

BIGMUN 2018

United Nations Educational, Scientific, and Cultural Organisation (UNESCO)

Research Report

Topic 1: The question of making professional empirical research more widely available and statements contradicting said research more easily distinguishable to the public



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Introduction

Empirical research is the process of testing a hypothesis using experimentation, direct or indirect observation or experience.¹ Nowadays, the availability of information provided to the general public has by far surpassed that of previous times. Due to the broader accessibility of knowledge, it is very not unlikely for people with no prior knowledge about certain topics to stumble upon some false information, which they will therefore naturally believe. Social media, the news fake websites, and governments can all be blamed for this. Everyday fake news is promoted on social media accounts like Facebook, and many tend to not fact-check the information. On the other hand, the ones who try to fact-check struggle with finding the exact information, so this makes it a question of to what extent should empirical research be available to the public, and how can one distinguish between the false from the real?

First it is important to understand why this type of research is important. That is because it looks at all learning aspects, and hence increases the learning possibilities and outcomes of the students/scientific researchers. This is applicable to all types of subjects and topics, such as the sciences, psychology etc. It is common for different scientists to get different results, or results that are not fully the same. Because of this it is important for researchers to be able to easily access other researchers' evaluations and conclusions. Nowadays technology allows us to easily be able to achieve this, but modern technology can also mean that fake researchers altering with the experimental values can be more and more common. Again, this leaves the question who and what can one trust and how available is this information to the general public?

Key Terms

Case study – A study of just certain clients whether in groups of certain races or privately. This can be in form of therapy or just generalizability.

Baseline – Pre-intervention level of a dependent variable. A control experiment carried out before and experimental treatment.

Follow up – Repeating experiments a set of times in order to ensure lasting and effective results.

Experiment – A scientific procedure that hopes to make a discovery, test a hypothesis, or re-enforce a known fact.

Inductive – Reasoning in which a general conclusion can be reached almost instantly.

¹ <https://explorable.com/empirical-research>

Constructive criticism– Giving or getting one’s own evaluation and opinions about the work of others. The comments can be both positive and negative, and are meant to help improve the work. This is a fair and friendly procedure.

Main Body

A lot of the information internet on the is false, from quotes to news to research results. This is all resulted from the reasons started in the introduction (social media, the news etc.). Being able to deliver fake news or research results, is a basic freedom, but should the government intervene to stop these mendacities from spreading. If they do interfere, how far should they then take it? Interference of the government would mean taking legal consequences with the ones responsible for providing these fake results. This would mean shutting down social media accounts, and online forums that are known for their inaccurate and misleading results. Removing them is a relentless and possibly never ending challenge. Through education, the government can help citizens demarcate between fake information and real one. In many ways education is important for this.

If empirical research becomes more and more incorporated into educational systems as the students transition from schools to universities etc. then the average citizen would have an idea of what sounds or may be true, and what is just purely lies. Studies conducted at the Department of Psychology’s Human Performance Lab have shown that first hand learning (conducting experiments) help perform better in the sciences.² It is good practise for the students to have more first-hand practice from an early stage in their education, therefore habituating themselves to be critical thinkers. Understandably, not all schools, universities and not even countries may have the resources to conduct the respective experiments needed, but this problem can easily be tackled. Educational institutions can use a bigger percentage of the money provided to them by the respective governments in order to ensure all types of learners get their rightful experience. It is important to be taught a well-rounded education hence one can not rely solely on the results and conclusions achieved through experiments. Experiments are prone to have varying results. Consequently, contradicting results should be easily accessed to the general public through books and the internet in order for one to know if there results turned out be correct or not. This easy accessibility should be practised from early on in order to normalize it professionally.

As for scientists, therapists, experimentalists etc. their jobs depend on these first hand experiences, therefore facilitating these first hand experiences is of the utmost importance for them. This allows for further human sophistication and a better understanding of the world, as many of the life-changing discoveries were discovered through hands on experimentation of scientists whether by accident or intended.³ It is always to keep conducting trivial experiments over and over. For

² <https://news.uchicago.edu/article/2015/04/29/learning-doing-helps-students-perform-better-science>

³ <http://www.juliantrubin.com/bigten/pathdiscovery.html>

scientists who witness unusual activities, it is vital that they go through this with other scientists, through an online forum or any other convenient method.

An efficient way to fully ensure the reliability of the research that is reached to the general public could be one where the researchers upload their data, after being read and approved by a superior panel. The general public could read all the information provided by the forums, but can only use it as 'spectators', without having the ability to adjust any of the information provided. This forum can then be subsidised by the government if necessary, and also recommended by the governments.

Relevant Countries and Organizations

The American Association for the Advancement of Science (AAAS) – The AAAS seeks to "advance science, engineering, and innovation throughout the world for the benefit of all people." To fulfil this mission, the AAAS Board has set the following broad goals:

- Enhance communication among scientists, engineers, and the public;
- Promote and defend the integrity of science and its use;
- Strengthen support for the science and technology enterprise;
- Provide a voice for science on societal issues;
- Promote the responsible use of science in public policy;
- Strengthen and diversify the science and technology workforce;
- Foster education in science and technology for everyone;
- Increase public engagement with science and technology; and
- Advance international cooperation in science.⁴

International Council for Science (ICSU) – Aim is to mobilise knowledge and resources of the worldwide scientific society, in order to strengthen international trade.⁵

Chinese Academy of Sciences (CAS) – World's largest scientific organisation, comprising 114 institutes and over 48,500 researchers.

<https://www.zmescience.com/science/news-science/science-publisher-12052016/>

⁴ <https://www.aaas.org/about/mission-and-history>

⁵ <https://www.icsu.org/about-us>

Relevant UN Resolutions

Statement submitted by the IBRD on communicating the impact of communication for development: recent trends in empirical research. vi, 51 p. : ill., tables, Washington, D.C. : The World Bank, 2007.⁶

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⁶ <https://digitallibrary.un.org/record/624209?ln=en>