# ACADEMIA

Academic Paper Published: May 10, 2020 doi: 10.6084/m9.figshare.12277937

# ACHIEVING ORGANISM LONGEVITY THROUGH HYPERGRAVITY A THEORETICAL STUDY

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## ABSTRACT

This paper considers the possibility of achieving organism longevity through hypergravity. This study looks into the behavior of time in different gravitational pulls (otherwise known as G). In this study, it has been observed that the heavier the gravitational pull, the slower time behaves and the lighter, the faster as explained by the gravitational time dilation effect. This study believes that if an organism exposed to a heavier environment will have a longer lifespan relative to that of a lighter environment. The reason as to such belief is that if the growth of an organism is slowed down, it would take longer to decease. Essentially all organisms have a "limit" and that limit will be hit over time. To prolong life, what we can do is delay the time of growth that will hit that limit. However, it is in assumption that the organism is retaining all the necessary nutrients to survive. Other factors that can contribute to an early death is not considered in this paper.

Keywords: Hypergravity, Longevity, Gravitational pull

# INTRODUCTION

This study wishes to take advantage of the gravitational time dilation effect to simulate an environment where hypergravity is present. According to (Kennel, 2015) This effect measures the amount of time that has elapsed between two events by observers at different distances from a gravitational mass. In other words, time runs slower wherever gravity is strongest,

and this is because gravity curves spacetime. With the definition of (Kennel, 2015) it is said that time runs slowest in such hypergravitational environment.

So theoretically speaking, aging will take longer in a hypergravitational environment relative to that of a microgravitational environment. This study also theorizes that an organism's biological clock is influenced by the gravitational field it is exposed upon



Figure 1 – Earth's varying magnetic field

relative to that of which is exposed to another gravitational field. Meaning an organism will live longer in a slightly heavier environment than that of a lighter environment.

# How are we going to prolong life?

Essentially, all biological organisms have a "limit" and that limit is hit over time. To prolong life, is to basically delay the time for an organism to hit its limit. Hypergravity slows down time, so it is a solution to delaying the time to hit such limit.

However, according to (Minois, 2006) too much of hypergravity is not beneficial but rather damaging to the body. When gravity is too much for the body to take, the body is essentially slowly "crushed".

# GOALS

This study wishes to prolong life as it is on earth and contribute to the understanding of the relation of time and gravity and understanding the "limit" of biological organisms.

# **EVIDENCE THAT IT WORKS**

# The Life Span Expectancy Rate of Different Areas

Essentially earth has an average gravitational force of 9.807 m/s<sup>2</sup> or 9.8m/s<sup>2</sup> for short. As mentioned it is the **average** gravitational force, so meaning, it varies from area to area. With a natural observation that a magnet's strongest points are on the north and south pole, we can infer that gravity is strongest on those particular points of the planet, simply

Country	Average	Male	Female
	age	age	age
Japan	82.6	79.0	86.1
Hong Kong	82.2	79.4	85.1
Iceland	81.1	79.4	85.1
Switzerland	81.7	79.0	84.2
Australia	81.2	78.9	83.6
Spain	80.9	77.7	84.2
Sweden	80.9	78.7	83.0
Israel	80.7	78.5	82.8
Macau	80.7	78.5	82.8
France	80.7	77.1	84.1
Canada	80.7	78.3	82.9
Italy	80.5	77.5	83.5
New	80.2	78.2	82.2
Zealand			
Norway	80.2	77.8	82.5
Singapore	80.0	78.0	81.9
Austria	79.8	76.9	82.6
Netherlands	79.8	77.5	81.9
Martinique	79.5	76.5	82.3
(France)			
Greece	79.5	77.1	81.9
Belgium	79.4	76.5	81.9
Table 1 – Top 20 countries with the			
longest life expectancy			

because the Earth is one gigantic magnet.

With the concept in place that the heavier the gravitational pull, the longer the expected lifespan, we can infer that those that live on the "strong points" or "red zones" essentially live longer relative to those who don't.

As mentioned, an organism's biological clock is influenced by the gravitational field it is exposed upon. According to our statistics the average person living in the "red zones" in **Figure 1** live longer than those who do not. The top twenty countries in which their average citizens live the longest (relative to the rest of the world) are as follows in **Table 1**.

All the countries mentioned in **Table 1** are in the "red zone" of the magnetic field. So, we can infer that because of the stronger magnetic field which leads to a heavier gravity, their biological clocks tick slower, so it takes them longer to die or have a longer life expectancy rate.



**Figure 2 –** Life expectancy rate of the world. The darker the shade the longer.

For a clearer picture, try to match **Figure 1** with **Figure 2**. Whatever "red zone" there is on the magnetic field of the earth located in **Figure 1** is a dark blue shade in **Figure 2**. This means that the two figures coincide with each other with the claim that the stronger the gravitational field, the longer the expected life.

# Utilizing the Gravitational Time Dilation Effect (Kennel, 2015)

This effect already takes place as to correctly calibrating GPS systems to correctly pinpoint the exact location of the user. Clocks in outer orbit of the earth **tick faster than those on the surface of the earth** where the gravitational force is weaker.

This does not relate to the subject, but it proves that time does behave differently in

different gravitational fields. So, if we can simulate such hypergravity environment on earth, we may live longer.

# APPLICATIONS

Strong gravitational fields can be achieved also through electromagnetics. Provided that time behaves slowly in a heavier environment, it can be utilized to prolong life.

Basically, with this observation, if a person wishes to live longer, he or she may migrate to an area where the gravitational pull is stronger.

#### **OTHER OBSERVATIONS**

## **Light Might Have Mass**

While doing my research I have come across an article from The Science Explorer saying that light can be influenced by gravity as to the reason there is a Gravitational Time Dilation Effect, that light, because of gravity may take longer time to reach its destination. Einstein once said that in order to achieve the speed of light you must be massless. But the definition of gravity is that two masses attract each other in which one will influence another as to the resulting effect that the lighter mass will be pulled by the heavier mass. Provided that light can be influenced by gravity this implies that light does indeed have mass. The result is unclear because I am only a student, but this may serve as a contributing idea.

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