

Історичні, філософські, правові й кадрові проблеми фізичної культури та спорту

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THE QUALITY OF LIFE OF STUDENTS WHO STUDY IN UKRAINE AND POLAND

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Abstract

The current relevance of the research. The study of the quality of life is a core issue both at the scientists' level and the level of government workers in the world. The main goal is not only to extend lifetime, but to improve its quality too. Ukraine's desire to enter the European Community and the European Union is impossible without substantial improvement of the quality of life. However, the quality of life depends on the quality of labor potential, and hence on the prospects for the development of the country. Since the 70s of the XXth century, the state of the quality of life has begun to attract the attention of many researchers and practitioners in various fields of researches. The Council of the European Union adopted a development strategy in 2010 – 'Europe 2020: A Strategy for smart, stable and inclusive growth' based on the analysis of monitoring the quality of life of the European Union. The aim was to study the students' components of the quality of life, depending on the place of study (countries) and the origin (nationality). **Methods:** synthesis and analysis of the current scientific and methodological studies on self-assessment of the quality of life using the SF-36 questionnaire and the methods of mathematical statistics. **Results.** Analyzing the students' answers, we revealed the regularity among indicators of the physical and mental (psychological) components of the quality of life and the sex of the respondents, the year of study, self-evaluation of their study achievements, conditions of life. Besides, the main components that play the leading roles in shaping the overall picture of the quality of life and those that reduce the quality of students' lives were found out. Due to the analysis of the correlations between indicators of the physical and mental (psychological) components of the quality of life, the interdependent components that form the basis of the students' quality of life were highlighted. **Conclusions.** The study makes it possible to compare both the generalized results of the quality of the Ukrainian and Polish students' lives and the individual components that form the physical and mental (psychological) basis for the quality of life.

Key words: quality of life, students, study, Ukraine, Poland.

Ольга Андрійчук, Василь Пантік, Володимир Ковальчук, Сергій Савчук. Якість життя студентів, які здобувають освіту в Україні та Польщі. Актуальність. Вивчення якості життя населення є питанням, яке піднімається на рівні як науковців, так і державотворців у всьому світі. Основна мета – не лише подовжити тривалість життя, а й покращити його якість. Прагнення України увійти в Європейську Співдружність Країн та в Європейський Союз неможливе без суттєвого покращення якості життя населення. Водночас від якості життя залежить якість трудового потенціалу, а отже, і перспективи розвитку держави. Починаючи з 70-х років ХХ ст., стан якості життя населення став привертати увагу багатьох учених і практиків у різних галузях досліджень. Рада Європейського Союзу у 2010 році прийняла стратегію розвитку – «Європа-2020: стратегія розумного, сталого й інклюзивного зростання», яка ґрунтується на здійсненні аналізу моніторингу якості життя населення країн Європейського Союзу. **Мета роботи** – вивчити компоненти якості життя студентів залежно від місця

навчання (країни) й походження (громадянства). **Методи дослідження:** узагальнення та аналіз сучасних науково-методичних досліджень питання самооцінки якості життя за допомогою анкети SF-36, методи математичної статистики. **Результати роботи.** Аналізуючи відповіді студентів, ми помітили певну закономірність між показниками фізичного й психічного (психологічного) компонентів якості життя та статі респондентів, курсу навчання, самооцінки навчальних досліджень, умов побуту. Окрім того, виявили основні компоненти, що займають провідні позиції у формуванні загальної картини якості життя й ті складники, які знижують рівень якості життя студентів. Завдяки аналізу кореляційних зв'язків між показниками фізичного та психічного (психологічного) компонентів якості життя, ми з'ясували взаємозалежність компонентів, що складають основу якості життя студентів. **Висновки.** Проведене дослідження дає можливість порівняти як узагальнюючі результати якості життя студентів, які навчаються в Україні та Республіці Польща, так і окремі компоненти, що складають фізичну й психічну (психологічну) основу якості життя.

Ключові слова: якість життя, студенти, освіта, Україна, Польща.

Ольга Андрійчук, Василь Пантик, Владимир Ковальчук, Сергей Савчук. Качество жизни студентов, получающих образование в Украине и Польше. Актуальность. Изучение качества жизни населения является вопросом, который поднимается на уровне как ученых, так и государственных чиновников во всем мире. Основная цель – не только продлить жизнь, но и улучшить её качество. Стремление Украины войти в Европейское Содружество Стран и в Европейский Союз невозможно реализовать без существенного улучшения качества жизни населения. В то же время от качества жизни зависит качество трудового потенциала, а следовательно – перспективы развития государства. Начиная с 70-х годов XX в., состояние качества жизни населения стало привлекать внимание многих ученых и практиков в различных областях исследований. Совет Европейского Союза в 2010 году принял стратегию развития – «Европа-2020: стратегия разумного, устойчивого и инклюзивного роста», которая базируется на осуществлении анализа мониторинга качества жизни населения стран Европейского Союза. **Цель работы** – изучить компоненты качества жизни студентов в зависимости от места учебы (страны) и происхождения (гражданства). **Методы исследования** – обобщение и анализ современных научно-методических исследований вопросы самооценки качества жизни с помощью анкеты SF-36, методы математической статистики. **Результаты работы.** Анализируя ответы студентов, мы проследили определенную закономерность между показателями физического и психического (психологического) компонентов качества жизни и пола респондентов, курса обучения, самооценки учебных исследований, условий быта. Кроме того, выявили основные компоненты, занимающие лидирующие позиции в формировании общей картины качества жизни и те составляющие, которые снижают уровень качества жизни студентов. Благодаря анализу корреляционных связей между показателями физического и психического (психологического) компонентов качества жизни, мы выяснили взаимозависимость компонентов, составляющих основу качества жизни студентов. **Выводы.** Проведенное исследование дает возможность сравнить как обобщающие результаты качества жизни студентов, обучающихся в Украине и Республике Польша, так и отдельные компоненты, составляющие физическую и психическую (психологическую) основу качества жизни.

Ключевые слова: качество жизни студенты, образование, Украина, Польша.

Introduction. The study of quality of life is an issue that rises level of at both the scientists and the statesmen in the world. The main goal – not only to extend life expectancy, but also to improve its quality. Ukraine's desire to become a full partner in European Union countries is impossible without substantial improvement of the quality of life. However, the quality of life depends on the quality of labor potential, and hence the prospects for development. Since the 70s of XX century, the state of quality of life began to attract the attention of many researchers and practitioners in various fields of research. Council of the European Union back in 2010, adopted a development strategy – 'Europe-2020: A Strategy for smart, sustainable and inclusive growth «based on the analysis of monitoring the quality of life of the European Union». The Attention of modern scientists aims to study the dependence of the quality of life of gender [1], the effect of systematic sports on the quality of life [6] features lifestyle and physical activity of students [5], the physiological mechanisms of adaptation processes to physical activity [3], the impact of the physical rehabilitation on the quality of life [2], especially the physical and psychological health, depending on the residence [4].

The objective of our paper is to study the components of the quality of life for students, depending on the place of study (countries) and origin (nationality).

Methods: synthesis and analysis of current scientific and methodological developments regarding self quality of life using the SF-36 questionnaire, mathematical data processing using MedStar.

This study involved students of 18–21 years who agreed to processing of their data. Depending on the study (country) and origin (citizenship), we formed three groups. Group1 – students who are residents of Ukraine and enrolled in Ukraine (Eastern National University Ukrainian); Group2 – students who are citizens of Ukraine, but studying in Poland (Academy of Jan Dlugosz in Czestochowa); Group 3 – students who are citizens of Poland and study at Polish (Academy of Jan Dlugoszin Czestochowa). To study the peculiarities of the overall quality of life, we analyzed the elements that form it: physical component and

mental component. Thus, according to the conventional method of calculation and analysis of the results of the questionnaire SF-36, the answers to each question ranging from 0 to 100 points. Low scores are indicators of certain limitations in the quality of studentslife, and 100 points – full health. The physical component of health (Physical component summary – PCS), includes 4 parameters: physical activity (feature) (PF); professional activities due to physical condition (RP); intensity of pain (BP); general health (GH).

From these figures we calculated the average value (X) and standard deviation (s) for a number of variations that is different from normal.

Research results. The data analysis shows that the most significant contribution to the overall structure of the physical health component plays a physical feature(PF) for all investigated groups of students. In this case, the highest rate ofstudentsphysical activity ($94,95 \pm 25,77$) as of Poles (Gr. 3), somewhat lower is in Group1 – LesyaUkrainka Eastern European University ($91,46 \pm 13,11$) and the lowest in Group 2 Ukrainian students who study abroad ($73,86 \pm 21,23$). The rate of the professional activity, due to physical condition (RP) among Polish students ($92,0 \pm 29,28$) is much higher than in other groups: Group 1 – $68,08 \pm 32,0$; Group 2 – $63,57 \pm 26,13$. Regarding the indicator of the intensive pain (BP), it reduces the quality of life of most Ukrainian students who study in Poland ($61,14 \pm 15,94$), and almost the same for students of Ukrainian and Polish students studying in their home country ($70,26 \pm 22,78$ and $70,73 \pm 18,03$, respectively). At the same time, the indicator of general health (GH) is the lowest among Polish students ($60,31 \pm 12,99$), the highest – among Ukrainian students studying in Ukraine ($69,39 \pm 18,93$), and theintermediate place is taken by students of Group 2. The data are presented in table 1 and shown graphically in figure 1.

Table 1

Key Indicators of Physical Health Component in Quality of Life Scores (X ± S)

| Group of students | PF | RP | BP | GH |
|-------------------|-------------------|-------------------|-------------------|-------------------|
| Group 1 | $91,46 \pm 13,11$ | $68,08 \pm 32,0$ | $70,26 \pm 22,78$ | $69,39 \pm 18,93$ |
| Group 2 | $73,86 \pm 21,23$ | $63,57 \pm 26,13$ | $61,14 \pm 15,94$ | $64,37 \pm 17,84$ |
| Group 3 | $94,95 \pm 25,77$ | $92,0 \pm 29,28$ | $70,73 \pm 18,03$ | $60,31 \pm 12,99$ |

Consequently, students studying in Ukraine (Group1), havethe highest indicators of the physical health as a component of quality – an indicator of physical activity (PF) – $91,46 \pm 13,11$, the lowest – the rate of professional activity, due to physical condition (RP) – $68,08 \pm 32,0$. Group 2, which includes Ukrainian students studying in Poland, have indicators lower in comparison with students of Group 1.

Index of physical activity occupies a leading position in the overall structureof the physical health (PF) – $73,86 \pm 21,23$, pain intensity – the largest decreases quality of life (BP) – $61,14 \pm 15,94$. Students of Group 3 – Polish students studying in the Academy of Jan Dlugosz in Czestochowa, the highest rates of physical activity (PF) – $94,95 \pm 25,77$ and professional activities caused to the physical condition (RP) – $92,0 \pm 29,28$; the lowest rate – index of general health (GH) – $60,31 \pm 12,99$.

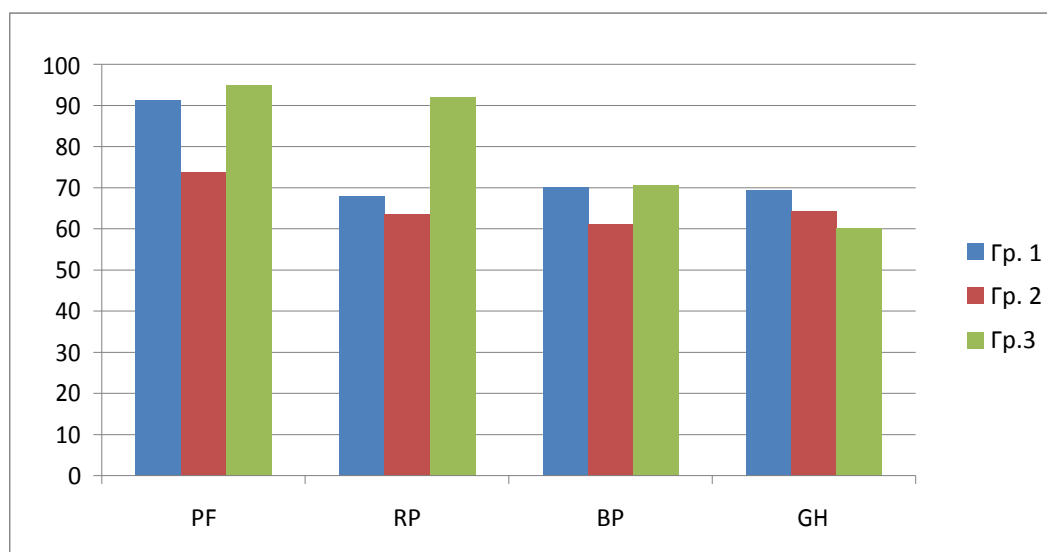


Fig. 1. Key Indicators of Physical Health Component in Quality of Life Scores

The psychological health component (Mental component summary – MCS), forms four parameters: vitality (VT); social feature (SF); professional activities due to the emotional state (RE); and mental health (MH). As the survey results, an indicator of vitality (VT) is the highest among students studying abroad (Gr. 2) – $66,0 \pm 14,13$, the lowest among Polish students (Gr. 3) – $58,25 \pm 15,66$. The rate of social activities (SF) is high in the Ukrainian students who continue their studies in Ukraine ($77,12 \pm 18,57$), slightly lower among students in social activities – $73,75 \pm 19,82$; the lowest social activity is among Ukrainian students who study outside the country ($65,71 \pm 19,81$). The rate of professional activity caused by the emotional state (RE) of Polish students is the highest of all mental health indicators – $92,0 \pm 34,85$, it is much lower among students in Ukraine ($60,36 \pm 36,46$) and almost half lower the of Ukrainian students who study in Poland ($47,62 \pm 27,55$). The indicator of the mental health among Polish students is the lowest compared to other groups ($60,72 \pm 14,01$), slightly higher – among the Ukrainian students who study in Poland ($62,06 \pm 14,7$) and of maximum value – students in Ukraine $66,6 \pm 17,2$. The data are presented in table. 2 and Fig. 2.

Table 2

Main Indicators of the Mental Health Component in the Quality of Life Scores ($X \pm S$)

| Group of Students | VT | SF | RE | MH |
|-------------------|-------------------|-------------------|-------------------|-------------------|
| Group 1 | $61,1 \pm 17,0$ | $77,12 \pm 18,57$ | $60,36 \pm 36,46$ | $66,6 \pm 17,2$ |
| Group 2 | $66,0 \pm 14,13$ | $65,71 \pm 19,81$ | $47,62 \pm 27,55$ | $62,06 \pm 14,7$ |
| Group 3 | $58,25 \pm 15,66$ | $73,75 \pm 19,82$ | $92,0 \pm 34,85$ | $60,72 \pm 14,01$ |

Thus, the most significant promotes the psychological health and quality of life of student Group 1 belongs to point of their social activity ($77,12 \pm 18,57$), and the reduces quality of life and worsens psychological health – professional activity caused by emotional state (RE) ($60,36 \pm 36,46$). Students in Gr. 2 who decided to get education in Poland, positive effects on the psychological health their vitality (VT) – $66,0 \pm 14,13$, at the same time is negatively represented of their professional activity caused emotional state (RE) – $47,62 \pm 27,55$. The Group 3 – Polish students – the highest component of psychological health is an indicator of their professional activity, caused the emotional state (RE) – $92,0 \pm 34,85$, the lowest – their vitality (VT) – $58,25 \pm 15,66$.

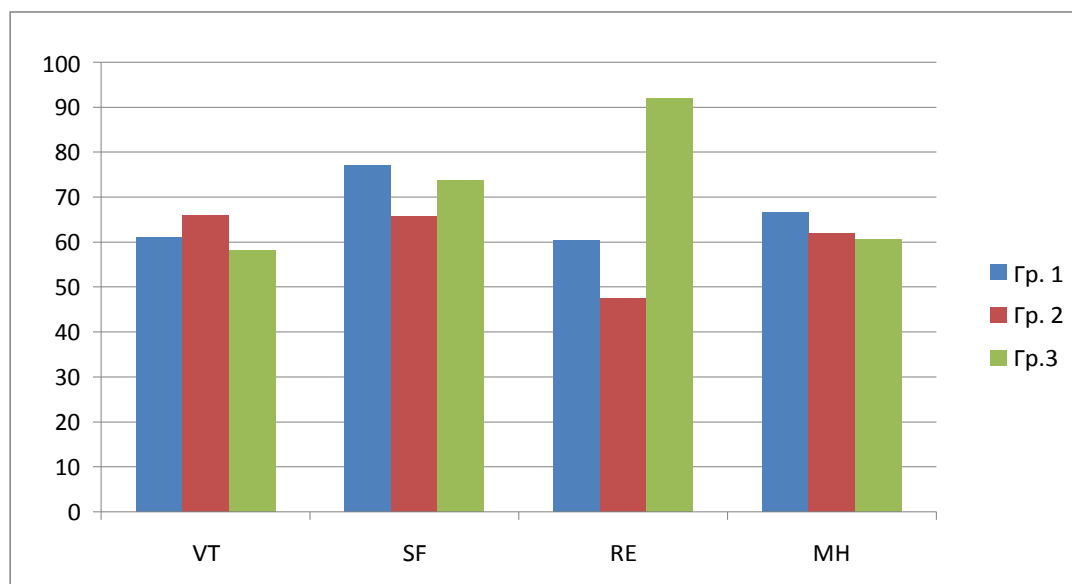


Fig. 2. Main Indicators of Mental Health Component in Quality of Life Scores

Summarizing the findings of two scales: physical health and psychological health, it could be argued that Polish students (Group 3) quality of life, higher compared to students of other study group (except for three indicators – life activity (VT), mental health (MH), general health (GH)). The lowest quality of life – of Ukrainian students, who study abroad (figure 3).



Fig. 3. The Main Indicators of Quality of Life Scores

Regarding the statistical significance of the difference between the figures obtained, the Scheffé method for multiple comparisons, revealed that in terms of physical feature (PF) medium difference is not statistically significant between Group 1 and Group 3; in terms of professional activity, due to the physical condition (RP) – between Group 1 and Group 2; in terms of the intensity of pain (BP) – between Group 1 and Group 3 and Group 2 and Group 3; in terms of the general health (GH) – and between Group 1 Group 2 and Group 2 – Group 3; in terms of vitality (VT) – between Group 1 and Group 2 and Group 1 and Group 3; in terms of the social activity (SF) – between Group 1 and Group 3 and Group 2 and Group 3; in terms of the professional activity, due to emotional state (RE) – between Group 1 and Group 2; in terms of the mental health (MH) – between Group 1 and Group 2 and Group 2 and Group 3. The difference between other indicators is statistically significant at the significance level $p \leq 0,01$. The data are presented in table 3.

Table 3

| Indicator | Group 1 – Group 2 | Group 1 – Group 3 | Group 2 – Group 3 |
|-----------|-------------------|-------------------|-------------------|
| PF | $p < 0,0$ | $p = 0,16$ | $p < 0,01$ |
| RP | $p = 0,52$ | $p < 0,01$ | $p < 0,01$ |
| BP | $p < 0,0$ | $p = 0,98$ | $p = 0,02$ |
| GH | $p = 0,1$ | $p < 0,01$ | $p = 0,36$ |
| VT | $p = 0,07$ | $p = 0,28$ | $p \leq 0,01$ |
| SF | $p < 0,0$ | $p = 0,27$ | $p = 0,03$ |
| RE | $p = 0,02$ | $p < 0,01$ | $p < 0,01$ |
| MH | $p = 0,1$ | $p < 0,01$ | $p = 0,88$ |

From these figures we calculated the average of the physical (PCS) and mental (MCS) component summary of life of students of studied groups. It was clarified that general indicators of physical health are higher than the rate of mental health in all groups of students. The Index of physical health highest is the among Polish students – $52,06 \pm 6,48$, slightly lower among the Ukrainian students studying in Ukraine – $51,12 \pm 6,75$ and the lowest – among students studying outside their country ($46,94 \pm 7,01$). General indicators of the mental health among students studying in their home country is almost the same – Group 1 – $44,27 \pm 10,11$ and Group 3 – $44,95 \pm 7,71$. The data are presented in table 4 and fig. 4.

The Quality of Life Scores ($X \pm S$)

| Group of Students | PCS | | | MCS | | |
|-------------------|------------|-------|-------|-------------|--------|--------|
| | X±S | min | max | X±S | min | max |
| Group1 n=513 | 51,12±6,75 | 23,28 | 70,77 | 44,27±10,11 | 11,7 | 62,96 |
| Group 2 n=70 | 46,94±7,01 | 23,84 | 58,56 | 42,91±6,99 | 27,88 | 59,24 |
| Group 3 n=100 | 52,06±6,48 | 32,07 | 86,26 | 44,95±7,71 | 16,946 | 59,797 |

As the results, Polish students have the highest rates of both physical and mental health and therefore a higher quality of life. The Ukrainian students who study in Poland have the lowest quality of life (physical and psychological health) among all studied groups.

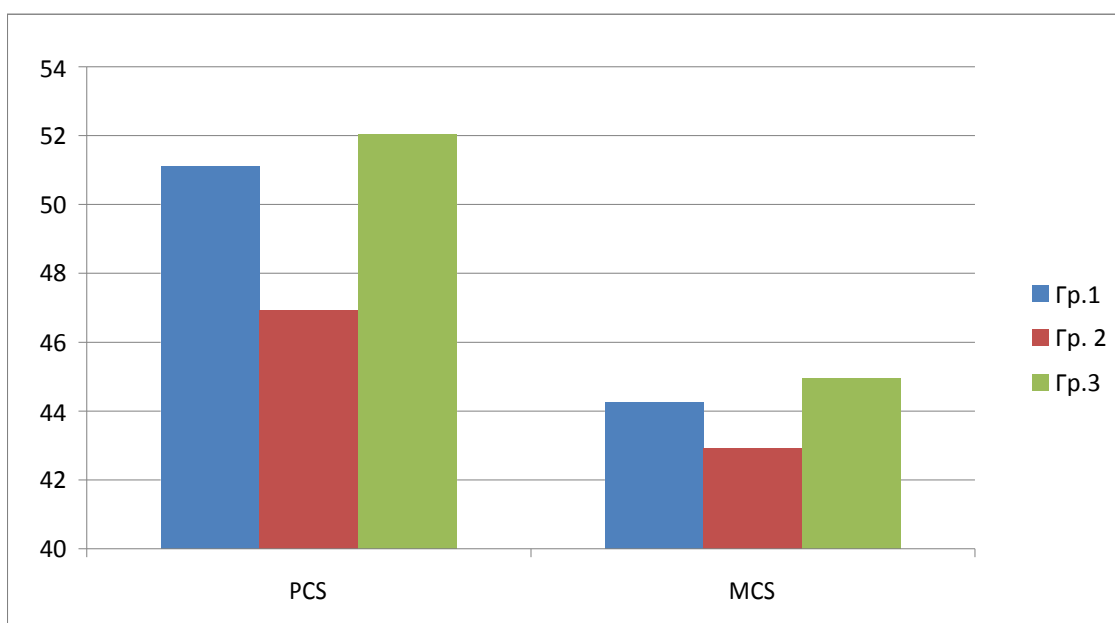


Fig. 4. The Quality of Life Scores

To establish a statistical difference between the physical component of quality of life between the study groups of students, we used Scheffé method of multiple comparisons. Thus, it appeared that the difference Group 1 and Group 2 is statistically significant ($F = 11,85$) on the level of significance of $p < 0,01$. The difference Group 2 and Group 3 is statistically significant ($F = 11,79$) on the significance level $p < 0,01$. A difference Group 1 and Group 3 not statistically significant ($F = 0,78$), $p = 0,46$. Thus, we can say that the indicators of physical health, have a statistically significant difference in Ukrainian students who study in Ukraine and Ukrainian students who study in Poland, and not statistically different from Polish students who study in their homeland. Also, there is a statistically significant difference between the result of the physical component of the quality of life among Ukrainian students studying in Poland and their peers, Polish students. Thus, we can conclude that the physical component of the quality of life for Ukrainian students depends on the country where they study. No evident significant difference between indicators of physical component of quality of life of students studying in their home country – the difference between the indices is random.

As for indicators of the psychological component of the quality of life in the studied groups of students, the difference averages is not statistically significant, $p < 0,05$.

Conclusions. The quality of life of students we studied using questionnaire SF-36 consists of two general indicators – physical health and psychological health. The results indicate that Polish students generally have the higher quality of life. However, in terms of physical health statistically significant difference between the group of Polish students and a group of Ukrainian students studying at home is not found. The physical health of Ukrainian students who are educated abroad is lower.

Analyzing the indicators of the psychological health, statistically significant difference between the study group not found. Thus, the Ukrainian students who study outside their country have low levels of physical health (Group 2).

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