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Extended life quality concepts and minimum risks

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The choice of risk mitigation measures has been of major concern in risk management. Different strategies have been evolved to assess the efficiency of mitigation measures. However, quality of life parameters using a net benefit criteria as efficiency indicator have been successfully applied in many fields of science, such as medicine, social science or engineering. Independent from the success of such indicators the question, whether efficiency should be the sole basis for the choice of mitigation measures remains. Works by Jongejan et al. (2007) and Pliefke & Peil (2007) have suggested that equality of the gain of a mitigation measure is also as much important as the efficiency. Considering the works by Covello et al. (2001) or Proske et al. (2007) about the different parameters for the acceptance of risks, even further parameters have to be included in the life quality concepts for the assessment of mitigation measures. Besides subjective evaluated benefit, additional parameters might be external trust and self control. Both parameters are opposites. Extending this statement to other parameters introduced in quality of life concepts, there seems to be a certain maximum of achievable quality of life (Easterlin 1974). This corresponds with a maximum of safety and a minimum of risk theoretically achievable, when human action is included. By definition, human action is included to risks (consider for example benefit, loss etc.). Therefore the theory of a minimum achievable risk seems to be supported by extended quality of life concepts and could explain so called disaster attraction behavior and the denial of enforced regulations concerning the safety of citizens. This bottom level of risk could not be undercut.

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