The purpose of this study was to determine the validity and reliability of the Persian version of the Vividness of the Movement Imagery Questionnaire 2 (VMIQ-2). In the first stage validity and reliability and in the second stage concurrent validity questionnaire VMIQ-2 by a Persian version of the Movement Imagery Questionnaire revised was evaluated. In the first stage of this study, 125 male and 96 female athletes of different levels of competition and in the second stage, 20 male and 30 female athletes from the two levels of competitive and non-competitive sports were studied. For the main component analysis, factor analysis and to confirm the structure of the questionnaire varimax rotation was used. The Kronbach α applied for measuring the reliability between subscales and the correlation method was used for determining the relationship between subscales, structure determination of validity and also to determine the validity of two simultaneous questionnaires MIQ-R and VMIQ-2. The results showed that about 47% of the questions related to the variance VMIQ were covered. Values of α coefficients for subscales of visual external and internal imagery, kinesthetic imagery and total scale, was respectively \( r = 0.86 \), \( r = 0.89 \), \( r = 0.91 \) and \( r = 0.95 \), that suggests the existence of a high reliability in the subscales and overall scale vividness of movement imagery. Regarding its validity, the results showed that this questionnaire has concurrent validity \((r = 0.70)\) and acceptable convergent validity of the construction between its subscales \((p < 0.001)\). It can be concluded that the Persian version of VMIQ-2 has the suitable validity and reliability.