

Scientific Study in Human Science

الدراسة العلمية في العلوم الإنسانية

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ABSTRACT:

This study shows the importance of science, which is that knowledge confirmed by experimentation, it is thanks to it that we reach the precision and the objectivity as we see in physics and biology as an example, The evidence is the laws that scientists reached, This success motivates other searchers to try to apply the experimental method in other fields rather than material, among those fields' human phenomena, whether psychological, historical or social.

The study found that it is beneficial to consider the human and social sciences as having great importance and notable position as other sciences especially the natural sciences, and it can play its effective role in the building of the human knowledge, in this way it is able and worthy to fulfill its role as one of the sciences.

Keywords: Science, Objectivity, Experimental Method, Human Sciences, Scientific Study.

الملخص:

تهدف هذه الدراسة إلى إبراز أهمية العلم وهو تلك المعرفة المؤكدة بالتجريب، إذ بفضلها نصل إلى الدقة والموضوعية كالتي نلمسها في الفيزياء والبيولوجيا مثلا، دليل ذلك تلك القوانين الكثيرة التي توصل إليها العلماء، هذا النجاح أغرى بقية الباحثين بمحاولة تطبيق المنهج التجريبي في مجالات أخرى غير المادة، ومن ضمن هذه المجالات الظواهر الإنسانية سواء أكانت نفسية، تاريخية، اجتماعية. وتوصلت الدراسة إلى أن أنه من المفيد أن ننظر إلى العلوم الإنسانية والاجتماعية، أن لها أهمية بالغة ومكانة هامة بين العلوم الأخرى لاسيما العلوم الطبيعية، ويمكن أن تؤدي دورها الفعال في بناء المعرفة الإنسانية، وبهذا فهي قادرة وجديرة بأن تهض بدورها بصفتها علم من العلوم. كلمات مفتاحية: العلم، الموضوعية، المنهج التجريبي، العلوم الإنسانية، الدراسة العلمية.

1- Introduction:

Most of topics studied by philosophy have a close relationship with the human being, therefore the philosopher Kant consider the central question of philosophy is: What is human?

The present time, scientific research occupies a prominent place in the progress of the scientific renaissance. The academic institutions are considered to be the main centers for this vital scientific activity, as it have a basic function to motivate, to revitalize scientific research and to stimulate scientific motives for the researcher and for the scholar. (Shahrukh, 2003)

The present time, scientific research occupies a prominent place in the progress of the scientific renaissance. The academic institutions are considered to be the main centers for this vital scientific activity, as it have a basic function to motivate, to revitalize scientific research and to stimulate scientific motives for the researcher and for the scholar (Awabdi, 2012).

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The developed and industrialized countries did not reach what it did, except through the encouragement to develop scientific research. Perhaps the undeveloped countries, including Algeria, are most in need to develop this field.

If this is the status of scientific research in the advancement of science and knowledge, the scope differs from science to another, this created a discrepancy in the assumed peculiarity of each science.

No one denies that there is a difference in scientific research between the experimental science and the human and social science. The human science, such as psychology and sociology are separated from the beginning of the nineteenth century from philosophy, and tried to study human phenomena with the curricula of experimental sciences that study natural phenomena. However, the difference between the subject of natural sciences and the subject of human sciences has led to difficulties and obstacles facing the scientific researcher in the field of human and social sciences.

The aim of the study:

The aim of this research is not merely a presentation of the obstacles of using and overcoming the experimental method in the human and social sciences, but rather it aims to demonstrate the importance and nature of the method related to the human and social sciences, and its implications on science and the advancement of human knowledge.

The problem of the study:

From the above, the problem can be raised in the main questions that this research paper comes to answer:

The accurate scientific knowledge about human can be provided by relying on the experimental method? What are the problems (difficulties and obstacles) of human science that face the scientific researcher? To what extent does it affect scientific objectivity? What are the possible solutions of the problem of human science?

The importance of the study:

The importance of the study is to know the most important branches of knowledge that represented in the human and social science, through discuss the different obstacles facing the scientific researcher in social and human science. Then, how to react against these problems in order to reach significant results depending on the experimental scientific method.

Method of the study:

The study depend on the historical method to clarify the characteristics of the human and social science since ancient times, in addition it depends on the descriptive analytical approach to collect information, to analyze and to find out the results.

2- The Obstacles to Apply the Experimental Approach in the Field of Human Science:

Scientists and thinkers have set basic conditions for the possibility of any science, and the most important of these conditions is the observation of the facts that's to believe there is no parallel, these conditions have been achieved in the natural sciences whereas, for the human science there is a difference between them which lies in the degree of progress. (Ibrahim, 2000)

Natural science is concerned with the study of natural phenomena, and among these sciences are physics, chemistry, geology, and astronomy, as well as, biological science such as animals and plants. Human science is the branches of knowledge that tend to study the origin and the history of human beings, Natural science is directly concerned with natural phenomena, while human science is concerned with the study of human activities and achievements.

Science is not science except by the method that it uses, science is a method before it is an object or a group of knowledge or theories, because it is not possible to obtain or to achieve scientific knowledge without the use of scientific method, In general, the study of the human behavior is carried out through different methods (Muhammad Jalal Sharaf, 2010).

Scientific research is one of the basic foundation of civilization and progression, as it is the means that human uses for the work of the mind, the senses and all the faculties in order to understand the reality of the natural and social phenomena that occur around, in order to serve the human beings.

Research means to search and to explore a specific issue to reach its truth, If the word search literally means to search for thing, i.e. to explore the thing, in other word, it revolves around the topic in itself which is to exert the effort in investigation, exploration, traceability and study of a specific topic until it becomes clear to what it is.

Scientific research and thinking process are contributed to push humanity out of darkness into the light and keep it away from the myths that control it, also it makes the human unable to explain the natural phenomena, Human beings refer back this natural phenomenon to hidden supernatural power. With coming of the modern era human mind is start to think of these natural phenomenon through the use of scientific method to achieve and to understand what is the truth of these phenomenon.

2-1- The Definition of Scientific Research:

It consists of two words: “research” and “scientific”, Research is derived from the past form of the verb “searched”, and meaning: “to follow, to search, to ask, to investigate, to try, to seek”, Thus the meaning of research is: to seek and to investigate the truth of facts or matters, which requires exploration, thinking and meditation, until the researcher is reach the thing that it wants (Mandhour, 1993).

As for the word “scientific”, it is related to science, and science means knowledge, knowing and realizing the facts, also science means briefing and familiarity with the facts.

“Or it is the realization of thought and organized mental effort on a set of issues or matters, through searching and investigation in the principles or relations that is common in between, up to the truth that is based upon the best solution.”

And it is defined as:

“Organized investigation, with following specific scientific, methods and approaches to scientific facts, with the aim of verifying its validity, modification or addition to new ones”.

As for the word method, it was covered with explanation and interpretation by many philosophical dictionaries and encyclopedias, because of its importance in every scientific

research. It is a translation of the French word 'méthode' which means "tracing and investigating" (Qasim, 2003).

From another hand, the method considers "the set of mental processes through which a science attempts to reach the desired facts with the possibility to clarify and to check its validity" (Al-Zawawi, 2001).

The question of research in method is one of the central issues in the natural and human sciences, because the result of each science is related to the methodology is used.

The history of modern science proves that there is no science without a method that constitutes its basic link upon which it is built, Epistemology is critical study of the principles of different sciences including the Methodology, which was completely independent by itself, in order to form a new science, which is "the science of methods" (Al-Jabri, 1988, p. 19) which differs completely from "formal logic".

Methodology study the various scientific approaches based on two basic rules, The first is each science has its own method, and the second is the work of the methodology is subsequent to the scientific work and not preceded by it, because the researcher in the science of methodology "do not draw the path to researcher, but rather, it traces the researcher intellectual and practical steps: to describe, analyze, classify, discuss and criticize, in order to formulate it in a logical theory that may benefit the world, and rise the researcher' awareness of the nature of his work" (Al-Jabri, 1988, p. 23).

Method in general is the clear way to express something, to do something, or to teach something according to certain principles and a specific system, in order to reach a specific goal, In the seventeenth century many books dealt with the issue of method. Descartes said that "I mean by method, simple affirmative rules that if a person take care of it with careful consideration, he is in safe from being correct for what is wrong, and the approaches are many" (Abdullah, 2002).

The scientific method applied in the social and human sciences is somewhat different from applied in the natural sciences, especially in terms of accuracy due to the difference in the nature of problems and phenomena in the two fields, The scientific researcher's difficulties are summed up in following obstacles and problems:

2-2- The studying of psychological phenomenon a scientific:

study, there is several obstacles which are:

It is a moral event deals with an unstable subject as it observed in nature. Where does the feeling settle? What is the point of attention? And where do we find the will? What is the scale of imagination? These are questions for which we do not find an accurate answer, and most of what happens at the level of the soul does not stop from movement and continuity. and from this point it is difficult for the human to observe accurately *Nouvel essai...*

Nouvel essai...

, and if the observation is not possible, the experimental method is completely neglected (Piaget, 1976).

It is a qualitative issue that can be described and cannot be quantified, and this prevents reaching accurate and precise results. For example, our intentions, emotions, desires, and perceptions cannot be accurately measured mathematically.

It is a subjective phenomenon that only its owner perceives, so what happens on a psychological level cannot necessarily happen in the self of another person, the memories, desires, interests, and the entire psychological life are different from the psyche of others, and this is what makes scientific study very difficult, since we do not find ourselves in front of a single psychological phenomenon that can be generalized as is the case in the physical phenomenon, as it is sufficient to enter a sample into the laboratory and when the experiment succeeds, I generalize, but this is impossible when we study the self, and sometimes even the self does not understand itself, and it is difficult for us to perceive it, and we find this in the cases of unconscious (Ahmed, 1979, p. 22).

Language problem, a person may suffer from very violent psychological diseases that disturb his life, and may sometimes lead him to suicide, such as depression, because it is considered the main reason for suicide in the world. This patient is in need of a psychiatrist to diagnose the disease in order to provide medicine, and if the psychological phenomenon is not observed, the doctor resorts to asking the patient in order to find out the internal side problem, and here the doctor faces the problem of language, because the patient is often unable to describe accurately what is going on in the internal side of the self. We live under psychological pressure, and when the doctor asks to know what the problem is, the answer perhaps is "I feel sad", or "I am depressed", and these expressions describe our situation, and sometimes the language cannot express what we live from the psychological side (Ahmed, 1979, pp. 22,23).

It is an interrelated event, as the psychological phenomenon is not independent, and may be related to the physiological aspect, as we find an overlap between sensation as a physiological phenomenon and perception as a psychological and mental phenomenon (Qaidi, 2011). Anxiety and depression as a psychological disease that may have a biological cause such as the secretions of the brain, or it may have a relationship with the data of the society in which the person lives. Consequently, we find that the overlap, mixing, and intertwining between what is psychological, physiological and social may prevent the researcher from trying to reach accuracy in the study of the soul (Al-Shalabi, 1998).

2-3- When we try to study the historical event a scientific study, we face several obstacles, such as the characteristics of the historical incident:

The historical event appeared in the past and, and therefore we cannot observe it, and as long as the observation is not noticed, experimentation is impossible.

It is an individual event, it happens only once and it is limited to a specific time, circumstances and motives not repeated, for example the French revolution occurred once and passed and it is impossible to refer to it, It has its own causes and motives, and if another revolution occurs after, it will not be an exact copy of the first. And if it occurs by other means, circumstances, motives, and other people rather than other natural accidents, it is ready-made

events that we can deal with whenever we want, Water is water with its two elements everywhere and at all times. But for the French Revolution, for example in the twentieth century, it is a past event, Due to such problems the scientific study will be complicated (Nazzal, 2003, p. 140) .

Achieving objectivity in history is not possible, regardless of the historian's keenness and the will to achieve this. Despite the fact that, the aim of the scientific study is objectivity, and although historians advocate the necessity of achieving objectivity in historical studies and avoiding subjectivity, history is still far from the goal (Al-Messiri, 2002, pp. 15-16) . Their criticism of each other is the best proof of the subjectivity of history, and this is a natural thing. the historian is human being who has his own county, culture, faith, ideology, so how can we demand that he deny all this? when the historian denies that, is like someone who is asking him to give up part of his personality, and objectivity is only applied in the world of things, which happened without our will or our interference. The study of iron and trees, for example, is independent of our tendencies and desires, unlike human incidents like history, and what confirms the historian's dimension on objectivity is that educational programs about history are always modified with the coming of new government. Whereas, it does not think of renew mathematics or chemistry books (Al-Messiri, 2002, p. 16).

It is not subjected to the determinism that requires the same causes lead to the same results, but it is a descriptive event that cannot be quantified, as it cannot be entered into the laboratory for the purpose of studying it. If the historian tries to improve a political hypothesis, he is assuming; he will create a war in a community to notice the correctness of his hypotheses! And of course, this is not logical (Heisenberg, 1962).

2-3- The problems facing the scientific researcher in the social phenomenon:

The first obstacle facing the researcher is the subjectivity problem, the researcher in the study of society is influenced by ideas and ideologies, which makes the study, subjective, and lack of credibility and objectivity¹⁶, as it is a complex in which the various human dimensions overlap: psychological, intellectual, religious, economic, biological, John Stuart Mill said " The complex phenomena and results that are due to interrelated and complex causes are not suitable for being a true subject of scientific induction based on observation and experiment" It cannot be a subject of experimentation because it is moral, and there is an obstacle to determinism: Man differs from the realm of material world in that he has the will and freedom to act in contrast to the substance that is governed by determinism, so a person cannot be a criminal despite the presence of all the causes that lead to criminality (Ahmad Hussein Al-Liqi, 1974).

3- Overcome Obstacles and Achieve Considerable Results:

These obstacles stand in the way of applying the practical method. Scholars have worked hard to overcome these obstacles in the field of human studies, and to develop curriculum that

are fit with the nature of subjects and it was able to reach scientific results, among these sciences are history, sociology and psychology.

3-1- Overcome the psychological obstacles:

We find that the closest school to the scientific study is the behavioral school led by Watson. This school is work on the study of the psychological phenomenon objectively, as it sees that the psychological phenomenon can be observed, by noticing its effects that is represented in the behavior which is considered as a mirror of the internal psychological life. Watson believed that human behavior is divided into a (stimulus) and (response).

All human behaviors happen in this way, because when the stimulation happens, the response is noticed. And through this the psychological phenomenon is represented in the method of response. Watson derived the ideas from the studies of the Russian scientist Pavlov: "Pavlov wanted to measure the amount of saliva that the dog secreted when eating, Watson fixed a dog in a certain place and put one of its salivary glands to a tube. Watson noticed during the experiment that the dog does not secrete saliva only when the food is in the mouth. The Secretion when seeing servants or hearing footsteps is reflective action resulted from the conditions that precede the process of eating. Pavlov called this process the conditional reflection.

Watson was impressed with this experiment. Watson start to explain the complexity of human behavior; the types of behaviors we encounter environmental stimulation are nothing but it is conditional reflections acquired through experience. Let us take the emotions Watson returns to three emotions: anger that arises from the restriction of freedom, and love that arises from caress, and fear arises from a response to an external stimulation, such as loud noises (Ammar Bouhouch, 2001, p. 37).

There is the analytical method or psychoanalysis, which is a scientific method to analyze psychological phenomena and mental disorders created by the psychologist Sigmund Freud as an alternative to hypnosis. Psychoanalysis is based on dialogue and free association of ideas through questions that the doctor asks to the patient. It relates mainly to the past, dreams, desires, and inclinations, and its purpose is to bring out the unconscious desires to the conscious until the symptoms of disease disappear. Freud said "the unconscious is a necessary and legitimate hypothesis to explain many actions that not jointed with the proof of feeling, whether for the normal or the sick alike" (Ammar Bouhouch, 2001, p. 37).

3-2- Overcome the historical obstacles

The favor to overcome these obstacles back to "Abd Al-Rahman Ibn Khaldun", as well as for European historians such as "Renan", Taine and "Futsal" De "Collange", whose demanded respect for the nature and characteristics of the historical incident, on this basis, the following results were reached (Khaldun, 2005) .

If the historical event is individual, unrepeatable, free from the principle of determinism and its impossible for experimentation, therefore the concept of experience must be adapted to be

consistent with its nature, and in terms of the necessity of determining its beginning, the historian resorts to the assumption in determining the starting point and chooses the closest to objectivity, taking into account the causal sequence between the historical event, and from experience, he makes it through historical comparison.

3-2-1- Based on this characteristic, the event must deal with the effect and the documents, which are two types:

- Involuntary sources, those remain unintentionally and without structure, such as buildings, money, weapons, and literary heritage.
- Voluntary sources, those remain to afford evidences to them, such as novels and history books.

3-2-2- Verify the authenticity of the sources and their own exclusion before reconstructing the historical incident with criticism which is done on two levels: (Ammar Bouhouch, 2001, p. 17)

- External criticism: It is the external examination of the source in order to find out whether this document dates back to that time or not? Or it reached us without distortion or falsification? And if it is a document examines the type of paper, ink, or the shape of a line. If it is a weapon, money or, the type of metal examine the nature of the chemicals in order to improve its effects.
- Internal criticism: It is an internal examination of the source, in order to find out whether what is mentioned in this document is in line with the mentality of the one attributed to it and is it consistent with what has been narrated in other references. As well as knowing the psychology and the success of the writer in this direction of sharpness which led him to scrutinize, to exaggerate, to distort events and careful reading so that he can identify the spontaneous errors.

3-2-3- Reconstruction the incident by relate its parts and to arrange according to its time, and refer it with general accidents after selecting them according to their importance and type (Maurice, 2004).

3-3- Overcome the sociological obstacles:

When come to study the social phenomenon a scientific study, we find Ibn Khaldun among the first who worked to understand and study social phenomena empirically and removed the obstacles that came across. Ibn khaldun name this science “the science of mankind” Then August Comte, the leader of positivism, and he was the first to use the term “sociology”. After that, Emil Durkheim addressed the social phenomenon through experimental study based mainly on determining its characteristics, the factors that control it and the most important characteristics. (Bourdieu, 1984, p. 124)

The social phenomenon is beyond the feeling of individual, because the individual is born and find society in front of him with its specific customs, tradition and public sector and he is subject in.

Religion for example preceded the existence of the believer, and he finds it full formed Email Durkheim said "Since this joint action is done outside the feelings of each of us, it necessarily leads to the confirmation and consecration of some special types of behavior and thinking, which are those types that exist outside us, and which are not subject to the will of any one of us separately" (Bourdieu, 1984, p. 124).

In other words, Durkheim emphasized that sociology could only exist when thinkers felt that social phenomena were things of real existence and that they could be studied even if they were not material things in the sense of the word. Durkheim said "Social phenomena are things that must be studied as things, and if we want to prove the validity of this issue, we do not need to study the nature of these phenomena in a philosophical way" (Bourdieu, 1984, pp. 124,125) .

Durkheim explained the meaning of objectivity "We do not actually say that social phenomena are material things, but we say that they are worthy of being described as just like natural phenomena ... and what it means to consider social phenomena as things is to study it in the same way as natural phenomena, to be liberated from every previous idea about these phenomena, and for our knowledge it comes from the outside through observation, and not from the inside through contemplation and introspection. It does not mean that to treat a particular set of phenomena as objects, is that to introduce these phenomena into a special class of natural beings. Rather, the meaning of that is that to follow a purely mental path towards it, In other words, we are studying it and we have adhered to this following principle, which is that we are ignorant of everything about its truth, and that we cannot reveal its intrinsic properties and the unknown causes that it is subject to through internal observation, no matter how accurate this method is" (Bourdieu, 1984, p. 125).

Thus, Durkheim considered the liberation from every precedent idea and social interpretation, and the consideration of social phenomena as objects are the components of the positivist scientific method based on description, analysis and comparison, not on imagination, contemplation, internal introspection and subjective opinions. Also he said that it is an obligatory and compulsory phenomenon. The individual and groups are obliged to apply and if those they reject, they are punished. Durkheim said: "I am not obliged to use the French language as a tool to communicate with my countrymen, and I do not have to use official money, but I cannot help but speak this language. I use this money, and if I tried to get rid of this necessity, my attempt would have failed" (Bourdieu, 1984, p. 125).

It is a collective phenomenon represented by what Durkheim called the collective conscience, that is, it does not belong to any individual or a group, it is spontaneous that is shared, and it is repeated for a long period of time.

It is characterized of being a historical incident that described a moment in the history of human society, the customs, and beliefs and laws that young people inherited from their

ancestors. Thus, Durkheim came to try to explain the social phenomenon in a scientific and positivistic way, far from philosophical studies.

Thus, the issues raised are not necessarily skeptical about the scientific value of these sciences, but rather an epistemological debate that would enrich the human sciences and push them to be precise.

Because all the difficulties are represented in the nature of the human phenomenon as a complex, variable phenomenon, and that man is the one who is studying and being studied at the same time.

4- Conclusion:

The study concluded that the scientific studies on the human phenomenon are related to the methodology followed and adapted according to the nature of phenomena, consequently, the studies concerned in the field of the humanities can hold the status of science in the sense that it applies with the peculiarities of its field, this issue confirm that it can improve the objectivity at a certain degree, for the sake of human to know himself, to achieve his identity and coexist with others, starting from the past as a basic rule.

Despite the difficulties and obstacles that face the scientific researcher in the field of the social and human science, it can be said that these two types of sciences are important among other sciences, especially the natural science, this importance is demonstrated through:

The human science is among the necessary branches of knowledge, but the most important one, if we do not said it is the origin from which all sciences started. These sciences must be supported and encouraged because it preserves the power of the state. And the preservation of society and the individual is the basis of society, then to product a generation aware of its responsibilities.

The human science is try to pull the rug of sanctity from all knowledge (certainty and trustworthiness), or the assumptions of science, as there is no knowledge that surpasses criticism, analysis and comparison (constantly reviewing and modification). In addition to, develop the learners ability for makes appropriate and positive decisions and benefit from both of the past and the present in order to achieve the future.

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