Recent Topics on Human Scientific Approach to Railway Transport Fields

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Human Science is a generalized term that encompasses research on human psychology, behavior and responses through a scientific approach. Just 50 years have passed since the establishment of the Railway Labor Science Research Institute of Japanese National Railway in 1963. The main purpose of applying the human scientific approach to railway transport issues is for the improvement of passenger/employee safety and comfort. This paper outlines recent topics and potential developments of this approach. Recent major topics have included the following: effective method of human error prevention, evaluation of usability and safety of the driver's cabin and coach, surveys involving risk perception of the railway users and evaluation of the influence of electric and magnetic fields on health.