Elementary school students' distance learning period: motor activity survey

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Abstract

Objective of the study was to analyze the elementary school students' motor activity in the distance learning period using an online questionnaire survey.

Methods and structure of the study. The elementary school students' motor activity in the distance learning period profiling online questionnaire survey was run using a special interactive questionnaire form of our own design including open and confidential questions. We sampled for the study the elementary school students' families (n=343) from Lyceum No. 32 and Secondary Schools No. 7, 17, 33, 35, 36, 42 and 50 in Belgorod city. The online questionnaire survey was intended to profile the opinions of elementary school students' families on their children's actual motor activity, leisure-time preferences, family roles in the motor activity control and the actual elementary school students' progress needs.

Results and conclusion. The online questionnaire survey data of elementary school students families and analysis geared to profile the motor activity preferences and family roles in the children's motor activity control found that in the digital distance learning period during the COVID-19 pandemic the elementary school students tend to neglect the healthy time limitations for home works at computer – partially due to the children being overloaded by educational tasks and, hence, doomed for motor inactivity in limited spaces. The survey data and analyses demonstrate that special efforts need to be made to efficiently encourage, control and manage the elementary school students' motor activity in the distance learning period.

Keywords: *motor activity, elementary school students, distance learning, online questionnaire survey.*

Background. Lately the popular motor activity has been reported to fall fast with the economic progress – as is the case for many rapidly developing economies the world over. Thus, according to the recent Russian statistics the popular physical activity has contracted by 18% for the last 16 years and is to further fall by 32% on the whole till 2030. Presently the situation is aggravated by the lockdown, home isolation and distance learning in the period of the COVID-19 pandemic [13]. The World Health Organization (WHO) reports the home isolation for a long time heavily contributing to the growing motor inactivity and sedentary lifestyles with inevitable serious detriments to health, wellbeing and life quality, and with potential high risks for mental health of the most vulnerable social groups [12].

It should be emphasized that the necessary isolation at home with transition to distance learning technologies is of special health risks for the school students on the whole and primary student groups in particular – for an optimal motor activity is their vital biological need as it is known to largely facilitate the physical and mental progress [1, 8, 9]. Therefore, the situation-specific motor activity control issues and

motor activity limitation factors in the distance learning period undoubtedly deserve a special attention of the research community.

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Results and discussion. A few study reports on the children's leisure-time preferences with the growing dependences on computers for the learning and leisure-time purposes have found rather alarming negative effects on the children's health – that need to be seriously addressed by society [2, 3, 5, 11]. Thus, it was found that the free time used or outdoor health-improvement physical activity is actually dominated by customary sedentary behavior indoors for many hours – both for the learning and entertainment purposes [4, 6, 7, 8, 10]. The survey data analysis of the elementary school students' motor activity in the distance learning period found that the elementary school students' families tend to believe that 51.9% of their children's activity is fairly versatile to combine reasonable motor activity with inactive and sedentary behavior.

Furthermore, 30.3% of the sample reported their children preferring low- and moderate motor activity; and 16.3% reported high-intensity motor activity, with 86% of the two-plus-children families reporting their children actually stimulating one another for motor activity; and 51.6% of the sample reported the children's motor activity being limited by shortage of sporting space and equipment at home.

The online questionnaire survey found only 20.5% of the sample having sufficient knowledge and experience to encourage their children's motor activity at home; with 23.7% of the sample complaining time limitations for the efforts to control the child's motor activity. Around 31.7% of the sample confessed shortages of knowledge and experience for assistance in the child's motor activity design and management at home, with only 39.4% reportedly taking some efforts to encourage the children's motor activity at home. 28.3% of the sample, however, reported joint morning exercises with their children albeit 57.1% said they never do other calisthenics at home.

The respondents were of contradictory opinions on the children's home motor activity rating issue, with 38.8%, 32.6% and 28.3% rating it poor, limited and adequate, respectively; and 21.6% considering their children's motor activity intensity adequate. 52.8%, 31.2% and 3.5% of the families reported trying to control and manage their children's motor activity every day, on weekends and during vacations, respectively; and 11.7% was found negligent to the children's motor activity at home. On the whole, the online questionnaire survey data may be interpreted as indicative of the families mostly complaining lack of opportunities, knowledge, experience, skills and willingness to control their children's motor activity in the distance learning period.

Conclusion. In the digital distance learning period during the COVID-19 pandemic, elementary school students were found to neglect the healthy time limitations for home works at computer – partially due to the children being overloaded by the school educational tasks and, hence, doomed for motor inactivity in limited spaces indoors. The survey data and analyses demonstrate the need for special efforts to efficiently encourage, control and manage the elementary school students' motor activity in the distance learning period.

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