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Gen Z Mindset in the Era of Rapid Advances in Science and Technology and Physics

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Abstract

Humans are God's most perfect creatures compared to other creatures, because humans are given reason to think. However, not all humans have this level of intelligence or sensitivity in logical, critical, creative or innovative thinking. This is based on the development of human thought patterns that are not simultaneous. Human thought patterns are influenced by the surrounding circumstances and of course influenced by the human will itself. If you look back, in the Babylonian era, ancient humans (approximately 650 BC) only had the mindset of maintaining their survival by moving around (nomadic). This is because at that time human were still based on customs and still believed in myths. This is different from today where humans have developed more in terms of thought patterns. Human today tend to have a higher level of curiosity, especially with the current advances in science and technology. . Science and technology develop together with science, so that the two have a continuous relationship. So human thought patterns are greatly influenced by knowledge which is becoming increasingly widespread along with advances in science and technology.

Keywords: human, think, influenced

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INTRODUCTION

Khodijah (2006:117) explains that mindset is a human personal activity that results in discovery that is directed towards a goal with a pattern of thinking to find the desired understanding.

Budiman (2011:107) explains that a mindset is a set of beliefs or ways of thinking that influence a person's behavior and attitudes which ultimately determine a person's level of success and future.

Fang et al., (2004), define thought patterns as something that happens in a person's head, which has the power to control a person's attitudes and has the potential to influence a person's behavior. Mindsets are important in explaining

human judgment and decision making in some decisions. can improve or worsen decision bias (Hamilton, Vohs, Sellier, & Meyvis, 2011).

In his book entitled Globalization and Identity (2004) by Manuel Castells, he explains that science and technology is a collection of tools, rules and procedures that are the application of scientific knowledge to certain jobs under conditions that allow repetition.

Sukamto, et al. (in Sitiatava Rizema Putra, 2013 (40), Science is a way of finding out about nature systematically to master knowledge of facts, concepts, principles, discovery processes, and have an attitude.

Based on the definitions that have been proposed by several experts above, it can be concluded that mindset is a philosophy of life, way of thinking, attitude, opinion and mentality that has the power to influence a person's behavior, is important in human judgment and decision making in individual responses to various situations. Mindset really determines human survival, because it is from that pattern of thinking that the instincts of life will follow, where mindset is the main factor, scientific insight is also a very important aspect.

Mindset is a person's way of concluding or giving value to something based on a certain point of view. Differences in a person's thought patterns are caused by differences in the number of points of view that are used as a basis, basis or reason because each person has a different way of thinking. This is caused by varying environments. Apart from that, the number of points of view a person has to think is influenced by emotions (mentality).

Mindset can also be interpreted as a fixed mental attitude which is formed through education, experience and prejudice. Thought patterns as mental maps are used as a basis for behavior and action. Maps that are able to describe the reality of a territory, make people know where they are and where they are going, so that they are able to plan how they will get there and how someone can proceed every day to fulfill the map.

RESEARCH METHOD

The literature review was carried out through the following steps. First, look for sources that match the material using Google Books and Google Scholar to get valid data. The data sought is regarding the development of human thought patterns in the progress of science and technology and is based on science (physics). Another way is to discuss together so that you get views that are appropriate and in line with the material

RESULTS AND DISCUSSION

The development of human thought patterns is a process in which humans will never be satisfied with their own existing thoughts so that they develop to the stage of science. Human thought patterns are usually referred to as mindset, namely the way the mind receives, processes, analyzes and makes conclusions whatever the source of information that comes through our senses.

Thinking is the correct reasoning of human abilities, reasoning is logical analysis and efforts to find answers to various realities. This ability is not through feelings, but through underlying knowledge.

The mindset has several stages according to age and year of birth, so that each stage has its own characteristics. Gen Z children with a birth year range of 1997-2012 have a fairly rapid development in their mindset with the increase in knowledge and technology. Gen Z tends to focus more on technology so they are easily carried away by trends or current affairs, whether in terms of lifestyle, education or perspective in dealing with things. Certainly advances in science and technology have advantages and disadvantages. Advances in science and technology have good application in the development of science, especially physics. With advances in science and technology, Gen Z is able to make innovations in terms of learning physics both in learning media and in the application of physics itself and can develop learning patterns that are now starting to become boring and less popular. With the existence of science and technology, Gen Z can carry out learning that is available on many platforms such as YouTube, Ruangguru, Quipper, and other learning services that are available for free or for a fee.

However, advances in science and technology also have drawbacks, namely that it prevents people from showing their abilities, because nowadays everything is based on machines or AT so that many human resources are in competition with the machines that humans themselves make. Gen Z also relies a lot on smartphones which have now become their everyday companions, this makes a person have a high individualistic attitude and even live an antisocial life. Not only that, many Gen Z are addicted to playing online games on smartphones which is detrimental to many things in their lives such as study time, social time, money to buy internet quota, and even their health is neglected because of irregular sleep times.

The development of human thought patterns from time to time continues to change and increase, because it is influenced by several factors. According to Iskandar (2008: 661) There are 7 sources of power that influence the human thought process, including parents, family, society, school, friends, media social, self, and progress in science and technology.

Since birth, humans have been equipped with the mind to think, but human thought patterns develop differently. The development of human thought patterns is based on existing curiosity and critical reasoning. Flashback, in ancient times the mindset that developed was still not broad enough, because in ancient times humans only thought about survival by nomadic means or moving from place to place. However, as time goes by, human thought patterns are balanced by developments in science and technology. From maintaining survival in a nomadic way, it changed to a mindset of building a permanent place using scientific knowledge that was known at that time, such as living in caves and wooden houses. So the development of human thought patterns is also based on knowledge that develops over time.

In life, there are 5 types of age stages in humans: Human thought patterns during infancy (0 – 2 years). This period has an age range of 0-2 years. At the age of 4-8 months, humans have experienced the process of developing thought patterns. Human thought patterns in childhood (2 – 12 years). During this period, the development of human thought patterns occurred very rapidly, because during this period humans were usually caught up in problems/questions about things around them. Human thought patterns during adolescence (12 – 21 years). During this period, humans tend to have a high curiosity. This curiosity usually arises from

one's own thoughts and to find answers to this curiosity, teenagers try not to involve the people around them. The human mindset at this time can be said to be stable or mature, because at this time humans have tried things that were previously considered important and have even been able to solve problems that occurred before. Human thought patterns in old age tend to return to childhood. However, in this sentence there is not a rapid development of thought patterns but rather questions or characteristics that lead to childishness.

The science that exists today is thanks to the help of technology which is developing very rapidly. The development of Gen Z's mindset regarding the progress of science and technology and science, especially in the field of physics, is very diverse. Of course Gen Z has a very fast mindset with high creativity because currently advances in science and technology in science are very diverse. It's not just theory, but Gen Z can easily apply this theory in everyday life. Without realizing it, everything that is done is most likely included in the application of physics. Gen Z's perspective on physics should be different from others, physics is a fun science and not as difficult as imagined. With advances in science and technology in science, students will be able to persuade them to study physics without coercion and with pleasure.

CONCLUSION

Human thought patterns vary greatly depending on the human mindset and way of thinking in receiving, processing, analyzing and making conclusions whatever the source of information that comes through our senses. Mindset is a philosophy of life, way of thinking, attitude, opinion and mentality that has the power to influence a person's behavior in carrying out human judgment and decision making in individual responses to various situations. Mindset really determines human survival, because it is from that pattern of thinking that the instincts of life will follow, where mindset is the main factor, scientific insight is also a very important aspect. In the thought process, each person has a different process, and these differences are the factors that differentiate each human's thought patterns. Gen Z's mindset in the field of science, especially physics, will also be different due to advances in science and technology which can easily create or create applications in everyday life.

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