## Academic achievement and obesity in children

Health & Medicine



RELATIONSHIP BETWEEN ACADEMIC ACHIEVEMENT AND OBESITY IN

CHILDREN A Research Proposal Obesity is defined as an excessive accumulation of body fat; and according to the data of American Obesity

Association, 15. 3 percent of children within the range 6 to 11 years of age are obese in the USA. The three main determinants of obesity in children are the parental modeling, genetic factors and low energy expenditure.

Although it is relatively easy to hypothesize the relationship between obesity and the daily time spent watching TV, or obesity and the weekly fast-food intake, it is not that easy to hypothesize the relationship between obesity and the cognitive performance of human beings.

This research will explore the relationship between "being a fat child" and "being successful in classroom environment" at fourth grade. The time span of the research will be 15th April 2006 - 30th May 2006. A questionnaire form will be used to collect data from the fourth grade classroom teachers of sample schools from all over the USA.

The definition of "achievement", as the dependant variable of the research, will be set within two main categories namely "successful" and "unsuccessful" although the classroom teachers will be supposed to write down the mean score of all written tests and exams of children within both category, in all courses during the two semesters of the academic year 2005-2006. This is mainly for the aim of preventing teachers from being mistaken and/or subjective, i. e. for the reliability of data.

Although obesity has a concrete medical definition, it has a social meaning as well, as a defining and attributed human condition, even perhaps more important in terms of achievement of a human being at a certain ground of life. Therefore, the definition of " obesity", as the independent variable of this https://assignbuster.com/academic-achievement-and-obesity-in-children/

research, will be "the attribution of the classroom teacher for a given child". A five-degree definition chart will be used to categorize the attribution of the classroom teachers to the children. In order to minimize the possible judgmental/subjective approach of teachers, only the category of "being quite high in weight" selections will be included in the research as obesity, i. e. " being a fat child" variable, and all the other four selections will be categorized as " non-obesity". The categories " being slightly higher or lower" will be set to minimize the judgmental approach by pushing the teachers to be more elaborate in their categorizing activity. Main points behind this approach are, first, to eliminate completely the possibility of harming the children who have weight problems by making current a possibly harming issue; and secondly, to avoid causing children conceptualize that a higher authority is subjectifying them. Selection of the schools will have to be representing the whole country in order to get validity to the research. Six schools will be selected in each city in each state. The schools will be selected with respect to their location mainly one at a lowest socioeconomic " area of the Centrum"/" county", one at a highest socioeconomic " area of the Centrum"/" county" and one medium level socioeconomic " area of the Centrum"/" county" in each city. The principals of the selected six schools in each city of each state will be the main contacts. Researchers will contact with the principals via phone to inform them and to ask for their coordination beginning on the 15th of April 2006, to collect data during the first two weeks of May 2006. Only one fourth grade classrooms will be included in the research, and in case that there are more than one fourth grade class in the school, only one classroom will be selected to include the research in each school, which will be the first in https://assignbuster.com/academic-achievement-and-obesity-in-children/

categorizing order (e. g. Fourth Grade Class A). The selection of the fourth grade is to have a homogeneous population of children as old as being evaluated as an academic performer (not too young) and as young as being defined as an adolescent (in order to keep the hormonal and hormones-related social factors/variables as distant as possible).

The data collected will be about the four main category of the togetherness of the two variables, which are: obese-and-successful, obese-and-unsuccessful, non-obese-and-unsuccessful. Since there is only one independent variable and one two-categorical dependant variable, a binominal test will be sufficient to evaluate the results. Again a binominal test will be sufficient to analyze the difference between boys and girls. The role of the researcher in this research is being the primary contact for the research area, the collector of data and the data analyst.

There are numerous researches done related with the connection between obesity and cognitive potential/performance, however it is not easy to have solid conclusions even through an overall evaluation of the available results. Obesity, as a problematique issue, is a dynamic topic, and the qualitative and the quantitative determinants as well as its statistics are changing rapidly within time. Therefore, the area needs more research to have a complete picture and this research will be another contribution to have a broad solid conclusion either to prevent and to solve the problem by framing and defining a set of data pulled out from a certain community at a certain time. The special contributions of this research will be its exhaustive wideness thanks to its feasibility, and its originality coming from the definitions of variables as teacher attributions, which keeps children definitely away from touch.

## Attachment I

## RESEARCH QUESTIONNAIRE

This is a questionnaire form designed to collect data for a research, which had been designed to evaluate the relationship between obesity and the achievement of children at schools. The form below is supposed to be filled by the fourth grade classroom teachers at the end of the academic year 2005-2006.

Please fill the form below as in the example. Only the initial of the family name of the child will be written next to the name of him/her in the tables. Although the mean score of the children will be numerical in the form, the weight condition of them will only be YOUR PERSONAL SUBJECTIVE JUDGEMENT WITHOUT ANY MEASURING PROCESS. PLEASE DO NOT WEIGHT CHILDREN AND PLEASE DO NOT EVEN ASK ABOUT THEIR WEIGHT. After filling the above tables, please give the form back to the principal of your school.

Example:

Rank

Name of the child followed by the initials of all the other names

Sex

The mean score of all written

tests and exams of the child in all courses during the two semesters of the academic year 2005-2006

Quite

low

in weight

Slightly lower

in weight
Just average
in weight
Slightly higher
in weight
Quite
high
in weight
1st
Samantha M. G.
91. 6
2nd
Chris T.
Eli G.
Male
Female
83. 0
83. 0
CHILDREN HAVING HIGHEST ACHIEVEMENT IN YOUR CLASSROOM
Rank
Name of the child followed by the initials of all the other names
Sex
The mean score of all written
tests and exams of the child in all courses during the two semesters of the
academic year 2005-2006

Quite
low
in weight
Slightly lower
in weight
Just average
in weight
Slightly higher
in weight
Quite
high
in weight
1st
2nd
3rd
CHILDREN HAVING LOWEST ACHIEVEMENT IN YOUR CLASSROOM
Rank
Name of the child followed by the initials of all the other names
Sex
The mean score of all written
tests and exams of the child in all courses during the two semesters of the
academic year 2005-2006
Quite
low
in weight
Slightly lower

in weight
Just average
in weight
Slightly higher
in weight
Quite
high
in weight
1st
2nd
3rd
Date:
Teacher's Name, Family Name:
THANK YOU VERY MUCH FOR YOUR EFFORT AND TIME.