

Operator control room Risk-Taking Questionnaire (ORTQ), a specific risk-taking assessment tool

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Introduction:

Risk taking as a critical aspect of controlling any industrial processes conveys considerable levels of criticality. Moreover, risk-taking encompasses massive influential roles in accident occurrence or prevention. Hence having a valid tool to evaluate individuals in terms of being risk taker or risk avoider is apparently necessary. Risk-taking has been investigated in the field of psychology and neuroscience and for this purpose some questionnaires and software have been developed.

Method:

In the present study a new questionnaire was developed and validated based on conceptual model to assess risk-taking behavior in people working in operator room control of industrial settings. Questions selected from well-known psychological scales and after face validity and confirmatory factor analysis (CFA) a new questionnaire completed by 208 males.

Results:

Risk-taking correlation coefficient and Impulsivity was 0.65 and venturesomeness and risk-taking was calculated to be 0.69(p-value <0.001). Cronbach's alpha for last version was 0.90.

Discussion:

Our results showed that impulsivity, venturesomeness and risk-taking are correlated with each other; therefore, the final questions were selected based on this scale.

Conclusion:

This questionnaire is a valid and reliable tool which can be used to screen risk-taking trait in the workers before being employed.

Keywords:

Risk-taking, Questionnaire, Impulsivity, Venturesomeness, Worker

Biography

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