



Otázka: Natural and Human Sciences

Jazyk: Angličtina

Přidal(a): Mikuláš Benda

Considering the different methods of attaining knowledge in both Human and Natural Sciences, are there things we can know with more certainty/ reliability in Human Sciences than Natural Sciences? To what extent should Human Sciences be considered „science“ or some other subject?

Humans are one of the most complex, and fascinating organisms living in this universe when it comes to our behaviour and physiology. Throughout the history, our brains have developed to such extent that we were able to study things around us. This gave rise to many natural sciences as well as human sciences. If we consider both natural and human sciences, there is clearly a vast difference between them. Natural Sciences can be seen much more developed and substantially more scientific than Human Sciences. On the other hand, it is not completely possible to compare the sciences in such way, as they have different values and uses. While Human Sciences focus on the social aspect in human interaction, the Natural Sciences try to discover and explain phenomena in the physical world.

Firstly, it is important to explain the principles of both Natural Sciences and Human Sciences, as well as explaining the differences among them. Natural sciences are disciplines that study objects or processes of the physical nature by means of scientific methods. Most influential Natural Sciences include physics, chemistry and biology, through which we are trying to understand phenomena of the physical world by developing predictive models, testing them through scientific observation. The greatest advantage of Natural sciences is that they are logical; its experiments are done most of the time in conditions of laboratory experiments, and

are usually supported by immense amount of evidence with the use of valid reasoning.

Human Sciences, on the other hand, focus more on human behaviour, and are much more abstract than Natural Sciences. This field of science deals with human society, social groups, and individuals in their social relationship, institutions of society, as well as material and cultural goods as expression of coexistence of human being. There are three major human sciences that try to explain things differently from the Natural Sciences. First one is psychology which investigates humans, their behaviour, thoughts and brain activity. Second Human Science is Economics, which investigates production, distribution and consumption of goods and services of humans. Third and Human Science is Anthropology, which is essentially a study of humans from all the possible perspectives, ranging from biological Anthropology to linguistic Anthropology. Goal of Social Sciences is to recognize patterns of collective action to which individuals contribute through their independent actions. Usually these sciences are done in a different environment than laboratory experiment, thus are less replicable, unpredictable, and not as scientific as Natural sciences.

The main difference between Natural Sciences and Human Sciences is essentially the way we approach and investigate things. While Natural Sciences have been trying to find the ultimate truths about this universe by forming theories, finding forces and values of literally anything, Human Sciences try to understand the social aspects in human interaction, having its foundation based on abstract term that cannot be studied the way Natural Sciences study their concepts. Human Sciences use mainly qualitative testing, also with a little help of quantitative testing, whereas Natural Sciences use mainly quantitative testing processing great amounts of data. This again shows that both of these sciences are put to a different uses, as well as pointing out that Human Sciences are not inferior nor superior to the Natural Sciences, but a different field of study. Because of the great difference between the both sciences, it seems impossible to use one Science to describe the findings of the other Science.

Trying to explain Human Sciences in terms of Natural Sciences or vice versa is simply impossible. Steven Pinker states that "Human behaviour makes most sense when it is explained in terms of beliefs and desires, not in terms of volts and grams.", which is a great example proving the different use of these sciences. Reasoning behind this is simply that we

cannot compare these two, as they have a different focus. While Natural Sciences were found and are most effective in explaining the principles of the universe, they would be useless for a person trying to explain certain human behaviour or thoughts. On the other hand, Human Sciences are perfect for investigation of any human actions and it would be completely impossible for someone to explain the laws of physics or chemistry using the Natural Sciences statements, terminology and knowledge. This proves that there are indeed certain things that we know with more certainty in Human Sciences than in NS, because of previously mentioned aspects.

Another important question we have to ask ourselves is whether Human Sciences can really be considered as a science or not. First, major argument that states that Human Sciences are not truly a science is the way of obtaining the information, in this case being observation, which is considered as less scientific than laboratory experiment. Secondly, it is the information type obtained, which is in this case more quantitative than qualitative, which makes the analysis more difficult, as well as not being able to predict similar results in the same experiment. Third, important factor is the fact that in human sciences, almost everything is abstract, and is usually based on human mind or behaviour, which we cannot measure, but maximally observe. Last important aspect that goes against Human Sciences being truly considered a "science" is that incorrect information may be obtained, due to deception from the side of participants studied. Because Human Sciences study humans, there is greater likelihood of them somehow biasing the results, making the results inaccurate and imprecise. Example of such Science can be a study of human thoughts and behaviour in psychology, which contains all the arguments against Human Sciences being "scientific". On the other hand, some social sciences use quantitative measurements, do not work only using observation, but also laboratory experiment as well as making sure there is no bias from the side of the participants. Example of this approach can be study of Gross Domestic Product in Germany in Economics; showing off the scientific part of the Human Sciences. Nonetheless, it is only a small percentage of Human Sciences with majority being "less scientific". From this we can clearly see that even though there are some Human Sciences that could be considered Science, majority should not.

Human and Natural Sciences are both ways of measuring certain aspects of this world, one considered to be more scientific than the other. Even though Human Sciences are considered to be less scientific, and presumably not even a real science, they have some features that could possibly make them look like they truly are sciences, but after a further investigation, it is easily recognizable that they are not. Notwithstanding the fact that Human Sciences might not

be considered a science, we can say that there are some things that they can do, which Natural Sciences cannot, for example study of thoughts and behaviours. Nonetheless, both Sciences cannot be compared to a greater extent, due to their considerable differences and a different use.