ASSESSMENT OF THE QUALITY OF ACTIVE FAMILY LEISURE

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Authors’ Contribution: A – Study design; B – Data collection; C – Statistical analysis; D – Manuscript Preparation; E – Funds Collection

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Abstract
Study purpose. The study was aimed at assessing the quality of active family leisure and identifying motivations for and interests in health-enhancing and recreational physical activity of parents and children.
Materials and methods. The study involved 106 families. A set of generally accepted research methods was used including theoretical analysis and generalization of scientific and methodological literature as well as domestic and international practical experience related to family leisure; sociological methods (questionnaire surveys), and mathematical statistics methods.
Results. The questionnaire survey provided an opportunity to identify priority areas of joint physical activity of children and parents and to assess the quality of family well-being and active family leisure. The attitude of parents to winter types of recreation in the organization of active leisure was identified. According to the survey data, 9.4% of the families had a high level, 59.4% had an average level, 30.3% had a satisfactory level, and 0.9% had an unsatisfactory level of family well-being. The vast majority of respondents (45.2%) believed that their family members had a satisfactory level of physical activity, 40.6% of families reported they had an average level, only 10.4% indicated they had a high level, and 3.8% said they had an unsatisfactory level. Among the surveyed families, 63.2% indicated an average level of satisfaction with family leisure, 29.2% rated their leisure as satisfactory, and the remaining 3.8% indicated an excellent or unsatisfactory level.
Conclusions. The focus was on identifying prevailing motivations, which contribute to the optimization of the family leisure process and the degree of activity when using recreational technologies. The obtained results indicate a significant potential for expanding physical activity of families with children, including through the use of winter recreation.
Keywords: health-enhancing physical activity, family well-being, active leisure, parents, children.

Introduction
Leisure is one of the spheres of life where the objectives of preserving the health of the population can be addressed most fruitfully (Krutsevich et al., 2021; Williamson et al., 2019). In this context, the most important tasks are to strengthen physical health, promote a healthy lifestyle, and improve the quality of active recreation (Andrieieva, 2014; Drozdovska et al., 2020; Galan et al., 2019). Health-enhancing and recreational technologies occupy a special place in the system of development of a healthy lifestyle that allows to use them as a means of development of a healthy family leisure. The expansion of recreational activities is both the cause and the consequence of significant changes in the life of modern society, which are associated with improving the quality of life and standard of living, increasing cultural and educational level, and increasing the amount of leisure time. The scale of recreation as an area of human activity can be demonstrated by the published data, which show that 20% (i.e. one fifth of the world’s population) annually are involved

in recreational activities, 40-55% of the population of major cities around the globe are involved in recreational active leisure on weekends; household consumption expenditures on recreation services in economically developed countries are 2.3 times higher than the spendings on clothing and footwear and 18% higher than the spendings on food (Pomazan-Ponomarenko, 2020). Recreation changed from privilege in the past to the most important sector of consumer demand in the modern world and became a characteristic element of a lifestyle (Zabriskie et al., 2018).

Currently in Ukraine, more and more attention is paid to ensuring the quality of recreational products, the perception of which is largely subjective and dependent on the individual characteristics of a vacationer (Velichko, 2013). In the field of physical recreation, a large number of studies has been conducted on the engagement of different groups of the population in active recreation using various means of physical activity (Andrieieva et al., 2019). Its theoretical and methodological foundations have been identified in the works of leading scientists including Krutsevich et al. (2021), Kashuba et al. (2021), Andrieieva (2014), and others. Innovative health-enhancing and recreational technologies that take into account personal characteristics and motivation of an individual are effectively introduced into practice (Andreeva et al., 2019). Issues of scientific substantiation of the use of various means of physical activity and assessment of their recreational potential are examined in the studies of Imas et al. (2018), Orikhovskaya et al. (2020), Hakman et al. (2020), and others.

Rational organization of family leisure has been the subject of studies both in Ukraine and abroad (Andrieieva et al., 2019; Kashuba et al., 2021; Townsend et al., 2017). The importance of organization of active family leisure was emphasized by the modern culturologist Petrova (2011) who summarized the practical experience of family leisure centers in foreign countries and analysed wide range of their offers and services. The influence of family and household traditions on the peculiarities of active leisure was examined by Bocheluk (2006). At the same time, long-term underestimation of the importance of comprehensive and systematic studies of the organization of active family leisure has led to the accumulation of unresolved issues and aggravation of family health situation along with the lack of a holistic view of the causes and consequences of the negative and crisis phenomena. The studies on the organizational and methodological support of health-enhancing and recreational activities of various groups in entertainment and leisure complexes are clearly lacking and they are mainly focused on improving the activities of organizers of active leisure (animators) (Pasichniak, 2016), various outdoor activities (Velichko, 2013), and socio-cultural conditions for the organization of family leisure by means of health-enhancing and recreational technologies (Hodge, 2015). Assessing the level of satisfaction and quality of family leisure will contribute to increasing the recreational effects of leisure, including optimization of physical, mental, and social status of a person.

Material & methods

Study participants

In total, 106 families living in large cities with a population of over 500,000 participated in the survey. The study was conducted in accordance with the ethical principles of the World Medical Association Declaration of Helsinki. The study was conducted at the National University of Ukraine on Physical Education and Sport (Kyiv, Ukraine). Ethical approval of research protocol was obtained from the Ethics Commission of the NUUPES.

Study organization

The Family Leisure questionnaire was created to establish the prevailing motives and interests in the health-enhancing and recreational physical activity of age diverse groups of population. This instrument was validated through a pilot test with the focus group of 7 people, created from educational staff of the Departments of Fitness and Recreation, and Innovation and Information Technologies in Physical Culture and Sport of the National University of Ukraine on Physical Education and Sport, who have children and, therefore, are potential respondents representing the general population, which was studied further. Furthermore, the questionnaire did not include dichotomous (‘Yes’ or ‘No’) items, so all the items provided relevant information about the condition of the families with children and contributed to the study of their well-being through the prism of their leisure activities. The sampling method was a simple random sample. Each participant was interviewed only once. Taking into account the social homogeneity of the sampled population, the sample was representative.

Statistical analysis

To assess the reliability of the Family Leisure questionnaire, we used Cronbach’s Coefficient Alpha, which is calculated based on the ratio of the variance associated with each item to the variance associated with the total scale. If not the actual value is measured, but only the random error in the answers to the questions, than the variance of the total will be the same as the sum of the variances of individual items, and the value of the coefficient will approach zero. In our study, the alpha was 0.92, and the standardized Cronbach’s alpha was 0.898, i.e. the coefficient approached 1 that indicated the high reliability of the questionnaire. Questions, which generated qualitative (textual) data, were treated separately. To assess the representativeness of the sample, the whole set of answers was randomly divided into equal parts, after which the Kendall tau coefficient was calculated. It should be mentioned that this correlation coefficient was calculated for the items that produced unambiguous answers. Calculations showed that for all the items the coefficient was close to one (τ > 0.64) and was statistically significant (p < 0.05). Therefore, these data indicate that the developed Family Leisure questionnaire had high validity and reliability, and the sample of respondents was representative.

Since a normality test of the raw data using the Shapiro-Wilk test showed that they did not comply with the normal distribution; therefore, the median (Me) and 25 and 75 percentiles were used to represent the data, and Spearman’s rank correlation coefficient was used for correlation analysis. Pearson’s χ² test was used for comparing categorical variables. Fisher’s F-test was used to compare continuous variables. The significance level was set to α = 0.05. The exact p-values are given in the test, and when the p-value was less than 0.0001, it was indicated that p < 0.001. Mathematical and statistical processing of the raw data was performed using the computer program Statistica 10.0 and Statistica Data Miner module.
Results

Analysis of the survey data showed that the majority of respondents (46.2%) were families, which were married more than 12 years ago. Another 21.7% of respondents were young families with up to 7 years of family life. The remaining 32.1% were families married 7 to 12 years ago. The smallest share of the families (22.6%) were families with preschool-age children. Furthermore, 45.3% of respondents had primary school-age children and 32.1% had middle school-age children. More than half of the families involved in the study (50.9%) had one child, 44.4% were families with two children, and only 4.7% of respondents were families with three or more children. The survey sample was dominated by parents who did not have chronic diseases, overweight, and bad habits. The highest percentage of respondents at health risk (19.8%) were parents who had bad habits like smoking. The vast majority of respondents were families who generally cared about their health and were not at health risk.

The analysis of the survey results showed that the sample included a large proportion of families in which both parents had previous exercise experience and a significant proportion of families which had previous experience with physical activity.

We found that the vast majority of families (83.0%) were maintaining an active lifestyle, 14.2% of families were living a passive lifestyle, and 2.8% of parents admitted that they led a lifestyle that is not conducive to health. There was no significant difference between the percentage of parents who regularly engaged in health-enhancing and recreational physical activity (HRPA) with children and those who participate in winter recreation (p > 0.05). It was found that the majority of respondents (83.0%) were the families, in which parents cared about the health of its relatives. Furthermore, the vast proportion of families (63.2%) understood how active family recreation affects the well-being of the family. Nevertheless, less than half of the respondents indicated that they have sufficient knowledge on the organization of active family recreation through the use of health-enhancing and recreational technologies.

Among various types of physical activity, families with children typically used walks in the park, as was indicated by 90.3% of respondents. In addition, a significant percentage of families (69.4%) preferred to ride bicycles or scooters with children or to play active games (46.8%).

Analysis of responses to the questionnaire revealed a seasonal decrease in health-enhancing physical activity, which is significantly different from the uniform distribution (χ² = 66.60; df = 3; p < 0.05). Furthermore, the number of families who indicated a decrease in health-enhancing physical activity in winter and autumn is statistically significantly higher than that of families who reported a decrease in spring and summer (χ² = 57.40; df = 1; p < 0.05).

The study ranked the most attractive types of active leisure and the reasons that prevent families from participating in them. According to this ranking, the respondents prefer outdoor walking, regular health-enhancing physical activity and active games. The use of these types of leisure was hindered mainly due to lack of time, as well as low quality of services provided by entertainment centers (Table 1).

We also determined the rankings of motives for participating in winter recreational activities as well as of reasons preventing families with children from participating in these activities. It was found that lack of time and lack of financial resources are the main reasons that prevent families from participation in winter recreation (Table 2).

Statistical processing of the obtained data showed that the distribution of the number of days, during which parents were engaged in active recreation or walking with children, did not comply with the normal distribution: in the first case the Shapiro-Wilk test W statistic was 0.93 at p > 0.05, and in the second one it was 0.89 at p > 0.05. It was found that during the last week, the respondents were engaged in active recreation together with children, including active games, physical exercises, cycling, dancing (2; 1; 3) days, and outdoor walking with children (2; 1; 4) days. Comparative analysis showed that parents spent significantly more time in walking than in active entertainment (U = 33; z = -2.59; p = 0.0097).

The study showed that families spent more than 1 hour on passive leisure such as watching TV, playing computer games or communicating online, etc. both on weekdays and weekends, and on weekends the share of families who indicated this increased by 16.0% (49.1% and 65.1%, respectively). Analysis of indicators of the families’ condition in the current period indicated that the raw data showed a significant departure from normality (Shapiro-Wilk W statistic

Table 1. Ranking of the most attractive forms of active leisure and the reasons that prevent families with children from participating in them (n = 106)

<table>
<thead>
<tr>
<th>Types of active leisure</th>
<th>Ranks</th>
<th>Ranks</th>
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<tbody>
<tr>
<td></td>
<td>r</td>
<td>Rank</td>
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<tr>
<td></td>
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<tr>
<td>Systematic physical activity</td>
<td>3.24</td>
<td>2</td>
</tr>
<tr>
<td>Visiting resorts / sanatoriums</td>
<td>3.84</td>
<td>4</td>
</tr>
<tr>
<td>Outdoor walking</td>
<td>3.06</td>
<td>1</td>
</tr>
<tr>
<td>Body hardening</td>
<td>4.55</td>
<td>6</td>
</tr>
<tr>
<td>Visiting entertainment centers</td>
<td>5.30</td>
<td>7</td>
</tr>
<tr>
<td>Active games</td>
<td>3.67</td>
<td>3</td>
</tr>
<tr>
<td>Practicing physical exercise with family members</td>
<td>4.33</td>
<td>5</td>
</tr>
</tbody>
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<tr>
<th>Rank</th>
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<tbody>
<tr>
<td></td>
<td>2.84</td>
<td>1</td>
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<tr>
<td></td>
<td>4.45</td>
<td>6</td>
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<tr>
<td></td>
<td>4.15</td>
<td>3</td>
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<td></td>
<td>4.24</td>
<td>4</td>
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<td></td>
<td>4.59</td>
<td>5</td>
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<tr>
<td></td>
<td>4.48</td>
<td>7</td>
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<tr>
<td></td>
<td>3.25</td>
<td>2</td>
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</table>
Table 2. Ranking of motives for participating in winter recreational activities as well as of reasons preventing families with children from participating in these activities (n=106)

<table>
<thead>
<tr>
<th>Motives for participating in winter recreational activities</th>
<th>Ranks</th>
<th>Reasons for limiting participation in winter recreational activities</th>
<th>Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement of physical health of family members</td>
<td>3.39</td>
<td>Lack of time</td>
<td>3.24</td>
</tr>
<tr>
<td>Body hardening</td>
<td>4.19</td>
<td>Lack of interesting offers</td>
<td>4.29</td>
</tr>
<tr>
<td>Improvement of family wellbeing</td>
<td>4.25</td>
<td>Low quality of services provided by entertainment centers</td>
<td>4.44</td>
</tr>
<tr>
<td>Meaningful and emotionally rich leisure</td>
<td>3.60</td>
<td>Lack of finances</td>
<td>3.76</td>
</tr>
<tr>
<td>Common hobbies and interests</td>
<td>4.05</td>
<td>Low level of knowledge and skills of organizing this type of active leisure</td>
<td>4.02</td>
</tr>
<tr>
<td>Improvement of endurance and physical working capacity of family members</td>
<td>4.27</td>
<td>Lack of desire to engage in winter recreational activities</td>
<td>4.38</td>
</tr>
<tr>
<td>Increasing mental working capacity</td>
<td>4.24</td>
<td>None, we participate in winter recreational activities</td>
<td>3.86</td>
</tr>
</tbody>
</table>

 ranged from 0.835 to 0.902 at \( p > 0.05 \), so the median, and 25 and 75 percentiles were used to describe sample averages, and nonparametric criteria and Spearman’s rank correlation coefficient were used for further analysis. Despite the fact that the median scores for all parameters equaled 8 points, thus indicating a high score given by the respondents to the family condition in the current period, and that we used the same scoring range for every parameter (0 to 10 points), we can see that, in contrast to other parameters, respondents rated slightly lower such indicators as typical emotional background, the degree of support between family members, and social activity of the family: the 25th percentile for these indicators was 5 points, while the 25th percentile for other indicators equaled 6 points (Fig. 1).

Figure 1. Median scores for the studied parameters according to families’ self-assessment (n = 106), where 1 – quality of family life; 2 – health condition of family members; 3 – psychological climate in family; 4 – level of social well-being of the family; 5 – degree of satisfaction with everyday family life; 6 – typical emotional background; 7 – degree of support between family members; 8 – social activity of the family

The correlation matrix generated for all the parameters of current family condition showed that they all have significant positive correlations with each other (Table 3).

In the analysis, we only considered parameters for which strong or very strong correlation was observed. A very strong positive correlation was found between psychological climate in the family and typical emotional background (\( \rho = 0.936 \)), which in turn was strongly correlated with social activity of the family (\( \rho = 0.738 \)) and very strongly correlated with the level of social well-being of the family (\( \rho = 0.909 \)) and the degree of satisfaction with everyday family life (\( \rho = 0.944 \)). The very strong correlations found in this study indicate the dependence of the degree of satisfaction with everyday family life on the level of social well-being of the family.

Discussion

Contemporary research shows concern about the low level of engagement in physical activity of the populations of many countries around the world that has led to increased prevalence of non-communicable diseases and reduced life expectancy (Imas et al., 2018). Researchers emphasize that a significant change in the situation is possible by encouraging regular physical exercise in leisure time or in specially allotted time (Andrieieva et al., 2019). We expected that determining the prevailing motivations and interests in health-enhancing recreational physical activity of parents and children will improve the quality of active family leisure. In addition, assessing the level of satisfaction with recreational consumers services will contribute to increasing the involvement of various population groups in regular physical activity, rational organization of leisure activities, and increasing their motivation to organize active family leisure.

One of the most important issues of the modern family is the organization of its leisure time, which includes active family leisure. Organization of family leisure was studied by (Hodge et al., 2018; Zabriskie et al., 2019). It was confirmed
that the family is a privileged area for the construction of the
children's leisure (Valdemoros et al., 2014) and that family-
shared leisure provides benefits for family functioning (Ag-
ate et al., 2009; Sanz et al., 2018).

Active family leisure was found to significantly affect the
psychological climate, as well as emotional background and
social activity of the family (Andrieieva et al., 2019; Burns
et al., 2022).

Leading motives that impel different populations to take
part in active leisure are: getting pleasure and positive emo-
tions from physical activity; desire to escape from everyday
problems of domestic and professional activities; emotional
relaxation; enjoying nature; and improving well-being. The
most attractive forms of active leisure and the reasons that pre-
vent families with children from participating in them were
identified. The obtained results confirmed the conclusions of
previous studies on the choice of priority types of physical ac-
tivity in the organization of joint family leisure (Shannon et al.,
2017; Camarillo et al., 2020). Information on the factors limit-
ing the participation of families with children in health-en-
hancing and recreational physical activity (Pasichnyak, 2016;
Galan et al., 2021) was extended. The reasons we have identi-
cified are more specific and individual that is probably due to
the clear specification of questions in the questionnaire aimed
at clarifying the personal characteristics of respondents.

Our study confirmed the published data on the populari-
ity of recreation in the organization of family leisure (Kashuba
et al., 2021; Krutsevich et al., 2019; Stodolska et al., 2020).
Nevertheless, there is a clear lack of research aimed at assess-
ing the quality of active family leisure, especially of winter rec-
reation. When comparing the identified motives for the par-
ticipation in winter recreation programs with those reported
in the professional literature, minor differences were found,
which consist in the prevalence of such motives as common
hobbies and meaningful and emotionally rich leisure.

The percentage of the families with high and moder-
ate levels of family well-being was significantly higher than
the percentage of the families with satisfactory and unsat-
satisfactory levels. The same applies to the families with high
and moderate levels of satisfaction with family leisure: their
percentage was significantly higher compared to the fami-
lies with satisfactory and unsatisfactory levels of satisfaction.
However, the percentage of respondents who rated the physi-
cal activity of family members as high and moderate does not
differ significantly from the percentage of the families with
satisfactory and unsatisfactory levels of physical activity.

The obtained results indicate a significant potential for
expanding physical activity of families with children, in-
cluding through the use of winter recreation. The results
of the survey allowed us to identify the prevailing motives
and interests of the families to health-enhancing and recre-
tational physical activity. Based on the answers to the ques-
tionnaire, the most attractive forms of active family leisure
were ranked, and the reasons that prevent the families from
participating in them were identified.

Conclusions

The focus was on the identifying prevailing motivations,
which contribute to the optimization of the family leisure
process and the degree of activity when using recreational
technologies. More than half of the respondents rated their
satisfaction with family leisure as high or moderate. By con-
structing a correlation matrix, we established significant cor-
relations between the indicators of the current family con-
dition. A strong positive correlation (ρ>0.9) was observed
between the psychological climate in the family and the
typical emotional background. The typical emotional back-
ground had strong positive correlations with the social ac-
tivity of the family (ρ = 0.619), the level of social well-being
of the family (ρ = 0.909) and the degree of satisfaction with
everyday family life (ρ = 0.944).

Conflicts of interest

The authors declare that they have no competing
interests.

References:

Krutsevich, T., Trachuk, S., Ivanik, O., Panhelova, N.,

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<thead>
<tr>
<th>Parameters of family's condition in the current period</th>
<th>Parameters of family's condition in the current period</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>1.000</td>
</tr>
<tr>
<td>2</td>
<td>0.777*</td>
</tr>
<tr>
<td>3</td>
<td>0.827*</td>
</tr>
<tr>
<td>4</td>
<td>0.786*</td>
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<tr>
<td>5</td>
<td>0.811*</td>
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<tr>
<td>6</td>
<td>0.816*</td>
</tr>
<tr>
<td>7</td>
<td>0.780*</td>
</tr>
<tr>
<td>8</td>
<td>0.620*</td>
</tr>
</tbody>
</table>

Note: 1 – quality of family life; 2 – health condition of family members; 3 – psychological climate in family; 4 – level of social well-being of the family; 5 – degree of satisfaction with everyday family life; 6 – typical emotional background; 7 – degree of support between family members; 8 – social activity of the family; * – Spearman correlation (ρ) is significant at the level of α = 0.05.
Healthy Lifestyle and Quality of Life of Men and Women in Modern Society Based on SF 36. Teoriä ta Metodika Fizičnogo Vihovannî, 21(3), 211-218. https://doi.org/10.17309/tmf.vf2021.3.04


Tsentr navchalniy literature [in Ukrainian].

ОЦІНКА ЯКОСТІ АКТИВНОГО СІМЕЙНОГО ВІДПОЧИНКУ

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Авторський вклад: A – дизайн дослідження; B – збір даних; C – статаналіз; D – підготовка рукопису; E – збір коштів

Мета дослідження. Метою цього дослідження була оцінка якості активного сімейного відпочинку та визначення факторів мотивації батьків і дітей до фізичної активності, що сприяє покращенню здоров’я, і рекреаційної фізичної активності та їхньої зацікавленості в таких формах активності.

Матеріали та методи. У дослідженні брали участь 106 сімей. У дослідженні використовували набір загальноприйнятих методів дослідження, зокрема теоретичний аналіз та узагальнення науко-методологічної літератури, а також впевненого та міжнародного практичного досвіду стосовно сімейного відпочинку; соціологічні методи (анкетні опитування) і методи математичної статистики.

Результати. Анкетне опитування дало можливість визначити пріоритетні напрямки спільної фізичної активності дітей і батьків та оцінити якість сімейного добробуту й активного сімейного відпочинку. Було визначено ставлення батьків до зимових видів відпочинку під час організації активного відпочинку. Згідно з даними опитування, 9,4% сімей мали високий рівень сімейного добробуту, 59,4% – середній, 30,3% – задовільний і 0,9% – незадовільний. Переважна більшість відповідей (45,2%) відповідає на стосунки зі сім’єю з батьками, що в них середній рівень, лише 10,4% вказують на високий рівень, а 3,8% – незадовільний. Серед сімей, які проводять активне відпочинок, 63,2% вказали середній рівень, 30,3% – задовільний і 6,5% – незадовільний рівень.

Висновки. Основну увагу було зосереджене на визначенні переважних факторів мотивації, які сприяють оптимізації процесу сімейного відпочинку та ступеня активності під час використання рекреаційних технологій.

Ключові слова: оздоровчо-рекреаційна рухова активність, сімейний добробут, фізична активність, батьки, діти.

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