



EFFECT OF FOG ON ENDURANCE CAPACITIES AMONG THE MALE PHYSICAL EDUCATION STUDENTS OF CHAUDHARY DEVI LAL UNIVERSITY, SIRSA”

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ABSTRACT:-

Environment is the surroundings or the environment around us. It consists of the living and non-living things present around us. There are several conditions which sometimes are beyond our control and are the byproduct of natural consequences. The present study is the study on the presence of fog in an environment and its impact on the endurance capacities of the male physical education students of Chaudhary Devi Lal University Sports Department. For the purpose of the study 20 B.P.Ed students with age ranging from 19-25 were selected. The endurance capacity was analyzed using Cooper 12-minute run and walk test. The pre-and post-test data was analyzed using t-test. The level of significance was set at 0.05. The findings of the study concluded that the presence of fog has a negative effect on the endurance capacity of the male physical education students. Therefore, it was recommended that the training of endurance should be avoided during fog.

KEYWORDS: Fog Endurance, Chaudhary Devi Lal University.

INTRODUCTION :

The word 'Environment is taken from the word Endure which means 'neighborhood'. The sum total of all surrounding of living organism, including natural and other things, that develop conditions for development and growth as well as danger and damage. The oxford dictionaries definition of environment is: "The surrounding or conditions in which a person, arrival or plant lives or operates". Environment has various moods as summer, winter, rainy days etc. Fog is a symbol of winter and in fog climate every human being faces some problems during many activities. Fog is a cloud that occurs at ground level instead of in the sky. Fog is made up of tiny droplets of water that float-suspended in the air, but it also may consists of ice particles during very cold conditions the

warmer the air, the more water it can hold. As the air cools, it loses its ability to hold that water. When air cools to so-called dew point, it becomes fully saturated with water vapor.



What is Fog?

Fog is a cloud that occurs at ground level instead of in the sky. Fog is made up of tiny droplets of water that float-suspended in the air, but it also may consist of ice particles during very cold conditions the warmer the air, the more water it can hold. As the air cools, it loses its ability to hold that water. When air cools to so-called dew point, it becomes fully saturated with water vapor. If the air cools any further, it loses the ability to hold all of that water upon and forces some of

the upon to condense around microscopic particles like dust, forming droplets when enough of these droplets form fog is made.

Fog is a cloud that touches the ground. Fog can be thin or thick, meaning people have difficulty seeing through it. Fog shows up when water vapor, or water in its gaseous form, condenses. During condensation, molecules of water vapor combine to make tiny liquid water droplets that hang in the air. You can see fog because of these tiny water droplets. Water vapor, a gas, is invisible.

Effects of Fog on our systems

Fog is basically a low-lying cloud where accumulation of water takes place from local water bodies. Fog rarely lasts longer after sunrise and has no major ill effect other than reducing visibility. But it is when this fog is mixed with other pollutants to form smog that it becomes dangerous for your health.

The main reason for the formation of smog is the increasing air pollution. Air pollutants from cars like Sulphur dioxide, nitrogen dioxide and various industrial pollutants like carbon monoxide, volatile organic compounds, ozone and particulate matter mix with fog to form a dense layer in the atmosphere called smog. Smog tends to linger in the atmosphere throughout the day, giving rise to a variety of ailments.

REVIEW OF RELATED LITERATURE

Mahmood Ahmad (2016), published an article in the newspaper in which he has stated that in the past few years the role of e-health applications has taken a remarkable lead in terms of services and features inviting millions of people with higher motivation and confidence to achieve a healthier lifestyle. Induction of smart gadgetries, people lifestyle equipped with wearables, and development of IoT has revitalized the feature scale of these applications. The landscape of health applications encountering big data need to be replotted on cloud instead of solely relying on limited storage and computational resources of handheld devices. With this transformation, the outcome from certain health applications is significant where precise, user-centric, and personalized recommendations mimic like a personal care-giver round the clock. To maximize the services spectrum from these applications over cloud, certain challenges like data privacy and communication cost need serious attention. Following the existing trend together with an ambition to promote and assist users with healthy lifestyle we propose a framework of Health Fog where Fog computing is used as an intermediary layer between the cloud and end users. The design feature of Health Fog successfully reduces the extra communication cost that is usually found high in similar systems. For enhanced and flexible control of data privacy and security, we also introduce the cloud access security broker (CASB) as an integral component of Health Fog where certain policies can be implemented accordingly. The modular framework design of Health Fog is capable of engaging data from multiple resources together with adequate level of security and privacy using existing cryptographic primitives.

Frank Alexander Kraemer (2017), Fog computing is an architectural style in which network components between devices and the cloud execute application-specific logic. We present the first review on fog computing within healthcare informatics, and explore, classify, and discuss different application use cases presented in the literature. For that, we categorize applications into use case classes and list an inventory of application-specific tasks that can be handled by fog computing. We discuss on which level of the network such fog computing tasks can be executed, and provide tradeoffs with respect to requirements relevant to healthcare. Our review indicates that: 1) there is a significant number of computing tasks in healthcare that require or can benefit from fog computing principles; 2) processing on higher network tiers is required due to constraints in wireless devices and the need to aggregate data; and 3) privacy concerns and dependability prevent computation tasks to be completely moved to the cloud. These findings substantiate the need for a coherent approach toward fog computing in healthcare, for which we present a list of recommended research and development actions.

SIGNIFICANCE OF THE STUDY

- The study may provide help to the male and female Physical Education students who want to check their

endurance capacities.

- The study may provide help to the male and female Physical Education students to check their endurance capacities in the presence of fog in the environment.
- The study may help further to understand the affect of fog on endurance performance.
- The study can be helpful for the coaches and the Physical Education Teachers to understand the affect of fog on the respiratory capacities of the players and to formulate the training sessions during the fog.
- The study may be helpful for the general public to understand the effect of fog on the health.

OBJECTIVES OF THE STUDY

The following was the objective of the study: -

- To compare the mean scores of Endurance capacity among the male Physical Education students in the presence of fog in the climate and in the absence of fog in the climate.

HYPOTHESES OF THE STUDY

Based on the literature gone through following hypotheses were formulated:

- There exists no significant difference in the mean score of effect of presence of fog and effect of absence of fog on the Endurance among the male Physical Education students of Chaudhary Devi Lal University, Sirsa.

DELIMITATION

- The study was delimited to male and female Physical Education students of Chaudhary Devi Lal University, Sirsa.
- The age of the subjects ranged from 19 to 25 years.
- The study was conducted only to graduate/under graduate male Physical Education students.
- The study was delimited to 20 male Physical Education students.

LIMITATIONS

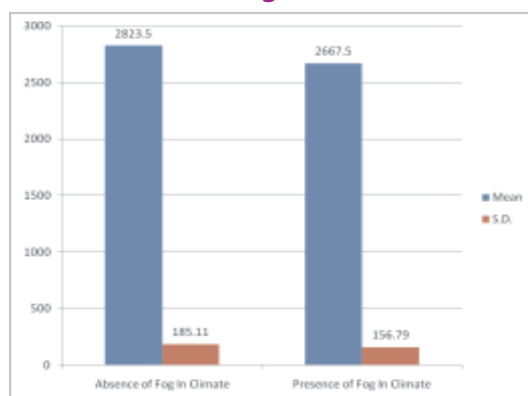
- The investigator was not able to control the other variables such as home environment, daily routine, diet etc which is again a limitation of the study.

Classification of Male Physical Education Students.

Table 4.1

Group	N	Mean	S.D.
Absence of Fog in Climate	20	2823.50	185.11
Presence of Fog in Climate	20	2667.50	156.79

Figure 4.1



The data from the above table & figure 4.1 shows that the mean value of male Physical Education students in Absence of Fog in Climate was 2823.50 and in the presence of Fog in Climate was 2667.50. The S.D. of the Physical Education Students in Absence of Fog in climate was 185.11 and in the presence of Fog in climate was 156.79 which shows that the score of Physical Education Students in the presence of Fog in climate is more uniform.

ANALYSIS OF ENDURANCE CAPACITY OF THE MALE PHYSICAL EDUCATION STUDENTS

Table 4.1.1

Group	N	M	S.D.	Std. Error Mean	DF	't' Value	'p' value	Remarks
Absence of Fog in Climate	20	2823.50	185.11	41.39	38	15.47	.000	Significant
Presence of Fog in Climate	20	2667.50	156.79	35.06				

Interpretation –The mean value of male Physical Education Students whom the Cooper Test was applied i.e. 12 minutes run and walk test in Absence of fog in climate was 2823.50 and in the Presence of fog in climate was 2823.50 and S.D. value of Absence of Fog Climate was 185.11 and in the presence of Fog Climate was 156.79. The standard error of Absence of Fog in Climate was 41.39 and Presence of Fog in Climate was 35.06. The calculated 't' value is 15.47, which is greater than standard table value of 1.68 at degree of freedom of 38. The results are significant at 95% level of confidence. The 'p' value is 0.000 which is less than the level of significance of 0.05.

However, the results were also checked at 0.01 level of significance and it was found that the calculated t value of 15.47 is higher than the table value of 2.428. Therefore, the results are higher significant at 99% level of confidence.

Main Findings

1. The mean value of male Physical Education Students whom the Cooper Test was applied i.e. 12 minutes run and walk test in Absence of fog in climate was 2823.50 and Presence of in Fog climate was 2823.50 and S.D. value of Absence of Fog in Climate was 185.11 and in the presence of Fog in Climate was 156.79. The standard error of Absence of in Fog climate was 41.39 and Presence of in Fog climate was 35.06. The calculated 't' value is 15.47, which is greater than standard table value of 1.68 at degree of freedom of 38. Therefore, the hypothesis was rejected.

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