Nurturing Intelligence Through the Growth Mindset and Environmental Factors Unraveling Intelligence: Nature, Nurture, and Developmental Pathways

The debate on whether people are born intelligent or unintelligent indicates that some scholars believe this trait is inborn and unchangeable. Intelligence is the measure of a person's ability to grasp class content and apply inherent skills. However, some people think that as long as they understand why certain elements work together, they are intelligent. The disciplines that expound on this topic include sociology, criminology, psychology, early childhood development, and biological sciences. Academicians in these areas seek to understand the structure and function of the human brain and its relation to society, emotional health, growth, and illnesses.

For example, sociologists study brain functions and the way they divide human beings into social classes in which shrewd leaders use their intelligence to manipulate their followers and create private communities such as cults. On the other hand, criminologists study brain functions to determine the thought patterns of criminals. The other disciplines tackle brain function, structure, and immunology to assess the heritability of diseases such as Alzheimer's.

The provided research seeks to answer whether human intelligence is indeed an inborn trait and what factors influence its presence and development. Through an analysis of the activities that people perform, this paper proves that intelligence develops over time since human beings are born with similar brain structures. In response to this, those with a growth mindset can develop their intelligence, as opposed to people with a fixed mindset.

Genetics, Environment, and Cognitive Development: Unraveling the Interplay

Although citizens are not born intelligent, their inherent genetics can contribute to developing certain levels of brilliance. For infants, since they cannot speak or react to situations that can be

used to measure their acumen, doctors often examine their brain size and structure to see if they are normal or abnormal (Von Rhein et al. 1259). Nonetheless, children whose parents are intelligent inherit 'smart' genes, which increase their smartness and ability to grasp the content. Different growth phases are also characterized by certain brain functions or cognitive abilities. Therefore, physicians can use these stages to determine a child's cognitive and mental capacity. Yeo et al. studied schizophrenia, intelligence, and genetics and found out that the disease, which affects cognitive function, is inheritable (240). Therefore, the scholars concluded that since children inherit cognitive disabilities, they could also genetically acquire high intelligence levels from their parents. However, they have to use their cognitive abilities to develop the trait. People are not born intelligent, but their environment can trigger the quality or diminish its development. The environment entails one's physical surroundings, emotional support, and neighborhood.

This is explored in Inequality by Design: Cracking the Bell Curve Myth by Fischer et al. as a response to the Bell curve argument, which states that people's racial features dictate their social classes and intelligence levels (20). The Bell theory assumes that people of certain races encounter immense socioeconomic challenges that make them unable to cater to their children's tuition fees, making the young ones lack the chance to learn and become intelligent. Bell believed that people from certain races live in slums, where their children obtain quality education due to the ill-equipped nature of the available public schools. Therefore, he concluded that since race determines one's socioeconomic status, it also influences a person's level of intelligence (Fischer et al. 20). However, the scholars state that the ideology is a myth and a manifestation of stereotypes since the theorist assumes that people from certain ethnicities are predisposed to experience the same socioeconomic challenges. Furthermore, the Bell curve

model focuses on American society while ignoring the rest of the world. Its proponents also forget that the intelligence gene develops with a person's cognitive functions (Ma and Schapira12). Therefore, the connection between race, social class, and intelligence is farfetched. Nevertheless, if children are surrounded by violent gangs, poverty, uneducated adults, and drug users, they are unlikely to develop an interest in their acumen. In such cases, their ability to develop astuteness depends on their environment. Still, some individuals are born ambitious, which makes them think beyond their environmental influences. Therefore, such youngsters can focus on their studies and achieve high levels of intelligence within their lifetimes. On the other hand, some children can develop their aptitude levels or lose interest in the same because of parental influences.

Intellectual parents and guardians motivate their children to study and develop cognitive skills from an early age. Those who were born into low-income families also insist that their children perform exemplarily in academics and attend institutions of higher education so that they can improve their brain power and be able to succeed in life. Dweck examines the development of intelligence and states that it can be acquired through constant exposure to reading materials and games that challenge cognitive functions (3).

The writer asserts that for intelligence to grow, it must be triggered by constant practice and reading. Notably, parents who treasure intelligence and intellectual phenomena tend to invest in their children's cognitive development. For instance, they pay for extra classes such as language and music lessons (Boyd et al. 17). Hence, children raised by such parents become intelligent.

Fostering Intelligence Through Self-Worth and Learning Opportunities

Because of the skills they acquire from a young age, in brief, parental backgrounds increase their children's inclination towards activities that boost their intelligence levels. People develop intelligence due to their self-worth, which refers to the way they perceive themselves. Synonyms of the word include self-value and self-esteem. If an individual values him or herself, he or she will most likely invest in his or her intelligence. Such people develop their acumen out of love for themselves or as a form of investment in themselves. Such persons are also motivated and competitive since they are confident in their abilities.

A confident person is unafraid of criticism and acknowledges personal strengths and weaknesses. Therefore, he/she is always ready to learn and unlearn. In the same way, people with high self-esteem are inclined to improve their present situations by constantly researching new self-improvement techniques. As they participate in holistic growth and development, such individuals exercise their minds by engaging in challenging tasks and reading books that expand their knowledge. Hence, people can increase their knowledge and intellectual abilities by acquiring knowledge on how to increase their self-worth.

Educational institutions also provide opportunities for youngsters and adults to develop their brain power. Although human beings are born with similar brain capacities, they have the opportunity to increase their intelligence as they mature by taking advantage of the available resources to do so. In this veritable position, Dweck categorized humans into two groups, namely, growth- and fixed-minded people (3). The former accept intelligence training, while the latter remain fixated on their capacities. To this end, people who fail to use scholarly resources to develop their psychological abilities cannot grow their acumen. Dweck states that students can use training opportunities and workshops in higher learning institutions to acquire new skills and Knowledge (6).

The Power of a Growth Mindset and Supportive Environments

They can also increase their intellect by reading books on various subjects. Individuals who possess a growth mindset tend to augment their intelligence levels over time. Dweck asserts that people with a fixed and growth mindset react to negative information and circumstances differently (3). When a growth-oriented person fails a test, he/she increases the time spent studying and the level of concentration in class. The author adds that such learners are open to criticism and practice self-improvement. Growth-oriented people also accept corrections, evaluate their strengths and weaknesses, and seek to develop their knowledge and behavior. On the other hand, those with a fixed mindset shun corrections and interpret them as evidence that they should quit whatever they are doing because they will not succeed. Such people are also rigid and pessimistic about their situations. For instance, if a student with a fixed mindset fails an examination, he/she could opt out of the class and regard him/herself as unintelligent. Consequently, the ability to view challenges as opportunities to grow one's aptitude indicates that the growth mindset, rather than the fixed mindset, can increase a person's intelligence. People who believe that qualities can be developed also enhance their acumen, whereas those who think that human traits are unchangeable see their situations as permanent and fail to seek lasting solutions. Most teachers and parents also judge poor-performing students as untalented and label them as weak. Instead of dismissing and giving up on such learners, teachers and parents should investigate the root issues of the student's poor performance and help them succeed.

In some cases, a youngster may perform poorly at school due to stress at home, which makes him/her fail to concentrate in class. In other instances, a learner may be uninterested in academics because of living in poor neighborhoods, which discourages children from studying

by preaching their future as drug addicts or unemployed. In such cases, tutors should devise ways to help their students obtain hope and gain interest in academics by informing them of the advantages therein.

Embracing Failure: Catalyst for Learning and Intelligence Growth

Instructors should also utilize multiple learning techniques so that pupils with different learning styles can all benefit from the syllabus content. In brief, some professionals wrongly assume that qualities such as intelligence cannot be learned or developed. People's attitudes towards failure also increase or decrease their intelligence levels. Growth-oriented individuals understand that learning is a process rather than a one-time experience.

Therefore, they view failure as an opportunity to expand their skills and intelligence. Conversely, people with fixed mindsets believe that failure is a demonstration of weakness and unchangeable inherent traits. For instance, if such a person opens a business and fails multiple times, he/she could quit the venture. Similarly, some people take tests or try learning new languages and skills but surrender when they encounter challenges. On the other hand, for intelligent individuals, a failed business serves as an opportunity to study factors that deter enterprises from prosperity. Similarly, if they fail a school examination, they examine the aspects that caused the low grades so that they can obtain better scores in forthcoming evaluations. In other words, the perception of failure affects one's acumen and success in life. Hence, the perception of mistakes as opportunities to expand knowledge is a quality of intelligent, growth-oriented people.

Intelligence is also acquired through continuous improvement techniques.

Therefore, humans have to evaluate their personal characteristics in social or professional aspects so that, later, they can determine the traits that will help them to become competent professionals

in a given field. For example, a lawyer should be compassionate, rational, logical, and emotionally intelligent. Hence, if a person aspires to excel in the field, he/she could list his/her weaknesses and strengths to determine the deterrents of competence and work on them accordingly.

Enhancing Intelligence Through Engaging Activities

After that, he/she applies the learned concepts to his/her daily activities. In this regard, people should aim to improve their habits and professional traits continually through reading the available literature on their weaknesses and careers. In addition to self-improvement, constant use of cognitive functions increases one's intellectual levels. This includes critical thinking, analysis, memory, and concentration skills. Activities that exercise these attributes require a high level of concentration and range from reading to playing games.

Such activities utilize the brain's cognitive abilities and increase a person's critical thinking capacity. Similarly, practices that prompt people to use their memory and analysis skills increase their intelligence and can include interacting with intellectuals in academics. Furthermore, people can use online platforms to network with them virtually to learn new self-improvement and goal-accomplishment techniques. Alternatively, they can attend conferences on debatable issues so they can increase their brain power by gaining expansive knowledge as well as argumentation and critical thinking skills.

Hence, humans can improve their intelligence by participating in brain-stimulating activities that improve their cognitive functions. Dweck's argument proves that people's cognitive perceptions can increase their intelligence levels. There is a scholarly consensus that individuals should use their physiological functions to advance intellectually.

Similar to the way a person exercises body muscles to increase his/her strength and endurance, people who engage their brains in complex tasks can augment their intelligence levels. At the same time, people who negatively use their cognitive functions can diminish their capacity to grow their brain power. Therefore, Dweck suggests that people perceive negative situations positively so they can develop a growth mindset (4).

Transforming Intelligence Through Practice and Mindset

The psychology expert further advises citizens to increase their mental capacity through constant practice to adopt such a mindset. Dweck asserts that people can improve their cognitive functions, such as memory, problem-solving, and concentration (4). In essence, although all human beings possess these traits, they manifest in different capacities, meaning that people who exercise their brain functions will increase their proficiency in various skills. The rationale behind this theory is that constant use of the mental cognitive function will increase its capacity. Hence, individuals should utilize their talents and abilities to prevent them from withering. Overall, increased cognitive function heightens the growth mindset and optimism; therefore, people should increase the use of their cognitive functions to increase intelligence. Opponents of the claim would argue that intelligence levels cannot be altered. Such claims purport that human beings are either born intelligent or dumb and that intelligence cannot be nurtured because brain development and functions materialize only on motor abilities and physical features.

Other arguments add that intellectual development is not a fundamental type of growth or a life skill; rather, people ought to prioritize their sources of income so that they can make money and lead happy lives (Boyd et al. 23). In other words, they view intellectual development as a useless

waste of time and resources. However, from a broader point of view, such arguments fail to realize that intelligence is applicable in all fronts of life, including financial success.

Humans develop intelligence because of their positive mindsets. Moreover, factors such as genetics, environment, parental care, self-worth, and institutional training can increase people's acumens. It is for this reason that individuals who make an effort to obtain new information or learn new skills are perceived to be smart. Similarly, those who use their cognitive functions to tackle challenges, such as puzzles and crosswords, also augment their astuteness.

Overcoming Challenges and Fostering Growth

Thus, in spite of the discouraging criticism, virtually everyone can improve their intelligence if they engage in activities that challenge their cognitive functions. On the other hand, pessimists and people who wallow in self-pity cannot enhance their intellectual levels. Hence, teachers and parents should use this information to challenge students to augment their brain power and ease the process of learning. According to the findings presented in the paper, people's intelligence levels are similar at birth, and variant levels of intelligence exist because some individuals practice cognitive skills and maximize their brain functions. On the other hand, other people believe that their brain capabilities are unchangeable; as a result, they refrain from cognitive activities and remain unintelligent.

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