

Stress resistance as a way to extend active longevity

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Abstract

Objective of the study was to study students' awareness of stress resistance and ways to increase it in the context of prolonging active longevity.

Methods and structure of the study. During the study, a survey was conducted (N=106), participants of the X Olympiad of students in the specialty "Physical Culture and Sports", as well as students from Yekaterinburg studying in the field of "Physical Culture". The questionnaire, along with general information about students, contained questions whose purpose was to identify the respondents' attitude to stress resistance as a factor in prolonging active and healthy longevity.

Results and conclusions. Using a survey, students' attitudes toward stress resistance as a predictor of active longevity were assessed. It was found that the most important components of maintaining a stress-resistant state, according to respondents, are: healthy sleep, physical activity and positive thinking. Factors that least reflect stress resistance are: meditation, changing the type of activity and breathing exercises.

Most respondents daily use in their lives ways to achieve active longevity that directly affect increased stress resistance, such as physical activity, positive thinking, and socialization. Factors that negatively affect the stress resistance of respondents in everyday life are: problems in professional sports activities, unhealthy sleep, negative thinking, problems in the family.

Keywords: stress resistance, active longevity, students, athletes, stress factors, health.

Introduction. In the modern world, stress has become an integral part of everyday life, and this poses a serious problem for society, since prolonged exposure to stressful situations can lead to the development of serious diseases and a reduction in active longevity. Stress resistance is a person's ability to effectively cope with negative environmental influences and maintain psychological and physical health. The experience of Russian scientists in the field of gerontology and geriatrics suggests that aging is a process of age-dependent decrease in the functional capabilities of the body, the ability to withstand environmental changes and stress [1, 3]. Russian scientists call one of the main determinants of active longevity the ability to withstand stress [2, 4]. As the experience of foreign experts shows, high stress resistance, which manifests itself in emotional stability and high activ-

ity, is associated with a longer life expectancy. This is confirmed by studies by Antonio Terracciano and Corinna E L ckenhoff [7] from the US National Institute on Aging. Foreign authors suggest that stress resistance plays a key role in prolonging active longevity [6]. Thus, it has already been scientifically proven that there is a relationship between stress resistance and active longevity. These studies demonstrate the significant role of stress resistance in overall health and life expectancy, which confirms the relevance of research in this area.

Objective of the study was to study students' awareness of stress resistance and ways to increase it in the context of prolonging active longevity.

Methods and structure of the study. Using a survey, students' attitudes toward stress resistance as a predictor of active longevity were assessed. A survey

was conducted in which 106 students (age range from 17 to 39 years) took part. The respondents were participants of the Xth Student Olympiad in the specialty “Physical Culture and Sports”, as well as students from Yekaterinburg studying in the field of “Physical Culture”. The survey was conducted via Google form and included 2 parts. The first part of the survey contained general information about the respondents: age, gender, type of sport. The second part of the survey included questions whose purpose was to identify respondents’ attitudes toward stress resistance as a factor in prolonging active and healthy longevity.

Results of the study and discussion. Assessing the respondents’ opinion about stress resistance in the context of achieving an active and healthy longevity, it was revealed that the most important components of maintaining a stress-resistant state are: healthy sleep (76.4%), physical activity (71.7%) and positive thinking (69.8%). Factors that least reflect stress resistance, according to respondents, are: meditation (29.2%), change of activity (23.6%), breathing exercises (18.9%). In our opinion, these results were obtained due to the fact that the majority of respondents go in for sports on a regular basis (94.3%). As you know, healthy sleep and physical activity are an inte-

gral part of an athlete’s life. In turn, positive thinking is a consequence of physical activity, which is confirmed by a study by the US National Institute on Aging on the relationship between physical activity on a person’s thoughts and, consequently, on life expectancy (people with emotional stability and positive thinking lived on average 2-3 years longer) [5]. According to respondents, the students chose breathing exercises as the least significant factor influencing stress resistance. We attribute this to the fact that students do not know, and therefore do not master, breathing exercises techniques. In our opinion, the potential of this factor is underestimated in the context of achieving stress resistance.

Based on the results of the study, it is clear that the majority of respondents daily use in their lives the following ways to achieve active longevity, which directly affect the increase in stress resistance: physical activity (48.8%), positive thinking (43.5%), socialization (43.5%). Less popular methods among daily use are: control of the emotional state of the body (9.5%), breathing exercises (4.2%), meditation (2.1%). The least frequently used (once a week) methods of achieving active longevity by respondents are: restorative procedures (25.4%), changing the type of

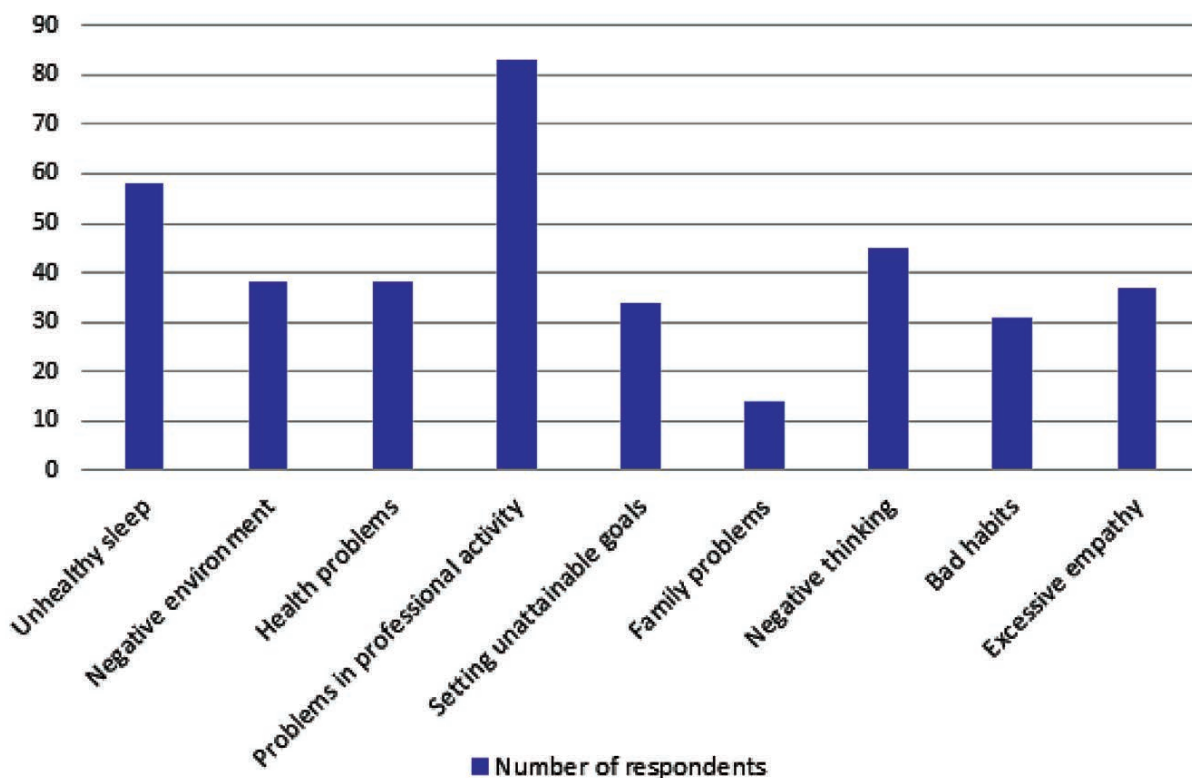


Figure 1. Respondents’ opinions about factors that negatively affect stress resistance in their daily lives

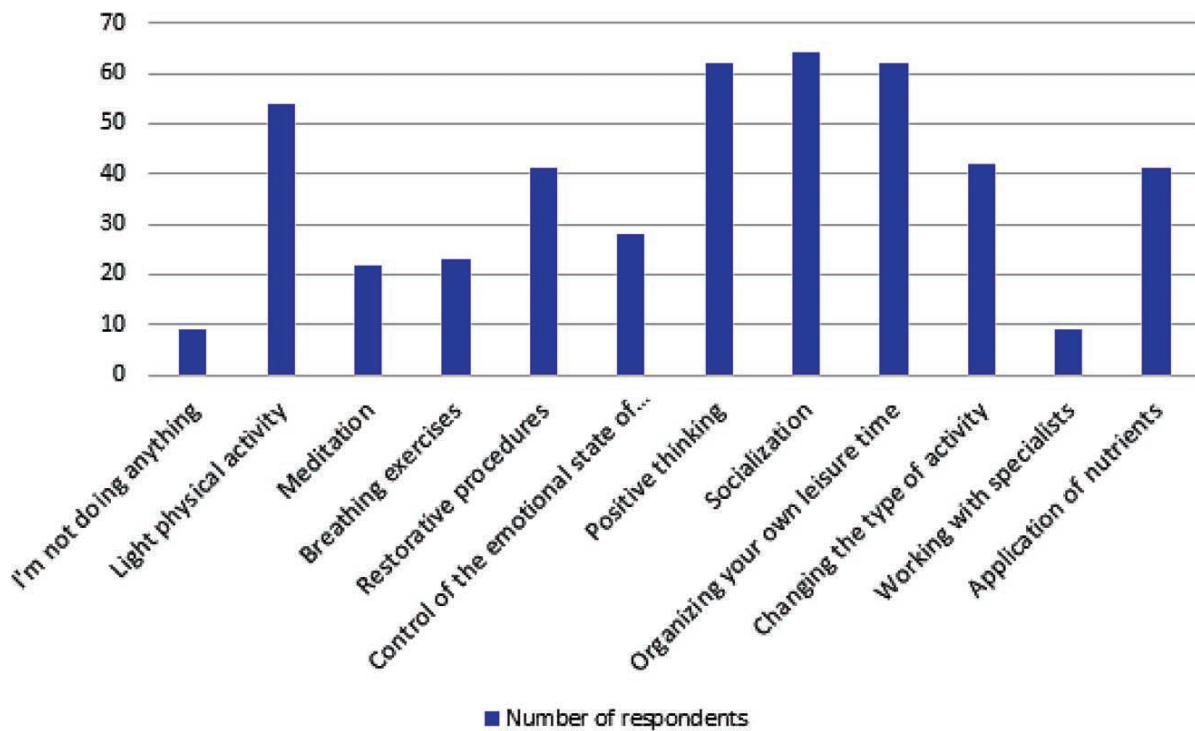


Figure 2. Methods used by respondents to increase their level of stress resistance and reduce the impact of negative factors on health and life expectancy

activity (25.4%), breathing exercises (15.9%), meditation (14.8%). Ways to achieve active longevity that respondents noted as not used in their daily lives are: meditation (58.3%), breathing exercises (54.1%), control of the emotional state of the body (44.5%). These results indicate that athletes do not fully use means to increase stress resistance and, accordingly, there is a point of growth in extending healthy and active longevity.

The main question for students was formulated in the following form: “Name the factors that prevent you from being stress-resistant in everyday life.” The selection of answers varied; as a rule, several answer options were selected. Among the options were the following: unhealthy/insufficient sleep, negative environment, health problems, problems in professional activities (the majority of respondents were active athletes, professional activities are understood as sporting achievements), family problems, negative (pessimistic) thinking, bad habits, excessive empathy. In the “other” tab, respondents noted setting unattainable goals. The results of answers to this question are shown in Fig. 1.

From Figure 1 it can be seen that the most common negative factors influencing stress resistance of

respondents in their daily lives are: problems in professional activities (88%), unhealthy sleep (61.5%), negative thinking (47.7%). The least common factors are family problems (14.8%). In our opinion, this is due to the fact that the majority of respondents are 1st-2nd year students who rarely have contact with their families.

The following graph reflects ways that will contribute to achieving active longevity by increasing stress resistance (Fig. 2).

Figure 2 shows that the most frequently used methods to increase the level of stress resistance and reduce the impact of negative factors on health and life expectancy, respondents noted socialization (67.8%), positive thinking (65.7%) and organizing their own leisure time (65.7%). The least frequently used methods were breathing exercises (24.4%), meditation (23.3%) and working with specialists (9.5%). It was also revealed that 9 out of 106 respondents (9.5%) do not take any action to increase the level of stress resistance and reduce the impact of negative factors on health and life expectancy.

Conclusions. Thus, the study identified factors that both negatively affect stress resistance in everyday life and contribute to its increase. The identified factors make it possible to maintain stress resistance



and create additional opportunities for prolonging active and healthy longevity.

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