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Lifestyles in young university students: application of the "FANTASTICO"

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ABSTRACT

OBJECTIVE

Entering university is a challenge of autonomy and self/group affirmation. Particular attention should be given to healthy behaviors by all stakeholders and the university environment in general. The current study aimed to investigate the lifestyle of the first year students of the Universidade Católica Portuguesa - Porto (UCP).

METHODS

The "FANTASTICO Lifestyle" questionnaire was applied in the "Critical Thinking" teaching sessions. The collected data were treated using the SPSS® program.

RESULTS

It was found that although the overall lifestyle of these students is considered "good" with no differences between genders, 7.9% of students are in the lowest values in the category. The items in which the values were most disparate were physical activity/associativism, work/personality type, nutrition, and health/sexual behavior. The heavy weighting of the item "family/friends" stood out.

CONCLUSIONS

It was concluded that the "FANTASTICO" was the first step towards a diagnosis and represents a starting point to evaluate the needs of these students. Although the situation can be considered favorable, it is important to begin planning interventions now, whether for promotion of the physical activity/associativism and nutrition component, or for control in the context of tobacco and alcohol consumption.

DESCRIPTORS

Lifestyle, University education, Health education.

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INTRODUCTION

Health, both individual and community, emerges from the underlying capital, which is sustained, managed, and enhanced in the environment in which the life process is managed and developed.

Lifestyles represent the person's idiosyncratic reaction to their circumstances and experiences in social interactions with others and the environment. The adoption of healthy lifestyles acquired at an early age is a factor considered as the most solid constraint for successful aging[1-4]; we could say that a good start leads to a better end.

The sooner the behaviors of the individual and the group move closer to the evidence obtained for models of a better quality of life, the more the community and its members will be able to enjoy a high level of health[2].

At the same time, research confirms that education, namely higher education, offers significant potential for positively influencing the health and well-being of students, staff, and the wider community, through education, research, knowledge sharing, and institutional practice[4-9].

The concept of Healthy Universities and Higher Education Institutions is based on the work, experience, and learning promoted by the cities, work environment, schools, and the European Network of Health Promoting Universities. In this broad scope, it encompasses the integration of health in university culture, processes, and policies[4,6].

Healthy Universities and/or Health Promoters are those that incorporate Health Promotion in their educational and work projects, with the aim of promoting human development in all its components (biological, psychological, and social) and improving the quality of life of those who study and work well, as well as endowing them with health-promoting skills at the level of families and the entire surrounding community.

The Ottawa Charter for Health Promotion (1986), the Jakarta Declaration (1997), and the Bangkok Charter for Health Promotion (2005), constitute the main base documents to understand its evolution and importance[4, 5, 7, 10]. The Millennium Goals and the World Health Organization Civil Society Initiative (2000 and 2001) are important documents to determine the role and responsibilities that Universities and Higher Education Institutions can potentially fulfill.

The first International Conference of Health Promoting Universities took place in Lancashire, United Kingdom, in 1996, from which came sequential initiatives, including at government level. In the Pan-American Health Region, the "First International Conference of Health Promoting Universities" took place in Santiago, Chile, in November 2003. Discussion continued on the establishment of a Pan-American or Regional Network for Health-Promoting Universities/Education Institutions[4, 5, 10-12].

In 2000, the Pontifical Catholic University of Chile has launched the Healthy University program, having organized the 1st International Congress of Health Promoting Universities[7].

In October 2005, together with the host University of Alberta, in Edmonton, it co-organized the 2nd International Congress in the Region of the Americas in which participants were invited to develop the document, the Edmonton Letter[13], and came to socialize the movement of Health Promoting Universities. The 3rd Congress in Juárez, Mexico, in 2007, institutionalized the Iberoamerican Network of Health Promoting Universities (RIUPS), with documentation to establish the functions and areas of collaboration and cooperation[8, 10, 12].

Other congresses followed, reinforcing the importance and relevance of this theme, and the most recent - IX Iberoamerican Congress of Health Promotion Universities was held in 2019 in Mexico.

The Health Promoting Universities/Higher Education Institutions have the following objectives/goals: to institutionally model a health promoting culture and a sustainable environment to work, live, and learn in; develop actions to improve the environments in which you live, work, and learn, encompassing the entire university community; facilitate and support people to live quality lives and choose healthy lifestyles; improve health services for staff and students; encourage staff and students to take responsibility for their own health and well-being; instill in students the concepts of health promotion and encourage their involvement in university life; prepare students for citizens of the future to promote health in their institutions and communities; support health promotion in the local, national, and global community[4, 11, 13, 14].

This purpose supposes and has in view the holistic approach to health, with boundaries that, due to contagion in concentric circles, expand and demarcate healthier communities[4]. It is the result of health empowerment provided by health promotion/education[15].

In this context, an assessment tool for students in higher education was developed by the Pontifical Catholic University of Chile[12] the "Fantastico Lifestyle" questionnaire (adapted from "Do you have a Fantastic lifestyle" from the McMaster University, Ontário, Canada) which was opportunely adapted for Portuguese[16]. Thus, the present study aimed to assess the lifestyle of 1st year students at the Regional Center of Porto at the Universidade Católica (UCP/CRP); provide content and proposals for critical reflection to the students themselves about their behavior in order to improve or reinforce a healthier lifestyle; promote a health intervention according to the values found, especially the lowest or most disparate, in the parameters of the Fantastico lifestyle questionnaire.

METHODS

Participants

In total, 418 students from the 1st academic year 2013/2014 of UCP/CRP participated in the study, enrolled in the discipline of "Critical Thinking". The sample was mostly female (62.4%), the male sex represented 35.4%, and 2.2% of the students did not provide this information. The mean age was 19.03 ± 3.32 years; the median 18 years (minimum 17, maximum 56).

With respect to residence, the municipalities with the highest representation were Porto (31.1%), Vila Nova de Gaia (10.2%), and Matosinhos (7.6%).

Instrument

In the present study, the "FANTASTICO" questionnaire was used as an assessment tool, translated, adapted, and validated for the Portuguese population, with an internal consistency of 0.71, measured by Cronbach's alpha[16]. The acronym "FANTASTICO" identifies ten major areas assumed as important conditioning factors (present and future) for individual and community health: family and friends; physical activity/associativism; nutrition; tobacco; alcohol and other drugs; sleep and stress; work/personality type; introspection; health and sexual behaviors; other behaviors.

This questionnaire consists of 30 questions, with each answer being assigned a numerical weight (quantitative): 0, 1, or 2. The respective sum of each of the ten columns multiplied by the factor 2 (two) results in the total score (score) that places the student in a range of the lifestyle scale, a category (#):

From 103 to 120 - Congratulations. You have a Fantastic lifestyle (#5).

From 85 to 102 - Very good. You are on the right path (#4)

From 73 to 84 - You are fine. You have an appropriate lifestyle (#3).

From 47 to 72 - You have a somewhat critical lifestyle (#2).

From 0 to 46 - You are in the danger zone, but your honesty is an excellent quality (#1).

Attached to the "FANTASTICO" questionnaire, each student was also given a message about each of the items in the acronym, a set of reflections/advice in order to adapt their behavior to the different areas with a view to the "Fantastico" lifestyle. It was intended, therefore, that the respondent should confront, guide, and consolidate their behavior to an option considered as healthier.

The questionnaire was also complemented by two parts: an explanatory introduction and a form for recording demographic data.

Procedure

The questionnaires were distributed to all students of the 1st academic year 2013/2014 of UCP/CRP, enrolled in the discipline of "Critical Thinking", during the month of November 2013. All students who volunteered to participate gave their ethical written consent (acceptance/participation form).

Statistical analysis

The results obtained were worked out statistically using a spreadsheet in Excel® and the SPSS® program. The statistical analysis was based on descriptive and inferential statistics.

RESULTS

The global behavior measured by the "FANTASTICO" was configured as "very good" (global final score of 89.78), which corresponds to the message "You are on the right path". When differentiating by groups/categories, it was found that: 11.6% of respondents are in category 5, the highest (from 103 to 120 points); 56.1% in category 4; 24.5% in category 3; 7.6% in category 2; and 0.3% in category 1.

The behavior (translated into the global Fantastico index) was similar for both sexes (x2 = 5.07 gl=4 p=0.28).

In Table 1, it can be seen that by grouping categories 1 with 2, and 4 with 5, the distribution of frequencies per course is revealed, with a highly significant difference (x^2= 47.762 p=0.000).

Table 1. Global distribution (percentages) of 1st year students at the Catholic University - Porto by Course and by Category regarding the "Fantastico" Lifestyle.

COURSE	CATEGORIES 1+2 (%)	CATEGORY 3 (%)	CATEGORIES 4+5 (%)
Bioengineering	0	7.1	92.9
Law	5.8	29.8	64.4
Economics	8.3	22.2	69.4
Nursing	0	26.3	73.7
Management	7	36	57
Microbiology	10	6.7	83.3
Nutrition	9.4	18.8	71.9
Psychology	5.3	0	94.7
Sound and image	29.2	25	45.8
TOTAL	7.7	24.5	67.9

χ^2= 47.762 (0.000)

The courses in "Psychology", "Bioengineering", and "Microbiology" are the most important in the higher categories, with "Law", "Management", and "Sound and Image" presenting values below the category mean; those with the most weight contributing to the lower categories were "Sound and Image", "Microbiology", "Nutrition", and "Economics". "Bioengineering" and "Nursing" were those for which the percentage was 0% in categories 1+2.

According to each item of the acronym (Table 2) we see that, except for "family and friends" and "nutrition" (for which the zero value was not recorded), students were included in all possible range values.

Table 2. Distribution of the values of each component of the acronym ("FANTASTICO") and respective variation in the1st year students of the Catholic University - Porto.

ACRONYM	MAXIMUM VALUE OF ITEM (REGISTERED VARIATION)	VARIATION VALUE	MEAN (% OF POSSIBLE VALUE)	MEDIAN
Family and friends	4 [1-4]	3	3.68 (92.0)	4
Physical activity/ associativism	6 [0-6]	6	3.76 (62.7)	4
Nutrition	6 [1-6]	5	3.85 (64.2)	4
Tabacco use	4 [0-4]	4	2.87 (71.8)	4
Alcohol and other drugs	12 [0-12]	12	10.61 (88.4)	11
Sleep and stress	6 [0-6]	6	4.22 (70.3)	4
Work; personality type	6 [0-6]	6	3.77 (62.8)	4
Introspection	6 [0-6]	6	4.43 (73.8)	5
Health and sexual behaviors	6 [0-6]	6	4.08 (68.0)	4
Other behaviors	4 [0-4]	4	3.62 (90.5)	4

The highest values obtained approaching the mean were for "family and friends" (92.0%), "other behaviors" (90.5%), "alcohol and other drugs" (88.4%), "introspection" (73.8%), "tobacco" (71.8%), and "sleep and stress" (70.3%), followed by "health and sexual behaviors" with 68%, "work and nutrition" with 64.2%, "personality type" with 62.8%, and, with the lowest value, "physical activity/associativism" 62.7%.

Of the total values for the component "Family and friends", it was found that, of the 404 validated respondents, 75.0% obtained a value 1.

For the subcomponent "I have someone to talk to about the issues that are important to me", it was found that 90.8% obtained the maximum score (almost always), 9.0% intermediate (sometimes), and 0.2% null.

As for the other subcomponent "I give and receive care/affections", 78.4% received the maximum score and 1.2% the minimum (almost never); 20.4% received one point.

Regarding "Physical Activity/Associativism", 9.2% of respondents obtained the maximum possible value of 6, (n = 404). The majority (35.6%) received a total of 4 points, followed by 3 (21.5%), 5 (17.6%), 2 (10.6%), 1 (5.0%), and 0 (0.5%).

In the subcomponent "I am a member of a community group and actively participate in activities", the sum of 0 points stood out with 51.3%, followed by 1 and 2, with 24.6 and 24.1%, respectively.

Conversely, in the subcomponent "I perform physical activity (walking, climbing stairs, housework, gardening) or sport for 30 minutes at a time", 68.6% of respondents were rated 2, 26.6% were rated 1, and 4.8% 0.

In the same way, in the third subcomponent "I walk at least 30 minutes daily", 52.6% of the students scored 2 points, 37.5% 1 point, and 9.8% 0.

With a total of 6 points for the "Nutrition" component (n = 401) the percentage distribution in decreasing order was as follows: 45.1% with 4, 25.9% with 3, 15.58% with 5, 7.2% with 2, 5.7% with 6, and 0.5% with 1.

Responding to "I eat two servings of vegetables and three servings of fruit daily", 59.6% scored 1 (sometimes), 20.3% 2 (every day), and 20.1% 0 (almost never).

As for "Frequency that I eat hypercaloric foods (sweet and/or savory) or fast food": 78.2% eat "some of these" (1 point), 11.3% "none of these" (2 points), and 10.5% "all of these".

With regard to "I am over my ideal weight by", 86.1% reported from 0 to 4 kg (2 points), and 10.9% and 3.0% from 5 to 8kg and more than 8 kg, respectively.

With regard to item 4, related to smoking, of the 403 respondents, 58.8% obtained the maximum score (4 points), 25.6% 1 point, 6.0% 0 points, and 5.0%, and 4.7% respectively 3 and 2 points.

In the subcomponents: 60.2% of the respondents (397) "did not smoke in the last 5 years", 34.5% "smoked this year", and 5.3% "did not smoke in the last year". Regarding the number of cigarettes smoked per day, 5.8% registered "more than 10"; 27.0% "1 to 10", and 67.3% "none".

"Alcohol and other drugs" refers to acronym 5, and is the one that contributes the most to the column sum: 12 (6 + 6). This total was achieved in 35.7% of the 403 respondents; 31.0% totaled 11, 13.9% (10), 9.7% (9), 4.0% (8), 2.2% (7), 2% (6), 0.5% (5), 0.5% (4), 0.2% (2), and 0.2% (0).

Considering the mean weekly alcohol intake, 90.7% of the students selected the option "0 to 7 drinks", 6.0% "8 to 12", and 3.3% "more than 12". Drinking more than 4 to 5 drinks on the same occasion was reported as "never" by 46.4%, "occasionally" by 42.6%, and "frequently" by 11.0% of respondents.

The practice of driving motor vehicles after drinking was reported as "frequent" by 2.3%, "rare" by 6.3%, and "never" by 91.5% of students.

With regard to illegal psychoactive substances, 86.7% "never" use them, 10.8% "occasionally", and 2.5% "frequently".

Excessive medication use was reported with similar values: 87.5% "almost never", 10.0% "sometimes", 2.5% "almost daily".

On the daily intake of stimulating drinks (coffee, tea, or similar content), 86.0% of respondents reported this "less than 3 times a day", 12.3% "3 to 6 times", and 1.8% "more than 6 times".

With respect to "sleep and stress" (item 6), only 17.9% of students (n = 403) reached the 6 possible points in the global sum; 27.4%, 26.9%, 18.7%, 6.2%, 2.7%, and 0.2% presented decreasing score values from 5 to 0.

Regarding "I sleep well and feel rested" (0 to 2 points), the majority (57.4%) indicated "sometimes" (1 point), 34.8% "almost always" (2 points), and 7.8% "almost never".

With similar percentages, participants responded to the question "I feel capable of managing stress", 48.4% of students answered, "almost always", 47.1% "sometimes", and 4.5% "almost never".

"I relax and enjoy my free time" was reported as "almost always" by 58.1%, "sometimes" by 37.8%, and "almost never" by 4%.

Item 7 is linked to "Work/Personality type". Of the respondents with validated responses (n = 403), 3.7% registered 6 points; the highest frequencies were for 4 points (31.3%), 3 points (28.0%), and 5 points (24.8%); with 2 and 1 points presenting 9.2% and 2.7% of students, respectively; 0.2% of respondents scored 0 points.

As for the first component ("I feel I am in a hurry and/or busy"), 66.5% registered "sometimes", 25.9% "almost never", and 7.6% "frequently". "I feel bored and/or aggressive" recorded the following percentages: 52.5% "sometimes", 42.7% "almost never", and 4.6% "frequently".

For the question "I feel happy with my work and activities in general", 61.3% of the students reported "almost always", 36.4% "sometimes", and 2.3% "almost never".

"Introspection" (item 8) had 403 validated responses. In total, 28.8% and 24.8% of the students received 6 and 5 points, 19.1% received 3, and 18.9% 4 points. The decreasing values followed (2, 1, and 0) were awarded to 6.7%, 1.0%, and 0.7%.

"I am an optimistic and positive person" included 54.8% of students in "almost always", 38.4% in "sometimes", and 6.8% in "almost never".

For 51.5% of students, "I feel tense and/or oppressed" occurred "sometimes"; "almost never" for 46.0%, and "frequently" for 2.5%.

"I feel sad and/or depressed" was recorded by 55.8% of students "almost never", 41.0% "sometimes", and 3.3% "frequently".

The "Health and sexual behaviors" (item 9) gave a possible score of up to 6 points. The highest percentage (29.4%) of respondents (4 = 401) corresponded to 4 points, followed by 5 (28.7%), 3 (18.2%), 6 (12.2%), 2 (8.7%), 1 (1.7%), and 0 (1.0%) points. "

Of the 399 validated responses to "I carry out periodic health assessment exams", 33.3% of the students reported "always", 49.1% "sometimes", and 17.6% "almost never". Regarding the second question of this component "I talk to a partner and/or family about sexuality issues", the highest percentage (47.2%) registered "sometimes", 30.9% of students reported "always", and 21.9% "almost never".

Regarding the question "In my sexual behavior, I worry about my self-care and the care of my partner", 87.2% of the students answered, "almost always"; 8.3% "sometimes", and 4.5% "almost never".

"Other behaviors" is the concluding item of the acronym. The maximum score (4) was received by 69.5% of the 403 respondents, 24.3% of students received 3 points, 5.5% 2 points, and with 1 and 0 points 0.5% and 0.2%.

The answers (n = 399) to the question "As a pedestrian or as a driver, I respect road safety rules" were: "always" with 76.7%, "sometimes" with 22.8%, and "almost never" with 0.5%.

The last question "use seat belts" was responded by 87.7% with "always", by 11% with "sometimes", and by 1.3% with "almost never".

After analyzing each item, the relative weight of the item values was verified (Table 3) in order to understand the item of the acronym whose removal was most accentuated. The item "family and friends" stands out with the greatest weight.

Table 3. Relative weight by acronym and the order regarding the "Fantastico" Lifestyle in the 1st year students of the Universidade Católica - Porto.

ACRONYM	RELATIVE WEIGHT	
Family and friends	1.8396	1
Physical activity/associativism	1.2534	10
Nutrition	1.2820	8
Tabacco use	1.4343	4
Alcohol and other drugs	1.7677	3
Sleep and stress	1.4074	6
Work; personality type	1.2551	9
Introspection	1.4773	5
Health and sexual behaviors	1.3603	7
Other behaviors	1.8081	2

DISCUSSION

The University, for various reasons and for different structures and communities, is a privileged place for intervention with a referential and behavioral model[4]. This institution has the mission of teaching/learning, research, and innovation. It is a place with conditions and resources that enable the establishment of change processes, favoring and developing potential capacities, attitudes and critical behaviors for the benefit of a healthy society, through the development and application of projects, promotion, and intervention programs in health and well-being at the level of the university community as well as in society[17].

For young people (an age group vulnerable to the adoption of new behaviors, especially in group interdependence), it is a decisive time of transition[2], namely in the field of health promotion, a process that aims to increase control over individual, socio-community, and environmental health determinants[1, 7, 10, 18].

It appears that there has been little investment in health education in higher education institutions, which are considered as institutions that can lead the actions in this area of promotion[5, 19], both in the long term, and in the short and medium terms, whether at the individual, community, regional, or national level[7].

The "FANTASTICO" is, at this moment, the first step towards a diagnosis, the starting point for investigating and assessing

the needs of higher education students at our Regional Center at the University. The relevance of the use of this questionnaire is related to the fact that it is a very accessible questionnaire, which is quick to complete and allows feedback to the participant, in relation to their lifestyle. The questionnaire has recently been used in other studies, such as in studies carried out by Goetz and collaborators[20] and Beltran et al.[21].

The situation of the global position of the 1st year students of Católica Porto can be considered good; the same was observed by Martins et al.[22] in students at the University of Algarve and by Silva et al.[3] in Sergipe, however, not without the need for intervention, as the objective will always be utopia, at least in the middle category considered as having an adequate lifestyle (from 73 to 84 points). It can be assumed that the qualification of the occupied position (good lifestyle) will occur because it concerns students with higher education and, possibly, from families with higher education (note that the institution studied is a private university).

Contrary to what was seen in the studies of Stewart-Brown et al.[23] with the application of the SF36 and, also in studies of Soto et al.[24] and Arguello et al.[1], with the "Cuestionário de Estilo de Vida en Jóvenes Universitário" (CEVJU) there were no differences between sexes. In agreement, but not with such weight, we could assume as the setbacks to work our equivalent stress which occupies the 6th position[1, 23, 24].

We found that the less advantageous situations of students (7.9% in groups 1 and 2) are equivalent to the 7.2% registered by Martins et al.[22]. This value, together with that of the intermediate group (24.5%), should define the primary intervention strategy in order to move as many of these students (32.2%) as possible into groups 4 and 5.

The differences found by course, highlight the reinforcement to be given especially to those courses with students whose percentages in groups 1 and 2 are the highest: "Sound and Image", "Microbiology", "Nutrition", and "Economics". This intervention strategy should above all take into account the items of the acronym whose removal was most accentuated; we can verify this by considering the relative weight of the item values. High weight was awarded to the item "Family and friends" which may be in parallel with the study by Soto et al.[24] and in disagreement with the study by Silva et al.[3] in which the equivalent questionnaire was applied, although to students of Physical Education and in which 15% of respondents scored inadequately, compared to our 6.4%.

The results of our study may be considered better than those of Silva et al.[3] regarding the "Physical activity" component and are not consistent with the findings of other studies, although with different methodologies[1, 9, 24]. In this item, the fraction of the greatest weight that we found is due to the "Associativism" component for which a motivating intervention should be carried out and that it is also one of the values inserted and that considers health promotion.

As for "Nutrition", there is also some agreement, namely in comparison with what is referred to in the aforementioned studies. We must emphasize the circumstantialism of the students if they are far from their family, going to bars and canteens, and often living alone or in shared housing, results that also corroborate the study by Howlt et al.[25].

Smoking habits assessed by behavior in the previous year have high values and are in line with those of other studies[3, 6].

Regarding alcohol consumption, it was found that 9.3% of students may be drinking too much, and that 11% "often consume 4-5 drinks on the same occasion". This fact is in agreement with the studies mentioned above[3, 6, 25], although the evaluation was based on different methodological instruments.

As for sleep and stress, globally, the position, although inferior, is close to the study by Silva et al[3]. In other studies, such as the one performed by Beltran et al.[21], there was a greater probability that the sleep pattern conditioned the rest obtained during sleep and allowed the enjoyment of free time. Regarding stress, the presentation of inappropriate habits was not as worrying as in other studies[21].

With regard to the items "Work/personality type", "Introspection", "Health and sexual behaviors", and "Other behaviors", the values found, as far as it is possible to compare, seem to put our students in a better position than those found in the literature.

Limitations of the study

As a limiting point, but at the same time a strategic challenge for the future, is the application limited to the first year students of the University.

As strengths to highlight in this study, the sample size, the questionnaire application method, and the response rate obtained stand out.

CONCLUSION

Entry into University represents a new phase of the life cycle, marked by a need to adapt to the environment. The behavioral and attitudinal situation revealed by our students through the "FANTASTICO" indicates a population that globally seeks health and its associated well-being. The continuation of the collection of this information in addition to an updated diagnosis should serve as an evaluative reference for health promotion actions (research-education-action) that are planned and carried out in practice. This specific intervention model should have an integrative and instrumental action with a comprehensive and multifaceted structure, properly and realistically implemented.

The present work can represent not only a step towards future research and intervention, but also a starting point for comparison and cooperation with international studies.

Health promoting universities are today the emerging thinking of a new public health. A Healthy University, based on promoting health for the development of human beings, aspires to create a learning environment, through a culture that boosts the health, well-being, and sustainability of its community and enables all members to reach their full potential. The current challenge is that, in addition to the knowledge that should continue to be transmitted, it is essential to generate long-lasting attitudes and behaviors, creating a specific "organizational culture", investing in particular in motivations, sense of risk, assertiveness, and critical spirit at the community and individual levels.

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