

## THE UNDERSTANDING AND THE ATTITUDE OF THE KOREAN PEOPLE FOR THE SCIENCE AND TECHNOLOGY

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### Abstract

The understanding and the attitude of the Korean people for the science and technology were surveyed. The results from the two age groups, 13-17 and above 18, were analyzed and compared with the survey results from U. S. A. and Europe. In general, people of all the survey groups were favorable toward science and scientists. Seventy % of Korean were interested in new scientific discoveries; significantly lower percentage than in U. S. A. (92%) and Europe (78%). Similar trends were also observed in the interests in the use of new inventions and technologies; Korea (44%), U. S. A. (64%), Europe (64%). They were not interested in science because i) it is not necessary (Korean adults 30%, youth 11%; Europe 16%) and ii) it does not give fun (Korean adults 24%, youth 46%, Europe 31%). In the science knowledge test, however, Korean obtained a score slightly higher than American or European. Both adults (95%) and teenagers (96%) in Korea considered that scientists play the most important role in the development of the society. They considered that scientists contributed more than medical doctors (91%, adults) and teachers/professors (77%, adults). Also noteworthy was the differences between the age groups in Korea; e.g. almost half of Korean teenagers responded that science was not interesting.

**Keywords:** attitude, public understanding, science and technology

### 1. Introduction

Surveys on public perception and public understanding of science & technology have been conducted in Korea and the results could be a valuable source of information in the decision-making process in science. The objective of this study is to analyze and compare the survey results in Korea with those conducted in U. S. A. and Europe. The attitudes of the two age groups of 13-17 and above 18 were also analyzed and compared.

### 2. Methods

The surveys in Korea were conducted by Gallup Korea for Korea Science Foundation by face-to-face interview. The survey was conducted by random sampling method in two groups; adults of the age above 18 and the youth of the age 13-17. Sample number was 811 for adults and 202 for youth. Standard error was 3.4%P for adults and 6.9%P for youth (95% reliability). The survey results in Korea in 2004 and 2005 were referred as 04 Korea and 05 Korea and those in U.

S. A. and Europe were referred as 01 U.S.A. and 05 Europe respectively.

### 3. Results

In the survey asking the general interest in science and technology, noticeable difference was observed in U. S. A., Europe and Korea. Korean people were significantly less interested in new scientific findings compared to American.

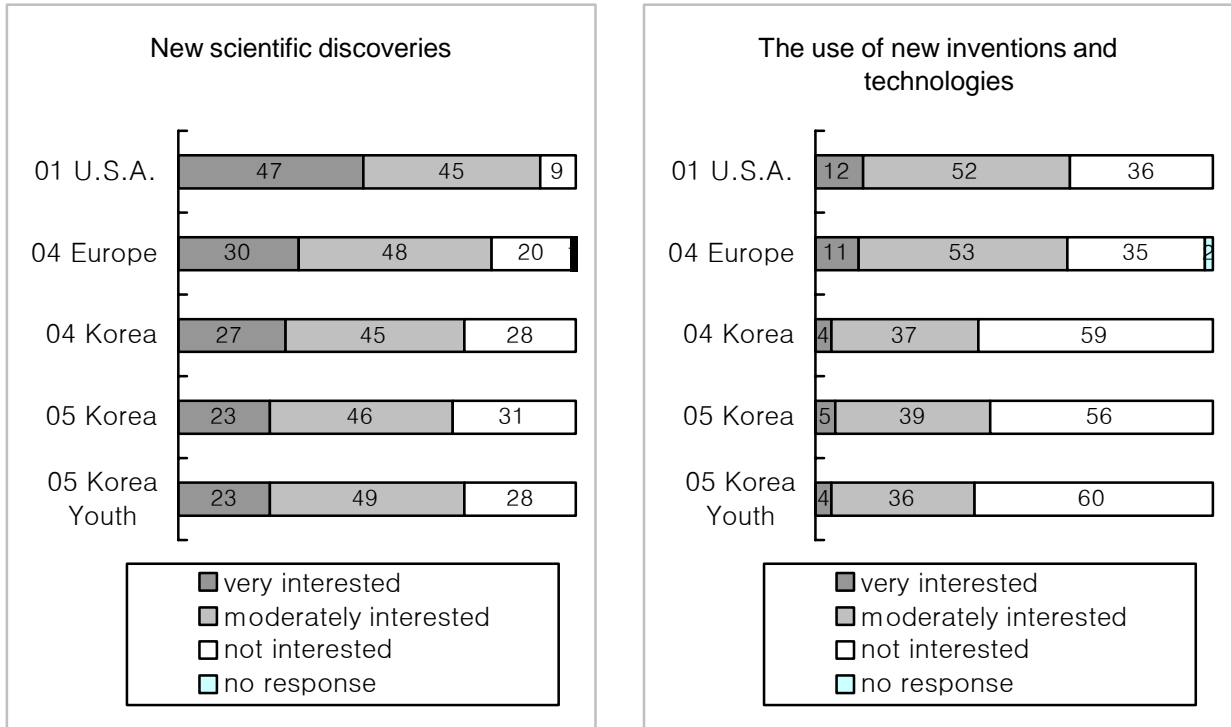


Figure 1. Interests in science and technology

As for the reason why they are not interested in science, 30% of Korean adults think that science is not necessary and 46% of teenagers think that science is not interesting. These deviations from the other survey groups suggest the point that should be considered in the science policy decision-making and in the strategy of promoting public understanding of science.

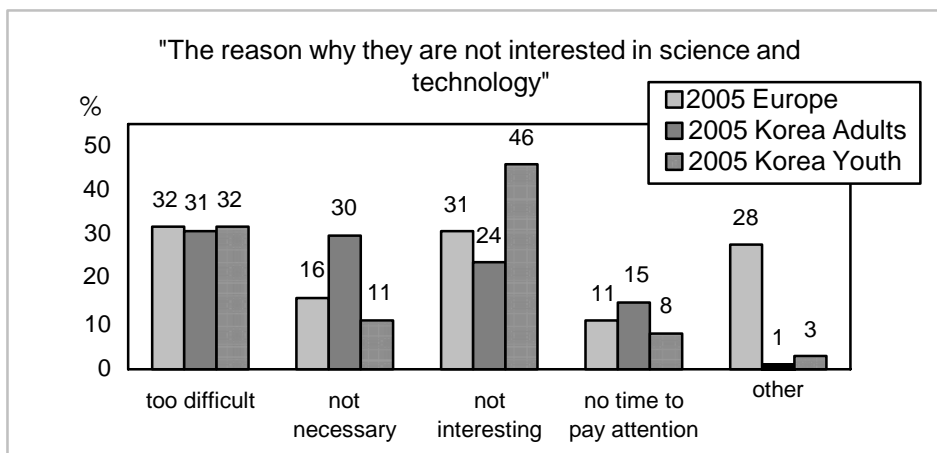
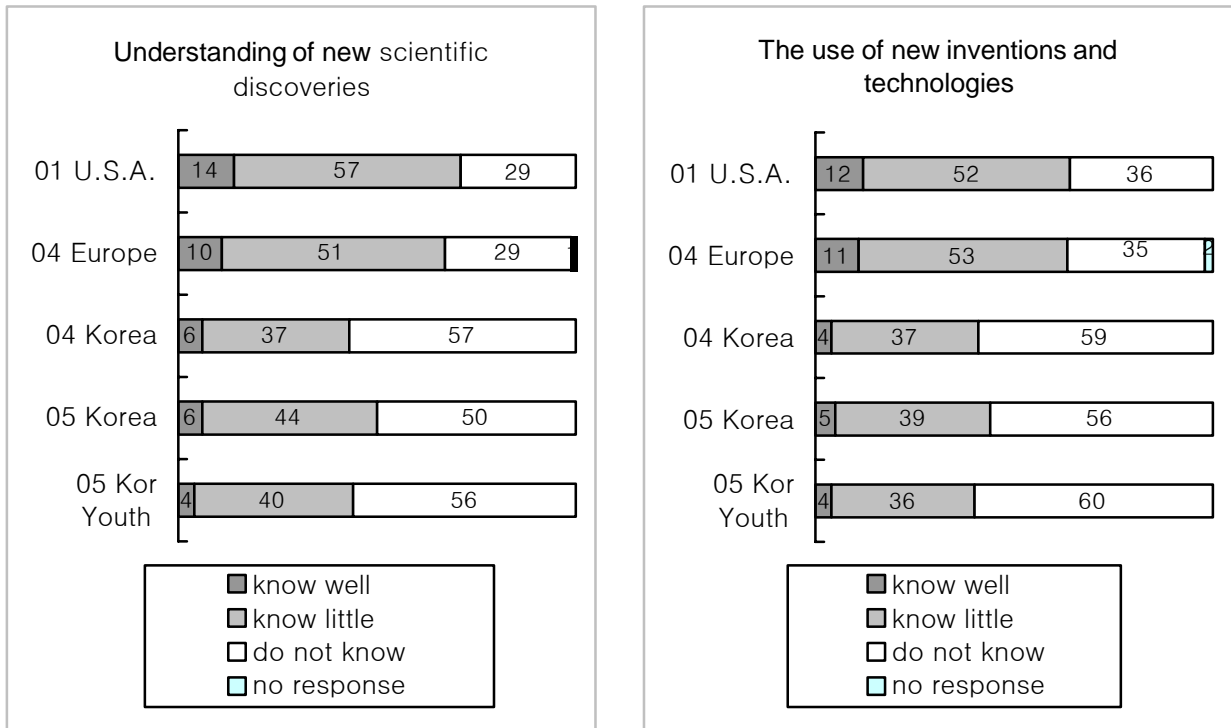


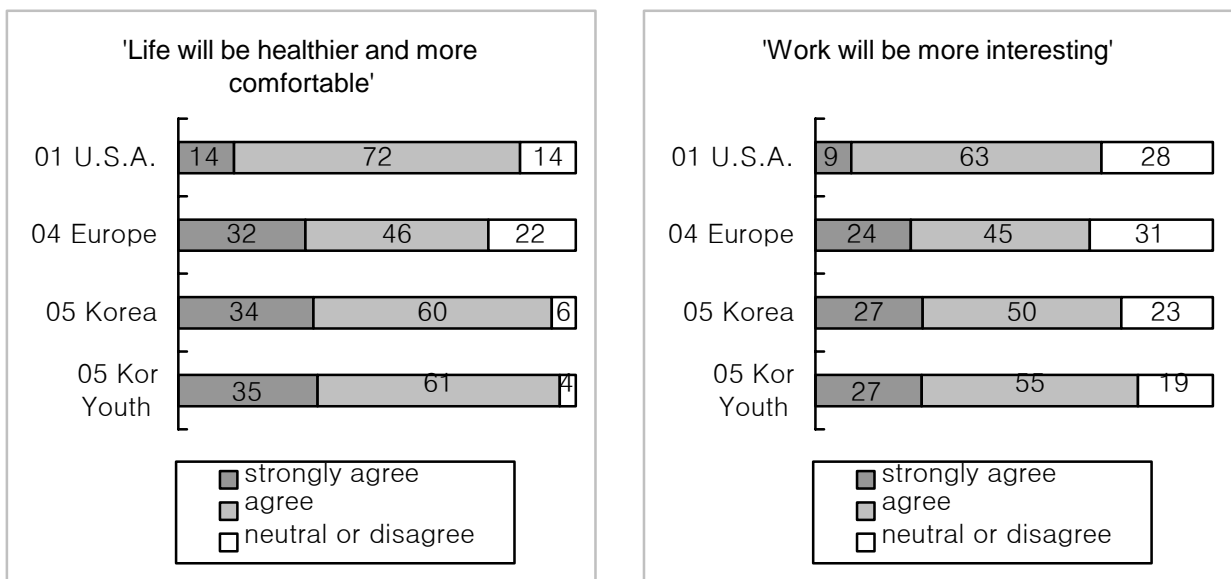
Figure 2. The reason why they are not interested in science and technology

Korean people were not self-confident in their knowledge in science even though they obtained comparable or slightly higher points in a science knowledge test (data not shown).



**Figure 3.** Self-evaluation of scientific knowledge

In Korea, U. S. A. and Europe, the vast majority of the people exhibited favorable attitudes toward science and technology. They believed that science will help to improve our world. Koreans showed even more positive attitude compared to U. S. A. and Europe.



**Figure 4.** The attitude toward science and technology

Majority of people in all the survey groups think that science is important in daily life. The positive attitude was much more prominent in U. S. A. In another question, more than half of the people in Europe and Korea answered that science cause too rapid change in life but Americans were more generous to the change.

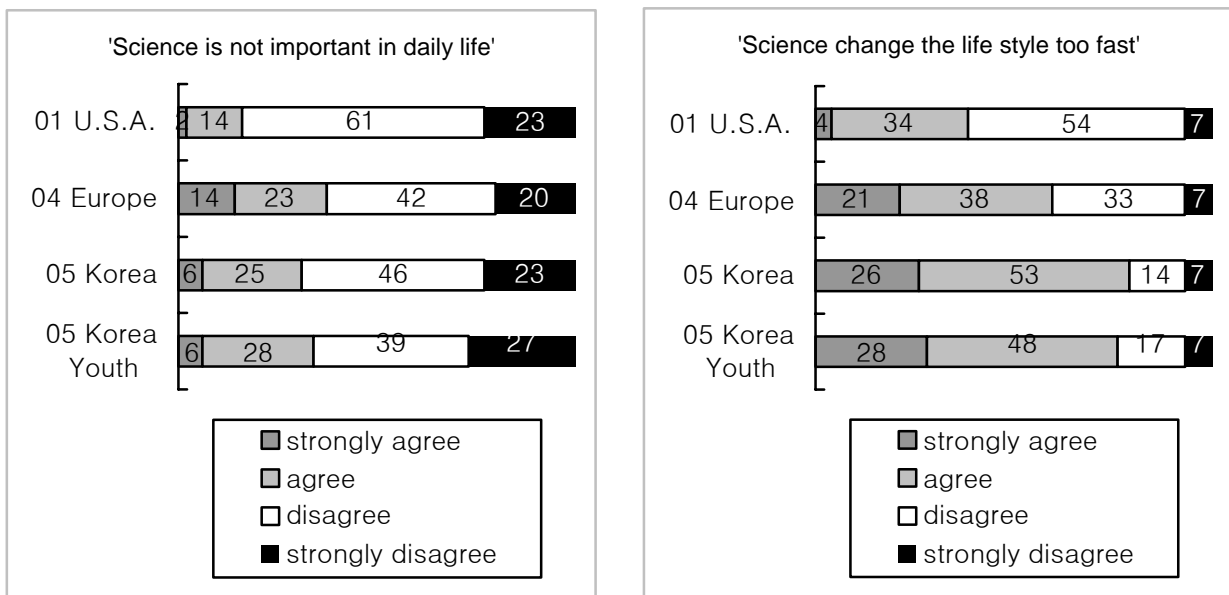


Figure 5. The attitude toward the effect of science in life

Korean people appreciated scientists as a profession that plays the most important role in the development of the society among the ten leading job groups in Korea. Younger generation also showed the highest regard for scientists, followed by medical doctors, CEO of big firms and teachers/professors (data not shown).

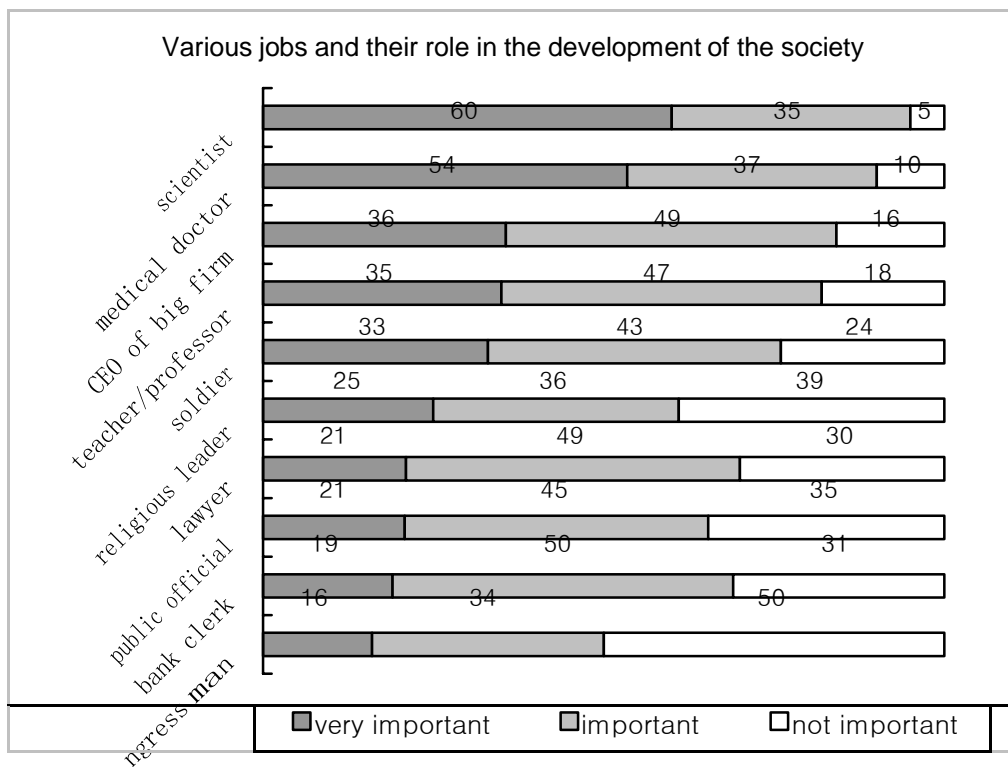
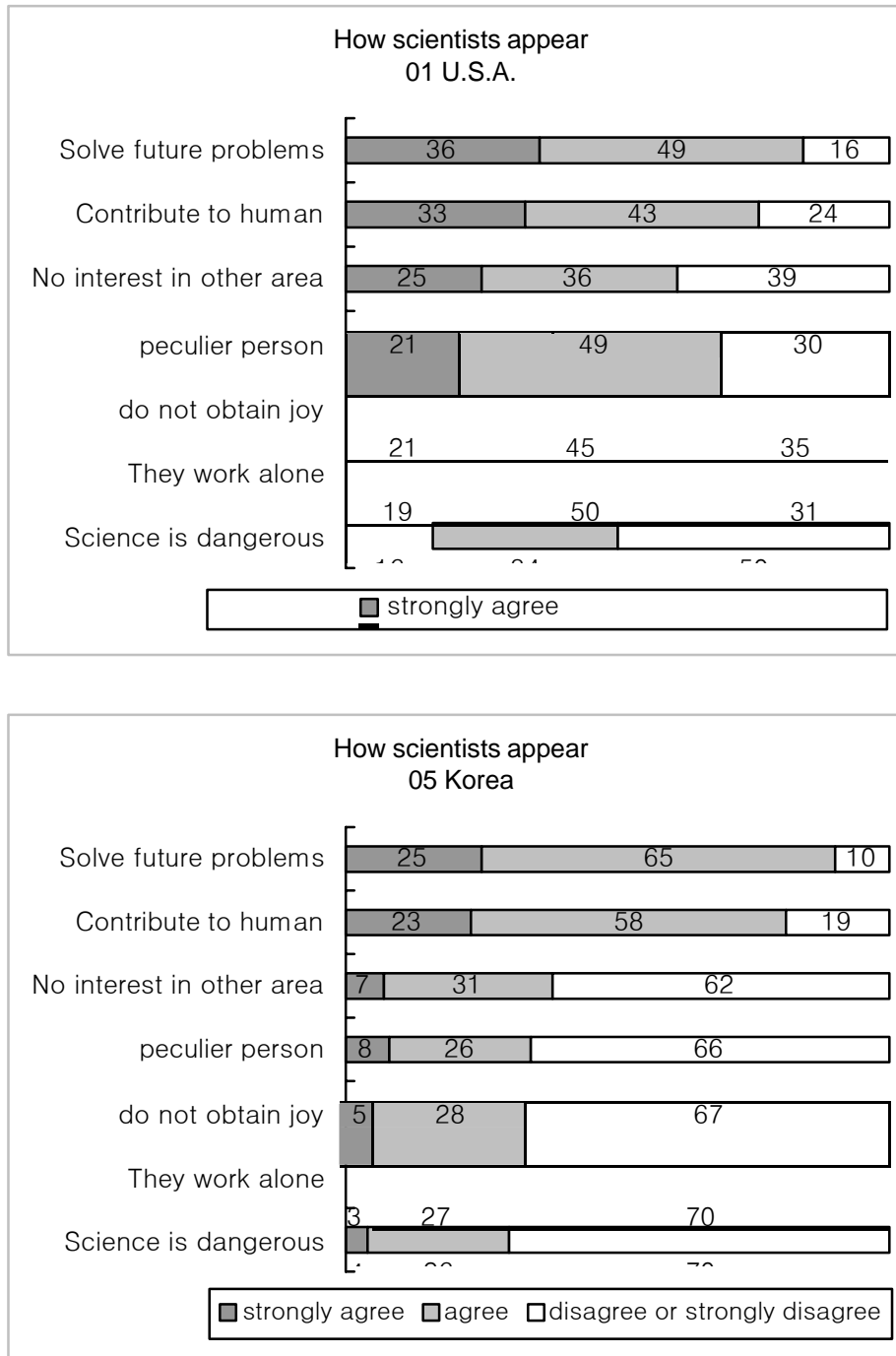


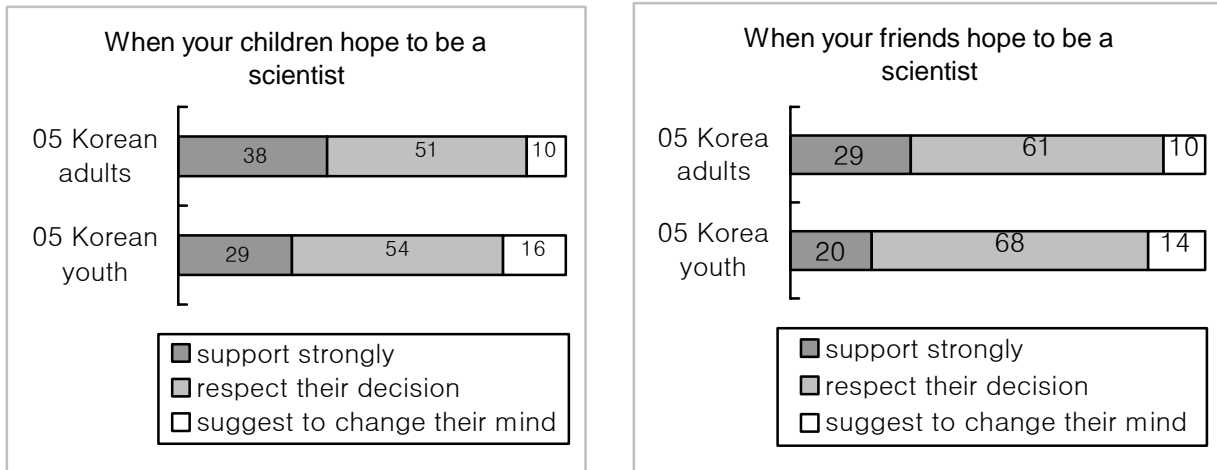
Figure 6. The attitude of Korean adults to leading jobs in Korea

The vast majority of the people in Korea and U. S. A. think that scientists contribute to improve our world. About two thirds of the population in U. S. A. think that i) scientists have no interest in other areas, ii) they are peculiar person, iii) they do not obtain joy, and iv) they work alone. This result was in contrast to that observed in Korea; two thirds of Korean did not agree to the potentially negative view for scientists.



**Figure 7.** The attitude toward scientists' image

In general, most of Korean is willing to support or respect their children or friends when they are going to be a scientist. However, this tendency is diminished in younger generation. Twenty-nine % of the youth were willing to support their children and 16% wanted to suggest another job. These data were compared with adults' data of 38% and 10% respectively. Similar trends were also observed in their attitude toward friends.



**Figure 8.** The attitude toward scientists as a job of children or friends

#### 4. Conclusion

The survey results in Korea, U. S. A. and Europe showed that general attitude toward science and scientist was favorable in that they believe science will help to improve our world and scientists are contributing to the development of the society. Although the survey groups exhibited similar trends in general, detailed analysis revealed some differences across the countries or across the generations. For example, Korean was less interested in novel science possibly implying that scientific achievements of a society are based on public science culture. Korea, however, possesses strong potential in that i) they do not regard scientists as abnormal person, ii) they think scientists are playing the most important role in the society and iii) they are willing to support their children and friends to be a scientist. Also noteworthy is the differences between the two age groups; almost half of Korean teenagers think that science is not interesting.

#### 5. References

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