

Peculiarities of transformation of adaptation level of the astronaut in conditions of long-lasting flight

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Prognostication of the development of adverse factors of psychological processes in the personality of the astronaut, who time and again feels transformation of internal structure of his personality, is one of cardinal problems of the long-lasting flight. Adaptation to changing conditions of long-lasting flight is of particular importance, because it has an effect on the efficiency of discharged functions and mutual relations in the team. The fact of standard psychological changes emerging in the personality being in the state of structural transformations is the precondition for the possibility of prognostication. Age-specific, gender and temperamental differences in the personality enable to standardize these changes. Examination of the process of transformation of adaptation level of the personality in the varied environment, depending on the type of temperament and constituents, age and gender is chief object of the report. In the report it is shown that in the process of transformation of adaptation parameters - attitude to «work», «family», «environment» and «ego» - the changes can go in two directions - in the direction of increase and decline of indexes. The trend of increase enables to accumulate them and form potentiality to reduce or increase the level of personality adaptation. There is a hypothesis that the dynamics of the process of transformation of adaptation parameter is shown up in the orientation of increase of the change and has the specific character depending on personality - age, gender and type of temperament. There was empiric study of people at the age of 25 to 50, with a different type of temperaments, who were in the state of the transformation of their personality and who were isolated for a long time by terms of the process of continuous variations of the environment. Mathematical treatment of the indexes was made using parameter ρ of Prisnyakova L.M. that enabled to examine the types of temperament in one plane, and determines the coordinates of range of variation of its constituents depending on age and gender. Taking into account the age and gender, in case of ρ increase, there is the change of orientation and quantitative meanings of increase of adaptation level index and its parameters per ρ item, depending on coordinates of the range were constituents of the temperament were found. Positive orientation of maximal increase of change of attitude to the «**Ego**» is for choleric men with coordinates of constituent in a range ρ_1 , for choleric and sanguine women with coordinates $\rho_2-\rho_1$, attitudes to the «**Environment**» (to surrounding people) is for phlegmatic men with coordinates $\rho_3-\rho_2$, for choleric women with the coordinates $\rho_2-\rho_1$, attitude to the «**Family**»

for phlegmatic men and women with coordinates $\rho'_3-\rho'_2$, attitude to the «**Work**» is for choleric men with coordinates $\rho'_2-\rho'_1$, for phlegmatic women with coordinates $\rho'_3-\rho'_2$, general level of adaptation for phlegmatic men and women with coordinates $\rho'_3-\rho'_2$. Negative orientation of maximal increase of change of attitude to the «**Ego**» is for choleric men with coordinates of constituent in a range $\rho'_2-\rho'_1$, for phlegmatic and sanguine women with coordinates $\rho'_3-\rho'_2$, attitude to the «**Environment**» is for the choleric men with coordinates $\rho'_2-\rho'_1$, for phlegmatic women with coordinates $\rho'_3-\rho'_2$, attitude to the «**Family**» is for choleric men with coordinates $\rho'_2-\rho'_1$ and for melancholic women with coordinates ρ'_1 , to the «**Work**» is for choleric men with coordinates ρ'_1 and melancholic women with coordinates $\rho'_3-\rho'_2$, general level of adaptation for phlegmatic men and women with coordinates $\rho'_2-\rho'_1$. Consequently, determination of tendency of change of orientation of increase of indexes of parameters of transformation process of adaptation of the personality, depending on age, gender and constituents of temperament type, enables to standardize the psychological changes in the state of personality being in a state of structural transformations. This fact can be applied for more exact prognostication of the development of adverse factors of psychological processes in the personality of the astronaut, and will substantially further safety of long-lasting flight.