

Abstract

Aviation maintenance is an area where better efficiency is needed to cope with ever increasing workloads. However aviation maintenance has also been identified as one of the major causes of accidents and also where maintenance personnel can sustain injuries. Consequently, if further efficiencies are to be achieved, they cannot come at the cost of reduced safety margins. The present study was concerned with identifying the reasons and attributions of injury incidents in major maintenance operations. Moreover compare team leaders and technicians and also investigate whether human error contributes to injury incidents. Much of previous research in this area has employed human error theory. In the present research the researcher tapped into the mainstream psychological theories to help clarify the mechanism underlying the links between the injury incidents and behaviour. The present study employed attribution theory and the theory of reasoned action to share light on explaining behaviour.

The sample consisted of 17 participants, five team leaders and twelve aircraft technicians from different departments in major maintenance. Results of the study indicate that participants experienced different injury incidents in major maintenance. These injury incidents occurred as a result of various contributory factors. Contributory factors cited were equipment deficiencies, pressure, slippery and dirty floors and stands. Team leaders and technicians had similar and different responses towards the research questions asked. Types of errors that contributed to these injury incidents were slips, skill-based, knowledge-based errors and most importantly, violations. Participants made external attributions towards injury incidents.

Explanations using reasoned action theory with regard to the reasons and actions that lead to injury incidents were related more subjective norm and also associated with violations and pressure.