

Areas of expertise:

- *Behavioral Sciences, Psychology, Clinical Psychology, Physiological Psychology*
- *Biology, Biophysics, Physiology, Kinesiology*
- *Human/system integration technology*

