Advances in Social Sciences Research Journal – Vol.1, No.3
Publication Date: May 15, 2014
DOI: 10.14738/assrj.13.176
Garcia, A. J., Vieira, L. S., & Rodrigues, N. (2014). Could Physical Activity Improve Healthy Lifestyles and Psychological Well-Being?, *Advances in Social Sciences Research Journal, 1*(3), 106-117

Could Physical Activity Improve Healthy Lifestyles and Psychological Well-Being?

García, A.J.
Facultad de Ciencias de la Educación, Dpto. Psicología Social, Universidad de Sevilla.
alfonsoj@us.es

Vieira, L.S.
Faculty of Humanities and Social Sciences of University of the Algarve
lsvieir@ualg.pt

Rodrigues, N.
Academic Sports Association Office of University of the Algarve
nvrodrigue@ualg.pt

ABSTRACT

It is clear the role that physical activity plays in psychological well-being and health. The main aim in this paper is evaluate the influence of the practice of regular physical activity in the adoption of healthy lifestyles and psychological well-being, in a sample of 183 students of the University of the Algarve, 94 regular physical activity practitioners and 89 who don´t. For the collection of data was applied a battery of instruments consisting of a Demographic Questionnaire and Physical Activity; by the Lifestyle Questionnaire (Carvalho & Cruz, 2006) and the Ryff's Scales of Psychological Well-being (Fernandes, 2007). Our results show that the subjects who practice regular physical activity adopt healthier lifestyles, as well as provide superior results in environmental mastery dimension in the psychological well-being. The analysis of the interaction between the values of the lifestyle, organized into three levels, and the psychological well-being, reveals that participants with higher scores present superior rates of psychological well-being, globally and in dimensions (environmental mastery, purpose in life and self-acceptance).

Keywords: physical activity, lifestyles and psychological well-being

INTRODUCTION

Reflex of the signs of the time, our society is constantly changing, causing changes in the quality of life of all people. Consequently each person is, more comfortably, addressed to risk or less healthy behaviours, as a result of sedentary lifestyle, inadequate food choices, and the lack of time for leisure. It´s a priority in scientific agenda to promote healthier living habits, in particular those related to a more careful eating and, especially, the practice of physical activities, such as strategies for improving the health status of each person.

The definition of health suffered over the years some modifications. Currently health is, beyond a situation of absence of disease, a state of equilibrium of the various systems and the individual with himself (World Health Organization, 2002). Not being a very stable and easy to reach, it is evident the need to acquire, reconstruct and protect the health and constantly throughout life (Mota, 1995).

Good physical condition is interpreted often as a positive indicator of health at that physical activity plays a protective role in relation to risk factors, current and future time for each

person. Today, there is ample evidence that physical activity through regular and moderate exercise, is one of the most effective strategies to acquire, protect and maintain health throughout life (Cid., Silva & Alves, 2007), logo with undoubted benefits to physical, psychological and social. Thus, all actions that might encourage increased physical activity and sports practice, constitute valid forms and with the potential to significantly improve the quality of life of populations. In this context, several studies (e.g., Alves, 2005; Berger, Pargam & Weiberg., 2002; Biddle & Mutrie, 2001; Bueno, 2002; Buckworth & Dishman, 2002) confirm and highlight the importance of physical activity in the development of healthy lifestyles and well-being of people in all ages.

The relevance of this study arises from the growing interest in research in this area, which led International Society of Sport Psychology, to publish a special issue in 1992, relating to physical activity and psychological benefits. In this publication it is stated that physical activity is generally associated in the long term, to a reduction in levels of anxiety and stress, to decrease depression, increase self-esteem and how to factor positive emotional effects producer. Nevertheless, the knowledge spread positive health effects that regular physical activity may increase, an overwhelming percentage of the population in industrialized societies are sedentary (ie about 70%) or abandon the practice in the first six months (ie about 50%), implying that these benefits are not sufficient reasons to undertake physical activity (Cid et al., 2007). In summary, it is curious to note the plethora of health problems, which usually struggle with people living in more developed countries.

Considering the importance of the adoption of health behaviors at younger ages, to promote health at older ages, the literature has demonstrated the central role of lifestyles in the adoption of health behaviors, and the psychological well-being describes the positive psychological functioning, put up the following question: the practice of regular physical activity is positively associated with psychological well-being and the adoption of healthy lifestyles of students in portuguese higher education?

Physical activity is defined as any bodily movement produced by skeletal muscle that results in increased energy expenditure above resting level, constituting a complex and dynamic process. During life, the individual goes through phases that show different levels of physical activity, determined by several factors (Caspersen, Powell & Christenson, 1985). Shepard (2003), recognizes that the consensus around the definition of terminology is recent physical activity and highlights that it undertakes all kinds of muscle activity that substantially enhance energy expenditure. Thus, exercise is a subcategory of regular physical activity, structured and repeated, deliberately and executed with the specific purpose of improving some aspect of health or preparation, improvement or maintenance of athletic competence (Delgado, 2006). Therefore, exercise is repeated and stereotyped physical activities, aimed at achieving a concrete goal, therapeutic or physical condition. For instance, we can speak of abdominal exercises, physical therapy exercises, exercises to prepare for childbirth exercises to acquire a given technique, strengthening exercises member had surgery, among others.

According to Delgado (2006), sport is also considered a subcategory of physical activity, specialized, competitive nature and that requires physical training, regulated by institutions and with the main objective, not to improve or maintain health, but with intended to competition.

So the practice of sport activity involves competition, between teams or individually, in dispute with others or to himself. This conception of sport activity applies to both the recreational sport as the competition, be it amateur or professional. These scenarios also include rules that

define your practice and goals to achieve, there are winners and losers (and often draws). In the context of this research we adopt the concept of physical activity defined as any muscle or motor activity that a person performs, or any action that involves movement, strength and posture maintenance. We also felt that this action is considered regular when implies a frequency of at least twice weekly.

The lifestyles are described as patterns of behavior, habits, attitudes and values that are relatively stable typical of a particular group or person (Matos, Simoes, Canha, & Fonseca, 2000). For the World Health Organization (1993), the lifestyles are associated with values, the motivations, opportunities, and also the specific issues related to cultural, social and economic. According to Matos (2005) there is not just one but several types of healthy life. The variety of styles is established according to the group where the individual is inserted and their own individual characteristics.

The literature has emphasized the importance of lifestyle to health, given the importance that the adoption of certain patterns of behavior can have on disease prevention and health promotion (Pais & Cabral, 2003). These patterns contribute to several factors, such as diet, exercise, tobacco use, alcohol and drug use, risky sexual behavior, among others, which form an integrated whole that is, probabilistically associated, to a greater or less likely to suffer from a disease and also to survive since patient (Matos et al., 2000).

The concern with the inclusion of physical activity in lifestyles is based, fundamentally, on the supposed benefits this could have for health and especially the fact that it is now recognized that no physical activity is a risk factor for health (Matos & Sardinha, 1999; Matos, Carvalhosa & Diniz, 2001). Since mode, and according to Torre (1998), physical activity should be considered as a critical component of a healthy lifestyle, to the extent that the realization of systematic physical activity and with some intensity is a protective factor of health and prevention of various disorders thereof by the important physiological and psychological benefits associated with exercise. In short, maintaining an active lifestyle should be understood as one of the keys to a healthy aging (IDP-LVAP, 2011).

As regard to the concept of well-being, several authors in recent years, through their research, were able to install it in the scientific field of psychology, and to assign specific psychological meaning and transform it, into a more emphatically discussed the constructs and invested in understanding the quality of life and healthy living. The construct of Psychological Well-Being described by Carol Ryff (1989), advocates a multidimensional model of positive psychological functioning consisted by six dimensions (autonomy, environment mastery, personal growth, positive relations with others, purpose in life and self-acceptance). For its formulation, the author searched in modern currents of Psychology, linked to development, clinical and mental health, the crucial elements that could best describe the well-being as an expression of positive psychological functioning (Ryff & Keys, 1995). For Fernandes (2007), the construct thus defined, the dimensions agree obtained from the analysis of the convergence of existing theories about the functioning positive psychological and since its formulation as claimed diverse, and alternative, however, the formulations coexistent wellness previously developed (eg, Diener, 1984; Warr, 1978, 1990).

There is scientific evidence that regular physical activity has unquestionable benefits for the physical and psychological health that, in turn, cause a significant impact on the general welfare of the subject at all ages (e.g., Cid et al., 2007).

On the other hand, the demand for well-being and emotional balance, makes more and more people subscribe to physical activity. These behaviors are consistent with approaches that emphasize the importance of physical activity on mental health, especially those resulting from physical exercise and improved physical condition, leading to feelings of psychological well-being (Cruz, Machado & Mota, 1996).

Considering the review that we made, where it was clear the role that physical activity plays in psychological well-being and health, it seems justified that studies the relationships of these dimensions in a population of higher education, which aims to identify the healthy behaviors and indicators of possible better health at older ages. The characteristics of this population and the meaning of the construct lifestyles justify, further work to assess the extent to which these students physical activity may be associated with the adoption of certain lifestyles.

We present five goals that we propose to answer in this research:

- Describe the contents of lifestyles and psychological well-being of study participants.
- Assess why practitioners of regular exercise have better lifestyles more positive and more positive indices of psychological well-being.
- Verify why the psychological well-being varies in function of different class lifestyles.
- Assess why scores of lifestyles and psychological well-being depending on the pattern of physical activity.
- Analyze the relationship between lifestyles and psychological well-being in individuals practicing and non-tracticing regular physical activity.

METHOD

Participants

The sample of this research consisted of 183 students enrolled at the University of Algarve, in the academic year 2011/2012, 95 (52%) female and 88 (48%) of males. Their ages are between 18 and 38 years, with a mean age of 22.15 years for a standard deviation of 3.58 years.

The sample is composed of 35 representatives of the Algarve University courses, and the courses in Psychology and Sport are the most representative, each contributing 21 (11.5%) participants. For the academic degree the sample includes 162 (88.5%) students attending a course in Degree and 21 (11.5%) studying in a Master course.

Regarding the manner of daily travel between home and the University we check, that most of the participants moving in own car (n = 80; 43.7%), followed by those who move on foot (n = 55; 30.1 %) and 23.5% (n = 43) in public transport. Of the remainder, only one refers to move by bicycle. Crossing the variables means of travel with regular physical activity, it appears that the percentage of students who move on foot to university is about the same among those who practice or not practice. We found identical distribution when referring to movements in own car and public transport.

Regarding the characteristics related to physical activity shows that the majority of students (n = 94; 51.4%) said that practice regular physical activity, while 48.6% (n = 89) declares not practice. The crossing of the variables gender and found that regular physical activity, 57.9% of participants in males and 45.3% of females participating in regular physical activity.

From the analysis of sample data, we did not identify a type of regular physical activity dominant. Participants distribute their interests in physical activity for very different

modalities. However, Football with 14 (7.7%) and Futsal 11 (6%) form the modalities more marked.

Instruments

We applied a set of specific measures to collect specific information about physical activity, life styles and psychological well-being, in addition to demographic data to characterize the nature of the sample, which we present in detail. To collect data from a demographic questionnaire which was applied requested information about age, gender, and education degree course, as well as other indicators related to mobility of individuals between their home during the classes and the university, in particular through displacement used and the distance between two places.

The questions related to physical activity were drawn from an original questionnaire of Neto (1994). In it were considered questions that assessed the physical activity, including frequency and type of weekly physical activity, in this instrument was also requested information on participation in sporting competitions and for the pattern of physical activity, percecionado by the subject, with the reference standard moderate physical activity, solved based on international guidelines for regular physical activity, which suggests that this is performed for at least 30 minutes with moderate intensity, with a frequency of 5 or more times week.

The *Lifestyle Questionnaire* [Questionário de Estilos de Vida; QEV] from Carvalho & Cruz (2006) was the instrument used to assess the lifestyles of the study participants. It's a one-factor questionnaire consisting of 31 items, designed to measure the quality of certain behavior, through the manifestation of the answer choice in five different alternatives, a Likert scale consisting of five degrees, from one point to five points for Never always. These items assess the quality of lifestyle of individuals in various dimensions of life, such as eating habits, sleeping habits, consumption of licit and illicit substances, physical activity, sexual behavior, safety behaviors, and social integration social support, and consumption of culture.

To evaluate well-being, we used a shortened version of the 30 items Scales of Psychological Well-being (SPWB) of Ryff, adapted for the Portuguese population by Fernandes (2007). This version integrates six independent scales consist of indicators for each of the dimensions of wellness model Carol Ryff. The participant is asked to express their level of agreement or disagreement with each of the statements in a Likert scale of five points (1 = strongly disagree to 5 = strongly agree). The total score for each group of items allows analyzing the index of well being in each dimension, while the addition of six partial scores gives rise, according to Fernandes (2007) the indicator of overall psychological well-being.

Procedures

The sample was obtained by convenience sampling method and not random, there is concern that it was homogeneous, the distribution of participants in relation to gender and practice (or not) of regular physical activity. All participants were students at the University of Algarve and expressed their willingness for informed consent to participate in the study.

The collected data were treated statistically and organized by the Statistical Package for Social Sciences (SPSS - version 18) for Windows. The data collected were subjected to exploratory analyzes, descriptive and correlational, to achieve the goals of this research, and has assumed a significance level of 95%, since it is the value used in scientific investigations in this area. In particular, regarding the statistical treatment, we used descriptive statistics to present the results of different statistical parameters considered (eg, mean and standard deviation for

numerical variables and frequency and percentage values for the respective variables in nominal scale). In order to analyze the differences between groups, the various independent variables, we turn to inferential statistics, including variance analysis by One Way ANOVA and T-test.

RESULTS

In Table1, we present the mean, standard deviation, maximum and minimum of the variables of lifestyles and psychological well-being. We observed that the results obtained in items QEV have an average overall 115.64 (SD = 12.63) and with the values vary between a minimum 75 and a maximum of 144. Note that these values are very similar to those observed in the study instrument validation (Cruz & Carvalho, 2006), with a sample of 514 participants.

Table 1 Descriptive analysis of sample results in scales QEV and SPWB.

Variables	Mean	Standard Deviation	Minimum	Maximum
Lifestyles	115.64	12.63	75	144
Overall PWB	116.92	11.12	62	142
Autonomy	18.96	2.91	10	25
Environment Mastery	18.00	2.42	10	25
Personal Growth	21.47	2.32	12	25
Positive Relationships with Others	19.91	2.61	7	25
Purpose in Life	18.99	3.08	11	25
Self-Acceptance	19.59	2.90	8	25

Secondly, we observe that the results obtained by participants in the variables of psychological well-being (PWB) are tend to score closer to the maximum that was possible. Even the maximum theoretical variance is achieved in the six dimensions of PWB. The two dimensions that have lower minimum results are positive relationships with others and self-acceptance. The highest mean score is obtained in the size of personal growth (M = 21.47, SD = 2.32) and lowest in environment mastery dimension (M = 18.00, SD = 2.42). As global wellness has an average score of 116.92 (SD = 11.12), for a minimum 62 and a maximum value of 142.

Comparing the results obtained by our sample with the results observed in the validation study of the reduced version of the SPWB, we find the average measure of overall psychological well-being of the participants in our study is slightly higher than that observed by Fernandes (2007), 116.9 against 115.3. Identical result is observed in the dimensions of personal growth and life goals, while the values are slightly lower in our study participants on the dimensions of autonomy and the environment mastery.

Aiming to verify the extent to which different levels of lifestyles influence and interact with the psychological well-being, we divide the total results in QEV into three different groups. We considered that the group with results below 100 points corresponds to the low level; the group with scores between 110 and 125 points corresponds to the medium level; and the group results with more than 125 points with high, the highest level of lifestyles. The Table 2 shows the distribution of the results of psychological well-being in terms of three levels of Lifestyles. Overall, we can see that the highest values of the variables of psychological well-being are in marked tend representative group of lifestyle considered more healthy.

In detail we can see that the group of participants with the highest score in lifestyles (over 125 points) presents higher scores on the global measure (M = 123.00, SD = 10.40) and in all dimensions of psychological well-being - autonomy (M = 19.4,; SD = 2.84), the environment mastery (M = 19.05, SD = 2.08), the positive relations with others (M = 20.56; SD = 2.61), the

purpose in life (M = 21.15, SD = 2.26) and self-acceptance (M = 20.74, SD = 2.82) - except for the dimension of personal growth, in which the highest value is observed in the intermediate group (M = 21.40, SD = 1.90).

Table 2: Mean, standard deviation and variance analysis of results of psychological well-being in terms of three levels of scores in lifestyles.

PWB	Total scores in QEV							
	Below 110 points (n = 36)		Between points 110 and 125 (n = 98)		Over 125 points (n = 39)			
	M	SD	M	SD	M	SD	F	*p*
Overall PWB	113.41	13.97	116.15	8.82	123	10.40	9.149	.000
Autonomy	18.78	3.50	18.84	2.63	19.49	2.84	.807	.448
Environment Mastery	17.20	2.75	17.96	2.24	19.05	2.08	6.606	.002
Personal Growth	21.15	3.08	21.40	1.90	22,03	2.23	1.598	.205
Positive Relationships with Others	19.63	3.51	19.79	2.05	20.56	2.61	1.604	.204
Purpose in Life	17.80	3.07	18.69	2.97	21.15	2.26	15.568	.000
Self-Acceptance	18.85	3.66	19.48	2.36	20.74	2.82	4.862	.009

The comparative analysis of the means and standard deviations, by applying the One Way ANOVA test, confirms the existence of statistically significant differences in overall psychological well-being (F = 9.149, $p \leq .000$), the environment mastery (F = 6.606, $p \leq .000$), the dimension of life goals (F = 15.568, $p \leq .000$) and in dimension of self-acceptance (F = 4.862, $p = .009$).

Using the contrast method for multiple comparisons, Bonferroni test, we found significant differences at $p < .05$ in all possible dimensions and in all cases in favor of the representative group of lifestyles with higher score. Specifically, the dimensions of the field of environment ($p = .001$; $p = .045$), goals of life ($p \leq .000$; $p \leq .000$) and overall measure of psychological well-being ($p \leq .000$; $p = .002$) between the representative group of lifestyles with the highest score and the other two groups (respectively, below 110 points, and between 110 and 125 points). In the dimension of self-acceptance among the representative group of lifestyles with higher score and representative group index lifestyles lower ($p = .007$).

In the Table 3 is presented the distribution of results in psychological measures studied as a function of practice, or not in regular physical activity. Overall, we found that participants practicing regular physical activity have higher scores on the variables of psychological well-being and lifestyles, compared to participants who do not practice.

Table 3: Mean, standard deviation and variance analysis results in lifestyles and psychological measures in the light of regular physical activity (RPA).

	Practice RPA (n=94)		Does not practice RPA (n=89)		Variance	
Variables / Dimensions	**M**	**SD**	**M**	**SD**	**t-test**	***p***
Lifestyles	119.73	10.82	111.31	13.01	4.767	.000
Overall PWB	118.10	11.87	115.68	10.19	1.476	.142
Autonomy	18.95	3.02	18.98	2.82	- .071	.944
Environment Mastery	18.50	2.44	17.47	2.30	2.929	.004
Personal Growth	21.69	2.31	21.24	2.33	1.326	.186
Positive relationships	19.9	2.8	19.9	2.3	- .157	.876
Purpose in Life	19.27	3.02	18.71	3.14	1.222	.223
Self-Acceptance	19.82	3.07	19.35	2.69	1.099	.273

Abbreviations: RPA - regular physical activity

However, the comparative analysis of values for physical activity, by applying the t-test, we found only two statistically significant at $p < .05$, favorable to participants practicing regular physical activity. A measure of the lifestyles ($t = 4.676$, $p \leq 0.000$) and another in the environment mastery dimension ($t = 2.929$, $p = .004$) of psychological well-being,

Although variations between those who practice regular physical activity and those who do not practice, they are not very expressive, and therefore not statistically significant (except environment mastery, cited above), we should not underestimate the tendency for an average superiority of those who practice activity physical regularly, either in overall PWB or most of its dimensions.

Cid et al. (2007) reported that, nowadays, there is ample scientific evidence that regular physical activity has unquestionable benefits for the physical and psychological health, which in turn are causing a significant impact on the welfare Overview of the subject, regardless of age. Moreover, Brownell (1995), states that, besides the physiological benefits, exercise generates positive psychological effects such as improved mood state, reduce stress, increase self-esteem due to improved self-efficacy and cognitive schemes that favor reasoning optimistic.

Our study is based on the relationship between three sets of variables: the practice of regular physical activity, life styles and psychological well-being, together with its various dimensions. As such, the study of the correlations of these variables it is essential to try to be able to better understand the nature and magnitude of the associations between these measures in our sample.

Continuing the analysis of results, we consider necessary to assess the associations between variables under study, even at the level of its dimensions. Accordingly, we used the Pearson correlation coefficients, since these ratios reflect different degrees of association and allow us clarify the characteristics of the relationships observed.

By reading table 4 we verified that for the group of participants in the sample who claims to practice regular physical activity, the variable lifestyles presents moderate correlation coefficients with the dimension of purpose in life ($r = .49$, $p \leq .000$) , and with the weak overall PWB ($r = .35$, $p = .001$) and with dimensions: environment mastery ($r = .20$, $p = .049$), positive relations with others ($r = .23$, $p = .024$) and self-acceptance ($r = .24$, $p = .020$). In terms of relationships between the various dimensions of psychological well-being found that associations go in the expected direction, however, with some higher intensity in the sample of practicing regular physical activity.

In particular, we note the following: the extent of autonomy has strong correlations with the overall PWB ($r = .68$, $p \leq .000$), with moderate dimensions self-acceptance ($r = .56$, $p \leq .000$), the environment mastery($r = .50$, $p \leq .000$), personal growth ($r = .41$, $p \leq .000$) and weakly with purpose in life scale ($r = .28$, $p = .006$); the size of the field of medium correlates strongly with the overall PWB ($r = .78$, $p \leq .000$) and with the self-acceptance dimension ($r = .64$, $p \leq .000$) and moderately with personal growth ($r = .56$, $p \leq .000$) and purpose in life ($r = .50$, $p \leq .000$)., the dimension of personal growth correlates strongly with the overall PWB ($r = .73$, $p \leq .000$), moderately with self-acceptance ($r = .52$, $p \leq .000$) and positive relationships with others ($r = .40$, $p = .024$) and with low intensity with purpose in life ($r = .32$, $p = .002$), the magnitude of positive relationships with other correlates moderately with the overall PWB ($r = .52$, $p \leq .000$) and with weak intensity with the purpose in life ($r = .27$, $p = .009$) and self-acceptance ($r = .26$, $p = .012$), the size of the purpose in life correlates strongly with the overall PWB ($r = .70$, $p \leq$

.000) and moderately with self-acceptance (r = .57, $p \leq .000$), and the extent of self-acceptance is correlated with a coefficient very strong with the overall PWB (r = .84, $p \leq .000$).

In the analysis of the same table, but now as to the results obtained by participants who do not practice regular physical activity, the overall PWB, nevertheless correlate strongly with all its dimensions, but this has not made a significant association with the lifestyles what happens, and also individually with each of the dimensions of psychological well-being, with the exception of the relationship of purpose in life (r = .27, p =. 009) with the lifestyles. The dimension of self-acceptance is a behavior similar to that observed in the overall PWB. All other dimensions of the PWB show a general reduction in correlation coefficients between the different dimensions of the PWB, despite some associations continue to show statistically significant coefficients with indices.

Table 4: Matrix of correlations between variables of the psychological well-being and the lifestyles: the relations in the sample of practitioners of regular physical activity and non-practitioners.

	1	2	3	4	5	6	7	8
1. Lifestyles	-	0.18	.20*	.11	.23*	.49***	.24*	.35**
2. AU	-.00	-	.50***	.41***	.12	.28**	.56***	.68***
3. EM	.11	.18	-	.56***	.18	.50***	.64***	.78***
4. PG	.12	.29*	.22*	-	.40***	.32**	.52***	.73***
5. PR	.04	.03	.29**	.28**	-	.27**	.26**	.52***
6. PL	.27*	.15	.40***	.34**	.26*	-	.57***	.70***
7. SA	.19	.36***	.48***	.50***	.38***	.48***	-	.84***
8. Overall PWB	.20	.53***	.64***	.66***	.54***	.70***	.82***	-

**P<0.05; **P<0,01; ***P<0.001*

Abbreviations: Lifestyles = total scale lifestyles; dimension AU = autonomy; EM = Environment Mastery; PG = personal growth, PR = positive relations; PL = Purpose in life; SA = self-acceptance; Overall PWB = total scale psychological well-being.

Note. Practice Physical Activity Regular: n = 94; Not Practice Physical Activity Regular: n = 89

Correlations of Sample Practitioners of regular physical activity are shown above the diagonal. Correlations of the non-practitioners group are shown below the diagonal.

Table 5 shows the means and standard deviations of the results by standard physical activity. We distribute participants' responses into four groups: the group of participants who did not perform physical activity or intends to do so, the group of participants who do not realize but ponders come to perform, the group of participants who already perform a physical activity but so casual, and the group of participants who have regular physical activity.

Looking at Table 5, we note regarding the relationship between physical activity pattern above and the average value achieved in lifestyles, it grows depending on the pattern of physical activity requires greater amounts of physical activity. It is observed that the lowest value is recorded by students who said they did not carry out any physical activity nor intend to come to realize it (M = 108.50, SD = 14.75) and the highest for the group of students who said physical activity regularly (M = 122.19, SD = 10.34). The application of parametric test One way ANOVA confirms the statistically significant difference between these variables (F = 10.398, $p \leq 0.000$). Using the contrast test for multiple comparisons Tukey HSD, in order to verify the relationships of the different possibilities, we realized that whoever does not practice and does not intend to come practice any physical activity have statistically significant differences in the results of lifestyles, who performs occasionally ($p = .034$) and for those who regularly performs ($p \leq .000$)

Table 5 : Mean, standard deviation and variance analysis results in lifestyles and in psychological measures as a function of the standard physical activity.

Variables	Does not perform, nor intends to do so (n=34)		Not done, but considering coming to perform (n=64)		Performs occasionally (n=33)		Performs regularly (n=52)			
	M	SD	M	SD	M	SD	M	SD	F	*p*
Lifestyles	108.50	14.75	113.48	11.37	116.85	11.09	122.19	10.34	10.398	.000
OPWB	113.94	14.03	117.20	10.15	115.60	10.81	119.38	10.01	1.856	.139
AU	19.12	3.54	18.86	2.69	18.15	2.71	19.50	2.81	1.508	.214
EM	17.91	3.03	17.77	2.20	17.39	2.09	18.73	2.31	2.544	.058
PG	20.53	2.82	21.66	2.12	21.61	2.49	21.77	1.98	2.364	.073
PR	19.15	3.00	20.20	2.23	20.30	2.36	19.81	2.87	1.521	.211
PL	18.15	3.42	19.13	2.94	18.94	3.05	19.42	3.03	1.234	.299
SA	19.09	3.06	19.59	2.79	19.21	2.97	20,15	2.85	1.185	.317

Abbreviations: Lifestyles = total scale lifestyles; dimension AU = autonomy; EM = Environment Mastery; PG = personal growth, PR = positive relations; PL = Purpose in life; SA = self-acceptance; Overall PWB = total scale psychological well-being.

In the measures of psychological well-being observed a tendency distribution identical result, however, according to the statistical tests applied the differences were not statistically significant.

DISCUSSION

The data we obtained in terms of daily commuting between home and campus, seem to indicate that the transport type or form of displacement of the study participants in this path, may be more associated with the distance between the two locations, as well as socio-economic status the students to be a behavior associated with a particular lifestyle or suggest any bearing on whether or not to exercise regular physical activity. The results observed at sample seem to indicate satisfactory levels of Lifestyles more positive, as well as for positive index of overall psychological well-being.

The results in the distribution of rates of psychological well-being by the three levels of lifestyles that define seem to indicate unequivocally that the participants in our study with healthier lifestyles show better psychological well-being. Already Blasco, Capdevila, Pintanel, Valiente & Cruz (1996), addressing this issue, we are told that the demonstration, in several studies, the positive correlation between maintaining active lifestyles and the availability of better health status and well-be fostered a growing interest of the scientific community in the development of aspects relating to knowledge and understanding of the factors that determine which individuals maintain active lifestyles.

The analyzed data also appear to show that the participants in our study who practice regular physical activity adopt lifestyles more positive as opposed to those who do not practice regular physical activity, and suggest that individuals who practice regular physical activity show improved capabilities for handle situations related to the domain of the environment where they operate. Implicit, then, a greater ability to develop a set of complex activities, at work, family and personal, ie describes individuals with more ability to develop a range of interests beyond their own personal sphere.

The analysis of correlation coefficients suggest a statistically more relevant between the lifestyles and psychological well-being in a sample of participants who reported regular physical activity. This correlational analysis seems to support the assertion Tower (1998), which argues that physical activity should be considered as a critical component of a healthy

lifestyle, to the extent that the realization of systematic physical activity and with some intensity, is a factor of protection of health and prevention of various disorders thereof by the important physiological and psychological benefits associated with exercise.

Overall our results seem to go in the same direction as observed in other studies. In other words seem to suggest a positive association between maintaining active lifestyles and healthy with the existence of better psychological states of welfare and affirmative answer to the fundamental question of our study: the practice of regular physical activity is positively associated with well-psychological wellbeing and the adoption of healthy lifestyles of students in Portuguese higher education?

In summary, the results seem to suggest that the participants in our study who practice regular physical activity adopt lifestyles more positive, as opposed to those who do not exercise regularly, have higher levels of psychological well-being and best environment mastery Given the positive relationship observed between physical activity and lifestyle and psychological well-being of college students, the psychological well-being describes structural features of positive psychological functioning, and that describes the lifestyles and behaviors tend to be stable sustainable, then our results seem to suggest that for the older adult, maintaining an active lifestyle should be understood as one of the keys to healthy aging.

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