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## A STUDY REGARDING THE NEOPHILIA OR THE TENDENCY TOWARDS NOVELTY FOR TWO TYPES OF STUDENTS – PARTICIPATING AT THE PHYSICAL EDUCATION LESSONS AND WITH MEDICAL EXEMPTS

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### Abstract

**Problem Statement:** Through the present research, we aim to bring to the fore a much debated, but less approached subject in practice, regarding a less studied aspect, namely neophilia or the tendency towards novelty during university studies, and the connection between neophilia and the Physical Education lesson or medical exemption.

**Purpose of Study:** This research has been undertaken within Physical Education and Sports lessons from the Petroleum-Gas University, Ploiești on a group of 80 students: (53 students enrolled in the second year of study, who have promoted the Physical Education modules; 27 students enrolled in the second year of study who have promoted as being students with medical exempts), we emphasize the fact that all students are enrolled in the Letters and Sciences Faculty. We also mention that groups were randomly selected. The only criterion which was taken into account was that the students had to be enrolled in the same Faculty (Letters and Sciences) and that they had promoted the modules during the two years, so that they have similar preoccupations, aims and leisure time activities.

**Research Methods:** The bibliographic study method; The observation method; The enquiry method (conversation, a questionnaire entitled “Do you fancy new experiences?” or “The Neophilia Scale”, etc.); The statistical-mathematical method; The graphical method.

**Findings:** For the research, we started from the hypothesis according to which the tendency towards neophilia, towards change is manifested according to the student’s type (participating at the Physical Education lessons or with medical exempt), due to the fact that they perceive differently the states of anxiety, depression, they can overcome psychological barriers and they find solutions to discover happiness, according to the type of preoccupation, as physical exercise could be the engine which enables or disables the thirst of knowledge and the tendency towards novelty.

**Conclusions:** Physical Education lessons and not having a medical exempt appears to be the amazing engine which offers new openings, experiences, thus determining an increase with a positive impact over the tendency towards the change of students in the future.

**Key words:** neophilia, student, medical exempts, Physical Education, lesson.

### Introduction

“If, until present days, the desire of constantly searching for novelty was associated with certain personality problems, alcohol or drug addictions, now researchers see this trait as beneficial for the individual” (Internet- [www.descopera.ro/.../9237028-au-fost-identificate-trei-trasaturi-ale-pers...pg.1](http://www.descopera.ro/.../9237028-au-fost-identificate-trei-trasaturi-ale-pers...pg.1)) and they refer to it as neophilia, namely the tendency towards change, towards the search for novelty. “There are ... also people who have few psychological barriers to surpass. Practically, they do

not suffer from anxiety and depression, and have interpersonal abilities, necessary for the establishment of connections with others” (Janda L., 2012, p. 202). I mention that when I started the research I took into consideration the fact that „In modern education, the teacher’s issuing role is more relaxed as long as the student has unlimited access to other sources of information (especially television and internet). The teacher is obliged to use often the role of receiver to enhance the role of issuing and develop communication.”(Oprea V., Vaida M., 2010,



p. 251), )...,In Romania“physical education is an important component of global education.” (Gevat C, Larion A.,Sabău E., Niculescu G.,2012,p.331) and that certain assessment made by specialists which represented a challenge regarding the human being’s need for novelty in general, which is supposed that it would “ ... decrease to half between 20 and 60 years”, reason for which I aim to bring to the fore a much debated issue, but less approached in practice, regarding an aspect connected to the neophilia – or the tendency towards novelty, and whether it decreases or not starting with the age of 20 and, moreover, the manner in which novelty is regarded in the college period. Furthermore, I will discuss the connection between neophilia with the Physical Education lesson and with medical exempts from the module, taking into consideration the fact that students develop in a different manner, according to their typology or to the activity they have (they participate at Physical Education lessons or they have medical exempts).“ ... According to the typical development sequences” (Epuran M., Stănescu M.

2010, p. 149), described by Epuran M., Stănescu M., it is known that three essential factors in development, namely heredity, environment and education, offer a multi-factorial complexity to the human being at the peak of the development process, but, in spite of this, “a fulfilled life is ensured by three other personality traits: transcendence, novelty-neophilia and perseverance.” “Lately, scientists discovered that the tendency towards change depends only partially on the genetic material and that part of the *guilt* pertains to the social context” (Internet-[www.descopera.ro/.../9237028-au-fost-identificate-trei-trasaturi-ale-pers...p.1](http://www.descopera.ro/.../9237028-au-fost-identificate-trei-trasaturi-ale-pers...p.1)), therefore the challenge is complete in order to follow the manifestation of neophilia for the two types of students participating at this research, especially that “The formative nature of physical education is well defined in the perception of students regarding the subjects’ preparation for life, this activity being considered pleasant and an attractive form for the maintenance of health, influencing positive relationships with other individuals.” (Vaida M., 2011, p. 561)

### Research Purpose

For our research, we followed, according to the subject, the following aspects:

- The implementation of a questionnaire entitled “Do you enjoy new experiences?” or “The Neophilia scale”, through which we are able to provide relevant data regarding the subjects’ physical activity and the perception of new experiences according to the student’s type (participating at Physical Education lessons or having medical exempts);
- The group participating in the research and its arrangement according to the questionnaire implemented;
- The classification of scoring indicators for the measurement;

### Research objectives

**Presenting** the objectives which laid at the basis of this research:

- Identifying the differences occurred as a consequence of neophilia – or the tendency towards novelty, according to the student’s type (participating at Physical Education lessons or having medical exempts);

### Research Hypothesis

- Performing the inversion of the score, according to the requirements from the questionnaire, and registering the data;
- Identifying the possible differences occurred in relation to the student’s type (participating at Physical Education lessons or having medical exempts), because it is possible that they perceive differently and that discrepancies occur;
- Identifying causes which led to the possible differences of the indicators between the two researched groups.

- Identifying causes which led to the possible neophilia for the two researched groups;
- Analysis of the contexts in which neophilia determines differences between the two researched groups.

In our research, we started from the hypothesis according to which the tendency towards change



(towards neophilia) is manifested differently, according to the student's type (participating at Physical Education lessons or having medical exemptions), due to the fact that they perceive differently states of anxiety, depression, and they are able to overcome their psychological barriers, and

### Operational approach and subjects involved

This research has been undertaken within Physical Education and Sports lessons from the Petroleum-Gas University, Ploiești on a group of 80 students: (53 students enrolled in the second year of study, who have promoted the Physical Education modules; 27 students enrolled in the second year of study who have promoted as being students with

### Research methods

1. The bibliographic study method (it was studied both in the local and foreign literature);

2. The observation method, the enquiry method, with a questionnaire entitled "Do you fancy new experiences?" or "The Neophilia Scale",

### Results obtained and their interpretation

When we started the research, before implementing the questionnaire, we took into consideration one of Robert Cloninger's statement, a psychiatrist who developed tests to measure this tendency (he referred to neophilia), through which he claims that "the desire to always seek novelty is one of the traits that keep us healthy and happy and that, with age, promotes the development of our personality. It can lead to the formation of antisocial behavior, but if we combine this with perseverance, desire for adventure and curiosity; if we become aware that the world is not just about us as singular individuals, then this trend can develop our creative side, resulting in a progress of society" (Internet - [www.descopera.ro/.../923708-au-fost-identificate-trei-trasaturi-ale-pers...](http://www.descopera.ro/.../923708-au-fost-identificate-trei-trasaturi-ale-pers...) p. 1). This research has been undertaken within the Petroleum-Gas University, Ploiești on a group of 80 students, as following: 66.25%, namely 53 students enrolled in the second year of study, who have promoted the Physical Education modules, being able to participate at Physical Education lessons and being actively involved in all modules, and 33.75%, meaning a number of 27 students enrolled in the second year of

they find solutions to discover happiness, according to the type of preoccupations, motion being maybe the motor which would activate or deactivate the thirst for knowledge.

medical exemptions), we emphasize the fact that all students are enrolled in the Letters and Sciences Faculty. We also mention that groups were randomly selected. The only criterion which was taken into account was that the students had to be enrolled in the same Faculty (Letters and Sciences) and that they had promoted the modules during the two years, so that they have similar preoccupations, aims and leisure time activities.

3. The measurement and recording method;
4. The scoring, data inversion and points addition method;
5. The statistical-mathematical method (score-percentile);
6. The graphical method.

study who have promoted as being students with medical exemptions. **Important to know!** The research undertaken for "A Study Regarding the Neophilia or the Tendency Towards Novelty for Two Types of Students – Participating at the Physical Education Lessons and with Medical Exempts" described is a research which aims, in the present moment, to be an observation study, this being the reason why the number of subjects is not very large, and the objectives are not very many, due to the fact that it represents a first step for a larger study in the future. "The pupil/student must have initiative and take responsibility, value the experience in the learning process." (Oprea V., 2012, p. 426). Considering all the above, I started the study on the group composed of 80 students enrolled in the second year of study, on which I implemented the questionnaire entitled "Do you fancy new experiences?" or "The Neophilia Scale". The questionnaire is composed of 38 items, and is a valid and verified questionnaire pertaining to Janda L. "Twenty four Personality tests", (Janda L., 2012, p. 199-201). At the beginning of the questionnaire, students were informed that the entire application was confidential, and that they should not



write their names, honesty being essential. Then I explained to all subjects the content of the questionnaire, how to answer the items, the fact that the answering options belonged to them, which are the recognition indicators of the questionnaire, which are the scoring methods, for the next items: 1, 3, 5, 7, 11, 14, 15, 18, 19, 21, 24, 25, 26, 27, 28, 33, 35, 37, 38; I explained to them how the score is reversed (example: 5= 1, 4= 2, 3= 3, 2= 4, 1= 5). After this step, they were supposed to add all the points. For each question there were five answering choices, according to a scoring scale. The scoring and points given for the chosen options was made in the following manner: 5 = strongly agree; 4 = agree; 3 = neither agree, nor disagree; 2 = disagree; 1 = strongly disagree.

After checking the answer, we calculated the score for each answer in percentiles. The data regarding the value of the answer indicated and the manner of scoring them was announced after the questionnaire had been completed, in order not to influence the students' answers.

The next step was to reverse the score for the given questions (5= 1, 4= 2, 3= 3, 2= 4, and 1= 5), and for items 1, 3, 5, 7, 11, 14, 15, 18, 19, 21, 24, 25, 26, 27, 28, 33, 35, 37, 38 we calculated the score according to the answer checked by each student, then we differentiated all questions and we observed that there is a structure in the questionnaire composed of two sequential phases, namely:

➤ **Sequence I – Reversed scores** (5= 1, 4= 2, 3= 3, 2= 4, and 1= 5);

➤ **Sequence II – The rest of the questionnaire items.** (1, 3, 5, 7, 11, 14, 15, 18, 19, 21, 24, 25, 26, 27, 28, 33, 35, 37, 38).

After reversing the score for questions (5= 1, 4= 2, 3= 3, 2= 4, and 1= 5), we added the points in order to have concrete data regarding the neophilic behaviour, both for students who promoted with medical exempts, and for students who promoted the Physical Education modules, being able to participate at Physical Education lessons and being actively involved in all modules, we added the score from other items and we obtained the following statistical indicators, according to data in Table no. 1.

**Table no. 1** Statistical indicators registered after the implementation of the questionnaire

Questions addressed to the two groups of students on the implementation of the questionnaire, who are part of the reverse scoring category	Registered statistical indicators			
	Students who have passed the Physical Education modules (S.P.M.E)		Students who have passed with medical exempts (S.M.)	
	Answers %	Percentiles	Answers %	Percentiles
<b>Sequence I – reversed scores.</b> Reversing the score for questions: 5= 1 5. The structure of our society should change less than now = 1; I consider that there should be fewer changes; 4= 2, 4. When thinking about going on vacation, I tend to choose unusual and exotic places = 2; I do not feel good when things remain the same, for a long period of time; 3=3	43 students-53.75% of total ~ 125-130 points	~ 50-70 percentiles	19 students -23.75 % of total ~112-116 points	30 percentiles
<b>Sequence II - The other items in the questionnaire.</b> 1, 3, 5, 7, 11, 14, 15, 18, 19, 21, 24, 25, 26, 27, 28, 33, 35, 37, 38 (Important! The questionnaire has 38 items, the space available for conference does not permit detailing each one of the items, reason for which one will not find details on each one, as the items are only interpreted, the remaining information for those interested to <i>observe in detail the working technique are elaborated in Janda L.'s book, (2012, p. 199-201)</i>	10 students-12.5% of total 138 points	80 percentiles	8 students - 10 % of total 110 points	15 percentiles
Total = 80 students / 100%	53 students-66.25 %		27students-23.75 %	≠ 15



38 items ≠ difference Maximum score = 140 points / 85 percentiles	≠ 8-13 points	≠ 10- 30 percentiles	≠ 2-6 points	percentiles
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As a consequence of this analysis, we observed that, instead of two groups (two types) that we considered to have at the beginning of our research, the group separated into four categories of individuals, two types for each category (A.; B.), and that the group divided as following:

**A. Students of the second year, who have promoted Physical Education modules participating at all Physical Education lessons.**

From this category, we had two other types of individuals:

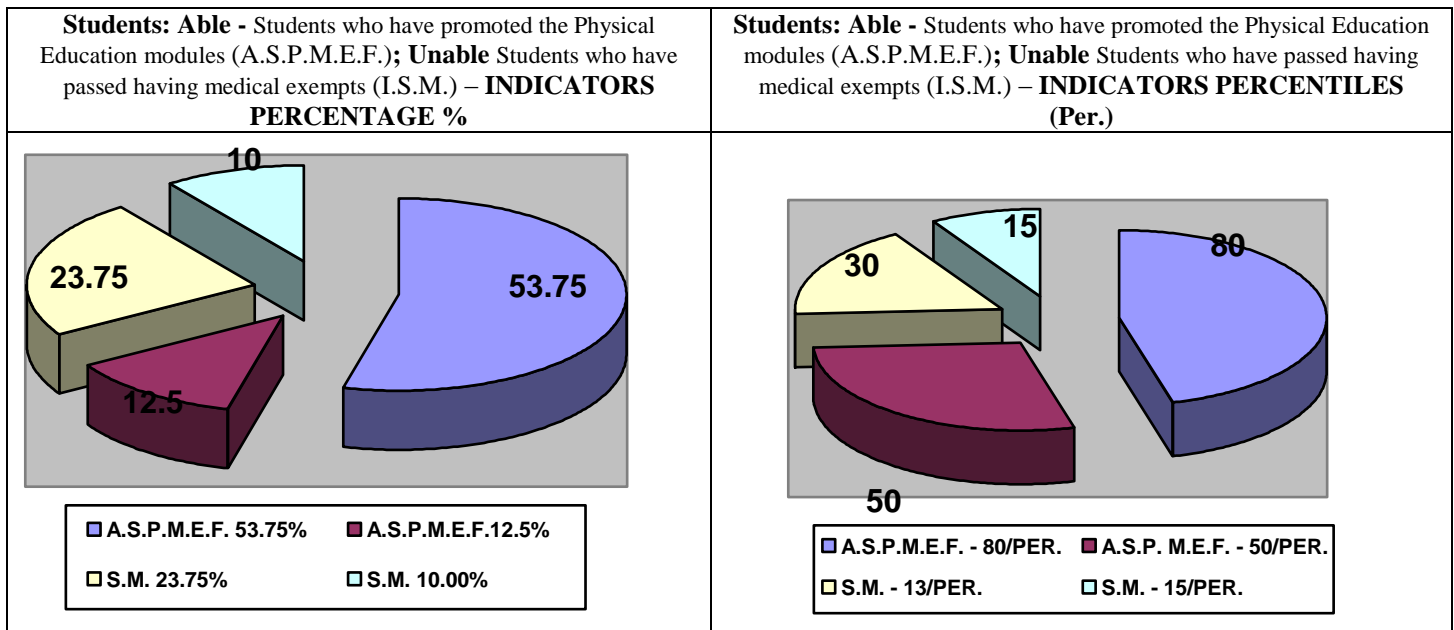
- **Type 1.** Represented by 10 subjects, namely a percentage of 12.5% who pertain to this group, and were close to the maximum score of 138 points, gathering, after the addition of points 80 percentiles;

- **Type 2.** Represented by 43 students, namely a percentage of 53.75% who recorded between 125-130 points, which is equal to a value between 50-70 percentiles.

**B. Students of the second year, who have promoted Physical Education modules by having medical exempts.**

From this category, we had two other types of individuals:

- **Type 3.** Represented by 19 students (23.75%) who had a score between 112-116 points. This score is valid for the value of 30 percentiles
- **Type 4.** Derived after scoring with a percentage of 10 %, namely 8 students who obtained only 110 points and the equivalent of 15 percentiles.



**Graph No. 1. Representative graphs presented as compared to the two groups of students:**  
**Able** - Students who have promoted the Physical Education modules (A.S.P.M.E.F.) – **Indicators in percentage % (to the left);**  
**Unable** Students who have promoted having medical exempts (S.M.) – **Indicators in percentiles (Per.)-(to the right).**



Considering the data recorded in Table and Graph no. 1, we conceived an analysis, according to the statement of the two scientists who studied in detail the phenomenon of neophilia, Walker and Gibbins, and we observed the results obtained from our research, therefore stating that the two categories of students (A.; B.) present many differences, namely:

**- Students of the second year (category A), who have promoted Physical Education modules participating at all Physical Education lessons** have higher scores, according to “the Neophilia Scale”, and according to the interpretation of Walker and Gibbins, they possess the capacity of concentrating on the “the big picture” in life and make “errors of inclusion” (Janda L., 2012, p. 203);

**- Students of the second year, who have promoted Physical Education modules by having medical exempts** have lower scores, according to “the Neophilia Scale”, and according to the interpretation of Walker and Gibbins, they “prefer specific details instead of the bigger picture, and are more exposed to errors of exclusion” (Janda L., 2012, p. 203).

If we fathom the research analysis, reporting both to the study of the two researchers, Walker and Gibbins, and to what we found by comparing the two groups of students, namely students who have low scores (group B) and who are considered to “... avoid new information due to a preservation instinct”, with students who have high scores (group A) and who “... easily accept social change, accept personal change and are willing to take risks in order to have new experiences” (L. Janda, 2012, p. 203), therefore confirming the research hypothesis, according to which the trend towards neophilia, towards change is manifested differently depending on the type the student pertains to (participant at Physical Education lessons or having medical exempts), because when motor activity is practiced systematically, it influences individuals and they tend to perceive differently anxiety, depression, they can overcome mental barriers and find solutions in order to discover their identity, depending on the type of their preoccupations (some practice Physical Education by evolving from a cognitive-emotional point of view through activities performed, while others are “stuck” on a bench without evolving in the absence of an incentive), as Physical Exercise has an important role in the university syllabus, and it could be the engine which enables or disables the thirst of knowledge

(neophilia) and the tendency towards finding a purpose in life of individuals.

We believe that this personality trait, this side of human personality, this desire for novelty, starts to shape even from the first lesson of Physical Education taken by the child, who shall later become a curious adult, with a thirsty mind, eager to experience and find new information that would help him/her sharpen his/her mind, due to the fact that only in physical activities systematically practiced, at least two times per week, the playful sense is developed as well as the desire of discovering what lies beyond the “*first goal scored*”. These aspects, unfortunately, are present only for students who participated at all Physical Education modules starting with the kindergarten, and it is absent for the second category of students (category B, with medical exempts), who have closed, or better said, never opened “this gate” of positive curiosity which can sharpen their senses and offer them the chance of finding a purpose in life at a given time. The phenomenon described above for the two categories of students leads us to the statement of Robert Cloninger, a psychiatrist who developed tests to measure this tendency towards neophilia of young people in general, through which he claims that “the desire to always seek novelty is one of the traits that keep us healthy and happy and that, with age, promotes the development of our personality. It can lead to the formation of antisocial behavior, but if we combine this with perseverance, desire for adventure and curiosity; if we become aware that the world is not just about us as singular individuals, then this trend can develop our creative side, resulting in a progress of society” (Internet-[www.descopera.ro/.../9237028-au-fost-identificate-trei-trasaturi-ale-pers...](http://www.descopera.ro/.../9237028-au-fost-identificate-trei-trasaturi-ale-pers...) p. 1). Neophilia “is an essential experience in finding a purpose in life” (Janda L., 2012, p. 203), as finding the purpose creates an inner balance, and a balanced human in this situation possesses a positive sense of neophilia with constructive-creative valences. Physical Education, with all its complexity and opportunities that it holds (socialization, communication, learning new sports, learning physical exercises, motion games, etc.), is what we consider to be an activity that may stimulate the satisfaction of the need for novelty, thus being a strong point in the support of the field, an alarm signal for the superior interested forums, and one of the many reasons for which Physical Education should not miss from the daily



schedule of children / pupils / students, being necessary more than two lessons per week in schools and more than one module per week in universities. Therefore, "Neophilia characterized by a strong desire for what is new, may be considered an access gate for discovery and creativity." Attention! *All these aspects can be found in the structure of the Physical education lesson!* Winifred Gallagher, a writer in the field of behavioural science considers that the three affective bases required by neophilia are surprise, curiosity and interest. Combined with the capacity of the brain of detecting the surprise element, neophilia gives an advantage for the human adaptation" (The brain's need for novelty - ROMedic,

[www.romedic.ro/nevoia-creierului-pentru-noutate-0P328651](http://www.romedic.ro/nevoia-creierului-pentru-noutate-0P328651), September, 2014). We emphasize that for our research, we had a maximum scoring of 140 points, for this score we had 85 percentiles corresponding, but the reminded score was not reached by neither of the categories of studied subjects, reason for which we believe that this score would be closer for subjects who did or are doing performance sports, but were not present in our researched group. We do not have a confirmation for our statement, therefore this subject is to be further researched in the future, in another study, thus remaining an open matter for field specialists.

### Conclusions

➤ For the research, we started from the hypothesis according to which the tendency towards neophilia, towards change is manifested according to the student's type (participating at the Physical Education lessons or with medical exempt), due to the fact that they perceive differently the states of anxiety, depression, they can overcome psychological barriers and they find solutions to discover their

➤ The desire of constantly searching for novelty was associated with certain personality problems, alcohol or drug addictions, now researchers see this trait as beneficial for the individual;

➤ *Being also an access gate for discovery and creativity*, the tendency towards neophilia, towards change is manifested differently, according to the student's type (participating at the Physical Education lessons or with medical exempt), due to the fact that they perceive differently the states of anxiety, depression, they can overcome psychological barriers and they find solutions to discover happiness, according to their preoccupation, motion being maybe the motor which would activate or deactivate the thirst for knowledge (neophilia) and the tendency towards change, thus confirming the hypothesis;

➤ *Surprise, curiosity and interest are positive effects in the lives of the researched subjects, and we find them as a compensation*, in the structure of the Physical Education lesson, thus explaining its presence in the schedule of pupils / students, certifying that it represents an appropriate trigger for the tendency towards change, towards searching the new;

identity, as in its absence it is possible that these perceptions do not exist.

➤ Physical Education is essential for the daily schedule, being maybe the motor which would activate or deactivate the thirst for knowledge (neophilia) and the tendency towards finding a purpose in life of individuals.

➤ We believe that the desire for novelty, starts to shape even from the first lesson of Physical Education taken by the child, who shall later become a curious adult, eager to experience and find new information that would help him/her sharpen his/her mind, and that these emotions lack for students who have medical exempts.

➤ Physical Education lesson, and not having a medical exempt, appears to be the amazing motor which offers new openings, experiences, thus determining a positive increase over the tendency for change, beneficial for students in the future.

➤ Physical Education, with all its complexity and opportunities that it holds (socialization, communication, learning new sports, learning physical exercises, motion games, etc.), is what we consider to be an activity that may positively stimulate the satisfaction for *neophilia*.

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