Development of fuzzy model of suicide risk among adolescents

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Our goal was to develop a model of suicide risk among adolescents considering the inner and external factors determining suicidal risk. We used the combination of measures such as, the hopelessness scale for children (A E Kazdin, A Rodgers, D Colbus), beck depression inventory (BDI), the reasons for living inventory (M M Linehan, J L Goodstein, S L Nielsen, & J A Chiles), Zung Self-Rating Depression Scale) Nemchin's Questionnaire, Kulikov's Questionnaire, Amirkhan's Questionnaire, Orel's Questionnaire to obtain inner risks and our specially developed measure: hopeless situation inventory (K Belogai, Y Borisenko, E Evseenkova, I Morozova) to find situational external risks. In our model, we consider inner determinants of suicidal risk to be hierarchic and on the first level to be united into three components: emotional and regulative component, cognitive and evaluation component and behavioral component. Each component has its own constituents which represent the second level of model. For instance, cognitive and evaluation component (K12) is compiled by reasons for living (K221) life situation evaluation (K222) self-image (K223), while K221 consists of survival coping beliefs (K3211), responsibility to family (K3212), fear of suicide (K3213), fear of social disapproval (K3214) and moral objections (K3215) on the third level of model. We use the membership functions of linguistic variables terms to provide scale values fuzzification for our model. Our fuzzy model of suicide risk also considers external determinants to be the triggers of suicide attempt when inner risk is high.

Biography

Irina Stanislavovna Morozova has completed her Doctoral degree (Psychology) from Novosibirsk State Pedagogical University. She is a Professor and the Head of the Acmeology and Developmental Psychology Department, and Director of the Institute of the Education at Kemerovo State University. She has published more than 85 papers in reputed journals and has been serving as an Editorial Board Member of Russian journals.

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