BACKGROUND: This research study deals with the assessment of personality traits in risk and non-risk individuals. The study is a response to the serious social issue of the abuse of legal and illegal drugs amongst adolescents, and is based on the prevalence values relating to the use of these substances. AIMS: The objective of this research study is to determine whether the manifestations of risk secondary school students differ in the degree of the above-described personality variables in comparison with students with lesser manifestations of risk behaviour. DESIGN AND MEASUREMENTS: The assessed values were obtained using four methods – Appearance of risk behaviour in adolescents (2015), Dolejš and Skopal’s impulsiveness scale (2013), Dolejš and Skopal’s anxiety scale (2013), and Buss and Perry’s aggression questionnaire (1992; Skopal & Dolejš, 2013). PARTICIPANTS: The target population comprised adults aged 15 to 19 years. The study sample included 2,387 respondents, which accounted for 2.75% of the study population. RESULTS: The differences between the sexes show that females manifest higher degrees of anxiety, whilst males manifest greater impulsiveness. The results document significant differences between risk individuals and those considered non-risk in personality traits, specifically verbal and physical aggression, anger, and the degree of impulsiveness. Statistically significant hostility or anxiety in connection with risk behaviour was demonstrated in neither the female nor male groups. CONCLUSIONS: The results appear to put the personality of risk individuals into a new perspective. The study points out personality traits which are likely to occur in risk individuals to a higher degree.