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EDUCATIONAL PSYCHOLOGY

A COMPARISON STUDY OF SIMULATION VERSUS MULTIMEDIA  
PRESENTATION INSTRUCTION ON FLIGHT STUDENTS' DECISION-MAKING  
SKILLS (187 pp.)

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Aviation is often stated as being the safest mode of transportation; however the General Aviation community has reached a plateau in safety. For the last 20 years, the accident trend has remained at approximately 7 fatalities per 100,000 flight hours, though in the year 2013 there was a dip to approximately 5 fatalities per 100,000 hours of flight. One possible way to make an impact on safety issues in General Aviation would be through education, focusing on improving students' decision-making skills, at the beginning levels of flight training to improve the decision making of the pilots throughout their flight careers. This Study investigates if the use of supplemental simulation scenarios to teach students decision making makes a difference in their proficiency. Simulation training can improve their decision-making capability beyond some of the current multimedia online instruction, which is currently being used to teach decision making. The results of this study indicate that the current stance of minimizing simulator training early in the flight training regime may not be the best course of action. If focused on the soft skills, such as decision making or communication, the use of simulation can greatly aid in the development of those critical skills.

*Keywords:* decision making, multimedia, simulation, flight education