Free essay on social sciences versus natural sciences

Environment, Nature

Introduction

Scientific as well as social knowledge have been in survived for a long time and the two bodies of knowledge are continuously developing due to the people's need to fulfill their curiosity and explain various phenomena that are of interest to human beings. People continued to explore the world in order to increase their knowledge and make discoveries via research (Williams 2002). Scientists develop their knowledge by observing and recording what they observe and later analyze the information that they obtain from the data they have recorded so as to construct theoretical explanations of the phenomenon which was involved. Scientific knowledge is some form of truths that can be tested and are justifiable by providing concrete evidence in support of the facts involved. Science can simply be defined as the process of obtaining knowledge through scientific research methods.

The scientific field is broadly divided into two categories: social and natural sciences. The social sciences studies societies and human behavior while the natural sciences focuses on the natural phenomenon (Binstock 2004). A good example of social sciences is economics while that of a natural science is physics. The two sciences have continuously tried to explain some various phenomena. However, the knowledge and information gained from the natural science (physics) is more reliable than that gained from the social science (economics). Instead of being more specific, Social sciences are more rigorous. It therefore bases most of its argument on application. The natural sciences on the other hand largely support its argument by finding basic and fundamental truth of the subject under research. Social actions are

aspects that easily change with time. They actually fluctuate. For instance economics can indicate that a given society will consume some particular products in a certain time. This knowledge is not justifiable since the tastes a, needs and preferences of the society may change at any time. They may decide to consume a different commodity altogether. Therefore, anyone who had made say an investment hoping to supply the society with such products will terribly experience a loss since the anticipated demand will not arise. Human sciences experience sufficient organized and purposeful manipulation by powerful individuals within the society thus leading to the collapse of the sciences and any knowledge that was expressed basing its evidence on the social sciences. Examples of people who can cause this are the elites who only contribute a small portion of most societies. They can easily manipulate the social sciences to suit their interests. Such conflicts in the society further hamper the reliability of social sciences. The basic process in the social arena is conflict and competition as people try to outdo each other. This there means that there is no cooperation in the society and any knowledge developed during such conflicts may not apply to every society hence may only be true to the specific society while to the society it is a flaw of ideas (Binstock 2006). Scientific knowledge bases its arguments on natural aspects that rarely fluctuate and are easily justifiable or tested. The natural phenomenon is relatively constant. They are less likely to be manipulated by influential individuals in the society. Knowledge that is based on the natural sciences is therefore more accurate and reliable since one can easily justify the reasoning behind it. The social sciences try to study the behavior of man and the society at large. All these are aspects that easily

change. For instance, an individual who used to be a robber can easily reform and start preaching. The society also keeps on changing. It is very dynamic hence any knowledge that is developed regarding a society may be accurate today but after a few days it turns out to be absolutely inapplicable or false (Binstock 2006). The dependency theory is a body of knowledge from the social sciences that states that the wealthy nations require a peripheral group of poor states so as to remain wealthy (Smith 2005) . It explains that the poor nations are poor not because they have not been integrated into the economic system but because they have been integrated into the world economy in an inappropriate way. The poor nations provide sources of production to the wealthy nations. If they fail to provide the resources they will not survive (Smith 2005). Any attempt of the poor nations to resist influence from the wealthy nations will lead them being attacked or sanctioned. Though this is true the situation is not permanent and may change at any time. Therefore this knowledge is not wholly reliable.

Most sciences are marred by uncertainties thus the conclusions are based on probability theories. Probabilisms in sciences arise due to lack of complete information or a variable to support a conclusion. As such, there is need to include some oversights and assumptions that reduce the accuracy of the results. Human and natural sciences have an aspect of probability. Most studies done in science are not fully backed by tangible level of success but rather based on the probability of a favorite outcome or failure. However, probabilism in human science is more profound than in natural sciences. A good example is a market study where a researcher does not know what to expect from the study. What they rely on is assumptions and probability

based on past performance.

On the other hand, natural science has also an aspect of probability. However, the results from studies on natural sciences are more reliable than the social sciences. This is because natural science is proved and supported by several experiments that are supposed to deliver similar results (William 2002). In fact, natural sciences employ the use of laboratories where studies are done in a controlled environment; therefore the chances of getting meaningful information are quite high.

Human sciences are not reliable in designing scientific laws but are rather concerned at identifying trends. This is because human sciences cannot provide exact data since the studies are not controlled. As stated above, a research on the market can uncover trends that consumer’s take or the movement of goods rather than identifying precise reasons as to why the situation is as it is. Human sciences are equally good at predicting laws that might be affecting such scenarios,; examples laws of demand, supply etc. however, the laws are dependent of market variable thus human science cannot e used to determine precise scientific constants.

Debates on social sciences like the economy have been marred by probability (Black 2002). Another example to this effect is a recent speech by Barrack Obama where he stated that is in important to evaluate the performance of teachers based on the result s of their students. This means that students with performing teachers are better positioned to attend higher education and have a decent life. This work cannot be trusted as having any empirical evidence. This is because there is no direct connection between teaching and performance of students; thus, there must be other

variables and assumptions working within to influence results. Social sciences do not show these variables. William (2002) asserts that most decisions in the society are based on social sciences. This is because the media is famous at publicizing the results since they assume the results are accurate and proven. The rationale behind this is that the social science usually affects a large population. Generalized conclusions are usually arrived at when social sciences are used.

Natural sciences are more reliable in providing more evidence on a phenomenon. Natural sciences narrow down to a specific area where through research are conducted. This involves gathering all the data available and using of technical terms that are specific to the field (Fox 2011). The results of the science give rise to scientific formulae and constants that are by far more reliable than human sciences. This clearly shows that the aspect of probability in natural science is low. An example is that it is ort possible to compare a weather forecast report with a study conducted on marketing in an area. The astronomical study is more accurate. Another aspect that increases reliability of natural sciences is the evidence that is provided. Laboratory results are based on clear instructions and procedures which are supposed to give similar results, though a small variance may occur.

Peer review is the act of crosschecking the work that is done by other professional. The experts who review the work are from the same field and have similar or deeper information on the field. The reviews are used to confirm results as well as adding other new aspects. This is important in enhancing credibility and reliability of the information. Peer review is more common in natural science since they entail a procedure that can be easily

repeated to verify results. This is also partly because science results are used to make very critical decisions especially in the medical fields that require high levels of accuracy because the studies involve a clear set of procedures, another expert can easily perform similar test to ascertain if he or she gets similar results or with a slight variance (Fox 2011).

The results of social sciences cannot be easily verified. This is because the studies cover a very wide scope with many assumptions that might differ among researchers. As such, it is hard to verify certain conclusions due to differences in samples and other changing variables. Despite this, if the social science result has a higher degree of accuracy, follow up studies are supposed to show some level of similarity in conclusion.

ConclusionIt is therefore evident that the knowledge we gain from natural sciences is more accurate and reliable than that gained from social sciences since the natural sciences are based on justifiable truths that can be subjected to test at any time. It uses logic and reasoning. It gains information through the analysis of data and experimentation. These make the knowledge created by natural sciences to be more accurate and reliable. Observation is a large step in the methods for obtaining information but aspects such as biasness, expectations, background assumptions and expert seeing can lead to distortion of the facts that will finally be obtained. This affects the accuracy and reliability of knowledge created by social sciences.

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