

Exploring the Influence of Parental Personality Types on Children's Academic Choices

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Abstract

The academic decisions that children make are frequently influenced by several different circumstances. One of the most important yet understudied aspects of this is the influence of the personality types of their parents. The objective of this report is to understand how parental personalities may impact a child's inclination towards science or art subjects. The Myers-Briggs Type Indicator (MBTI) Test was used for parents to indicate the relationship between parental personality type and the academic choices made by their children, particularly in the field of science and art. The results indicated that children from the INTJ, INFJ, and ENFJ parents' personality types, are likely to choose science subjects, while children from ENTJ parents' personality types choose art subjects. This sheds light on the association between parental personality types and children's academic choices; aiding educators and policymakers better tailor educational approaches to accommodate diverse student needs and aspirations.

Keywords: Personality Types, Myers-Briggs Type Indicator (MBTI), Children's Academic Choices

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■ 1.0 INTRODUCTION

The term parent signifies something sacred to all human beings as it cannot be described simply as one responsible for a child who belongs to them, children who are under their care, or children who are being entrusted to them to care. It is also included in the term those who have parental rights based on biological or gestational relations (Hill, 2017). Being a parent qualifies one for parenting services which refers to the process and practice of raising and nurturing children from infancy to adulthood. It involves providing care, support, guidance, and education to children as they grow and develop physically, emotionally, socially, and intellectually. Human relationships are special in the sense that they do not only involve physical interaction but also emotional connections that can occur in various contexts such as family, friendship, partnership, and communities. Of all the above, the parent and child relationship is the most sacred as our existence begins with our parents, be it biological or gestational. A parent-child relationship refers to the unique bond and connection between a parent and their kids. It is such an influential relationship that significantly impacts a child's growth, development, and wellbeing.

According to Carl Gustav Jung, a Swiss psychologist, and psychiatrist, our personality is shaped by the dynamic interaction between our conscious and unconscious minds, in which within the unconscious mind there are the personal unconscious and the collective unconscious. The conscious mind represents the thoughts, memories, and emotions a person is aware of. While the personal unconscious contains temporarily forgotten information as was explained by Sigmund Freud, the pioneer in unconscious mind theory. The difference between Freud's version of the unconscious mind with Jung's version is, that Freud relates it to repressed childhood experiences, while Jung called it a complex collection of thoughts, attitudes, and memories (Bal, 2019).

The collective unconscious concept by Carl Jung refers to shared, inherited unconscious knowledge and experiences across generations. He introduced the idea that the human mind has distinctive characteristics imprinted on it as predispositions stem from our ancestral past. Hence, the genetic inheritance of parental qualities to their progeny is possible. Frequently, individuals observe their children exhibiting behaviors that resemble their former activities, and this happens naturally without any instruction or guidance from parents. Carl Jung relates human personality with the collective unconscious mind and it appears in the form of a universal pattern of thought and behavior and categorizes people in various personality patterns. The four basic dimensions of this personality type are Extraversion vs Introversion, Sensation vs Intuition, Thinking vs Feeling, and Judging vs Perceiving (Randy J. Larsen; David M. Buss, 2010).

Since 1967, the Malaysian Education System has given high importance to science subjects (Suhanna Zainudin *et al.*, 2015). The system aspires to achieve a ratio of 60% enrolment for science students and 40% enrolment for Arts

students (known as the 60:40 policy). This policy was enacted in direct response to the 1967 Statement Report of the Higher Education Planning Committee, to ensure that our nation retains sufficient human capital to meet the demands of our industrial revolution. The 60:40 approach, as outlined in the National Education approach (MOE, 2012), remains in effect until today. Nevertheless, the level of student involvement in science subjects has not yet achieved the desired proportion. According to a report published in 2023 by the Ministry of Education, only 15.2% or 62,250 out of 415,000 Form 4 students have opted for science subjects. Considering this situation, a decline in secondary school attendance will impact university enrolment. Furthermore, it is worth noting that not all individuals who study science subjects will pursue higher education in the same field at the university level. They may have the option to choose art subjects instead, but art students do not have the same flexibility. Hence, without implementing significant measures, Malaysia would not achieve enough Science, Technology, Engineering, and Mathematics (STEM) professionals as intended by the 60:40 strategy in the long run.

National Science Foundation, USA in 2010, introduced the term Science, Technology, Engineering, and Mathematics (STEM). Since then, it has been widely adopted and used globally. Initially, the world only focused on the Science and Mathematics subject in referring to science and technology but later, technology and engineering subjects were added as part of the term. STEM in general is a trans disciplinary approach to expose students to future emerging technologies (Aspin *et al.*, 2021). The world has placed great importance on mastering STEM disciplines and transforming a technology-driven country on the road to globalization. Developing new technologies, adapting to new work processes, and the ability to move faster and in tandem with other developing nations are the drivers that push Malaysia to take additional measures for STEM education. It is only through education that the nations can prepare for the developed world and be at par with the rest of the world.

The National Science Technology and Innovation Policy (NSTIP) 2021-2030 is the government's pledge to effectively utilize and promote scientific and technological advancements to stimulate the socio-economic development of the country (Ministry of Science Technology and Innovation, 2021). The establishment of NSTIP aims to fulfill Malaysia's objective of developing a technologically advanced nation by 2030, characterized by sustainability, inclusivity, and scientific progress. This policy is part of the enabler for Malaysia in a Shared Prosperity Vision 2030, which replaces the Vision 2020. The policy has outlined 6 key thrusts supported by 20 robust strategies and 46 realistic and comprehensive initiatives that cover the implementation of NSTIP in various sectors. This report will take into consideration the empowerment of local talent to support NSTIP targets, which is implementing the 60:40 policies in education.

Our government has taken many measures, especially in the Ministry of Education and the Ministry of Higher Education to promote STEM education. In 2013, the government developed the Malaysia Education Blueprint 2013-2025 to provide a strategic roadmap for a rapid and sustainable transformation of the education system. One of the approaches is to actively include parents in fostering their children's enthusiasm for studying STEM topics. Parents are great influencers to kids in choosing what is best for their future especially when it comes to giving them the best education and, they hold the power to decide on their children's education.

Parents and their children have a unique relationship, particularly the special bond between mothers and their offspring. The sensation of being aware of the presence of a fetus within one's uterus is something that is beyond imagination. Regardless of the scientific explanation for the creation of babies, the presence of children in a parent's life evokes indescribable emotions and leads to the assumption of new responsibilities that were previously unimaginable. Parents go all out to provide the utmost care and support to ensure their children's survival in the world, which we refer to as parenting.

■ 2.0 ISSUES AND PROBLEMS RELATED

Malaysian parents' perceptions of STEM subjects are characterized by their limited awareness of STEM as a challenging career path, they perceive STEM subjects are more difficult to excel in compared to Arts subjects, and their belief that job prospects are limited for graduates of STEM programs (Ghani 2020). Ministry of Higher Education (MOHE) has initiated a twinning program that allows students to be attached to the industry during their study period called degree apprenticeship. Upon enrollment and graduation, parents and students will be assured that STEM jobs are as rewarding as non-STEM jobs. By doing this, MOHE hopes that the parents' stigma of their kids not having a good job after graduation in STEM subjects will be lessened (Tâm *et al.* 2016).

According to the World Economic Forum (2020) by 2025 most of the job roles in high demand will be related to the STEM field such as data analysts, robotics engineers, artificial intelligence (AI) experts, and so on (Aspin, Ali, and Bunyamin 2021). However, Malaysian graduates have been expressing dissatisfaction with the limited availability of job opportunities in science-related fields since 2021. We knew about the medical officer's issues of being employed on a contract basis for more than 5 years without knowing their future until they conducted a strike then the issues were resolved (Junaid Ibrahim, Martin Carvalho, n.d.). Also, the low salary offered to engineering graduates has been an issue for the last two years. In a press statement released by the Board of Engineers Malaysia on

September 14 last year, starting salaries for junior engineers were RM2,500, and this is one of the factors causing the young generation to be less interested in joining the profession thus reducing interest in taking STEM subjects. These two professions are among the top careers pursued by students in STEM subjects. Despite current situations surrounding the prospect of science graduates, parents cannot neglect the importance of encouraging their children to choose science

subjects over art subjects. In addition, the student shall be informed and allowed to explore their career choices to gain the opportunity to make connections between academic and practical subjects with work-related skills, starting at the secondary school level. However, due to the rigidity of the Malaysian education system fixed with the subsequent common perception of a ‘good career’, Malaysian students lack the opportunity for career exploration in the attempt to match their attributes such as personality, interests, skills, and values with real-life occupational demands in the market.

■ 3.0 RESEARCH METHODOLOGY

A quantitative approach was employed to gauge parental perspectives on their children's selection of science or art subjects. Additionally, the Myers-Briggs Type Indicator (MBTI) was utilized to assess parental personality types, facilitating the correlation between parental traits and their children's educational preferences. Indeed, the Myers-Briggs Type Indicator (MBTI) is a widely used personality assessment tool that categorizes individuals into sixteen personality types. Each personality type has its unique characteristics, preferences, and ways of interacting with the world. The MBTI, also known as a self-assessment tool, categorizes an individual's personality type and psychological preferences through introspection and self-reporting.

The MBTI instrument, developed in 1942 by Isabel Briggs Myers and her mother Katharine Cook Briggs, is rooted in the psychological theories of Swiss psychiatrist Carl Jung, particularly his groundbreaking work "Psychological Types. Jung's theory of psychological types was founded on the presence of four fundamental psychological functions - cognitive functions for evaluation (thinking and feeling) and cognitive functions for perception (sensation and intuition). He had the belief that a particular combination of functions tends to be prominent in an individual most of the time.

■ 4.0 FINDINGS AND RESULTS

This section aims to provide an empirically rigorous analysis of the impacts of parental personality on their children's educational preferences. The analysis is as follows.

4.1 The Report Analysis

The objective of this assessment is to classify individuals into four unique categories according to their perception of the world and decision-making processes. This enables participants to explore their personalities and gain a better understanding of themselves. The four categories comprise the traits of introversion or extraversion, sensing or intuition, thinking or feeling, and judging or perceiving. It is commonly believed that each person has one specific characteristic chosen from each area, resulting in a total of 16 unique personality types. Each trait in the categories is represented by the following abbreviations: E for Extroversion, I for Introversion, T for Thinking, F for Feeling, S for Sensing, N for Intuition, J for Judging, and P for Perceiving.

The purpose of this MBTI assessment is to know the personality type of parents and decision-making style based on their children's preferences in choosing between the Science and Art subjects i. secondary school. This assessment will be divided into three objectives; the first is to identify the predominant personality types among parents. Secondly, to examine the personality type of parents who decide for their children, in the fields of art and science, and thirdly to analyze the correlation between parental personality types and children's academic choices.

Table 1 Distribution of Respondents Across Categories (Science & Arts)

No.	Trait	Subjects	
		Science	Art
1	Extroversion/ Intuition/ Thinking/ Judging	1	3
2	Extroversion/ Intuition/ Feeling/ Judging	3	1
3	Extroversion/ Sensing/ Feeling/ Judging	1	
4	Extroversion/ Sensing/Thinking/ Judging	1	
5	Introversion/ Intuition/Thinking/ Judging	3	1
6	Introversion/ Sensing/Feeling/ Judging	1	1
7	Introversion/ Intuition/Feeling/ Judging	2	
8	Introversion/ Sensing/Thinking/ Judging		1
9	Introversion/ Sensing/ Thinking/ Perceiving		1
Total		12	8

Source: the author

This assessment was carried out by surveying 20 parents whose children are aged 16 years and above and who attend a government school in Malaysia. Participants are required to complete the MBTI assessment to establish a connection between their parenting style and their children's preferences for science and art topics. Out of the 20 parents, 12 of their children opted for science subjects while 8 chose Art subjects and the dominant personality types are ENTJ,

ENFJ, and INTJ. Based on the data presented in Table 1, a notable trend emerges: the dominant personality types for selecting science subjects are ENFJ and INTJ, whereas the dominant personality type for art subjects is ENTJ. According to MBTI theory, individuals with a preference for feeling are more inclined to choose art, whereas those with a preference for thinking tend to opt for science. The "thinking" trait aligns with logic and reasoning, while the "feeling" trait is associated with considering the impact of decisions on others (Briggs & Myers, 1962).

Analyzing the personality types in Table 1, it is evident that only two out of eight parents who selected art subjects exhibit a preference for feeling. Conversely, among parents who chose science subjects, six out of twelve prefer feeling rather than thinking, suggesting an association between feeling preference and selection of science subjects.

Table 2 Comparing Science and Art Subject Options

Science Subject										
Myers Briggs Type Indicator	ENTJ	ENFJ	ESFJ	ESTJ	INTJ	ISFJ	INFJ	ISTJ	ISTP	Total
Decision Maker										
The Parents			1		1	1				3
The Children		3		1	2		1			7
The Teachers	1						1			2
Art Subject										
Myers Briggs Type Indicator	ENTJ	ENFJ	ESFJ	ESTJ	INTJ	ISFJ	INFJ	ISTJ	ISTP	Total
Decision Maker										
The Parents					1				1	2
The Children	2	1				1		1		5
The Teachers	1									1

Parenting styles are multifaceted and shaped by a myriad of factors, encompassing cultural influences, upbringing, environmental surroundings, personal history, and individual beliefs. While the MBTI offers a foundational framework, it is important to recognize that it only provides a broad overview and may not fully encapsulate the intricacies of an individual's personality or their parenting approach. Even individuals sharing the same MBTI type can exhibit diverse parenting styles due to their unique life experiences and situational contexts.

Referring to Table 2, it is notable that the dominant personality type among parents making decisions on behalf of their children, whether in the context of art or science subjects, is INTJ. According to the MBTI manual, the INTJ personality type is commonly associated with scientific and technical fields (Mesarsova & Bavolar, 2017). However, it's essential to acknowledge that while certain personality types may gravitate towards specific domains, individual variations and contextual factors play a significant role in shaping parenting decisions and styles.

Furthermore, the personality types of parents who delegate decision-making to others predominantly consist of ENFJ and ENTJ. These personality types are characterized by traits of extroversion, intuition, and judging. Extraverted individuals primarily direct their energy toward external stimuli, often collaborating with others rather than working independently (Kim & Han, 2014).

Additionally, the correlation between parental personality types and children's academic choices is noteworthy. Science subjects tend to align with the personality trait INT_, which signifies a preference for introversion, intuition, and thinking (Kin & Mohd Rameli, 2020). Examining the data in Table 2, it is evident that only three out of twelve children who opt for science subjects have parents with the INT_ personality type. This highlights the complexity of the relationship between parental personality traits and children's educational preferences.

Figure 1 illustrates that child from the INTJ, INFJ, and ENFJ parents are likely to choose science subjects. While children from ENTJ parents choose art subjects. According to the MBTI manual, the "NF" trait is associated with the arts subjects while the "NT" traits are associated with science subjects. The INTJ parents are most related to science subjects with a preference for introversion, intuition, and thinking which is the preferred trait for science (Ismail *et al.*, 2017). Therefore, it appears that parents who possess the personality type "IN" do exert an influence on their children's selection of science topics through parental influence.

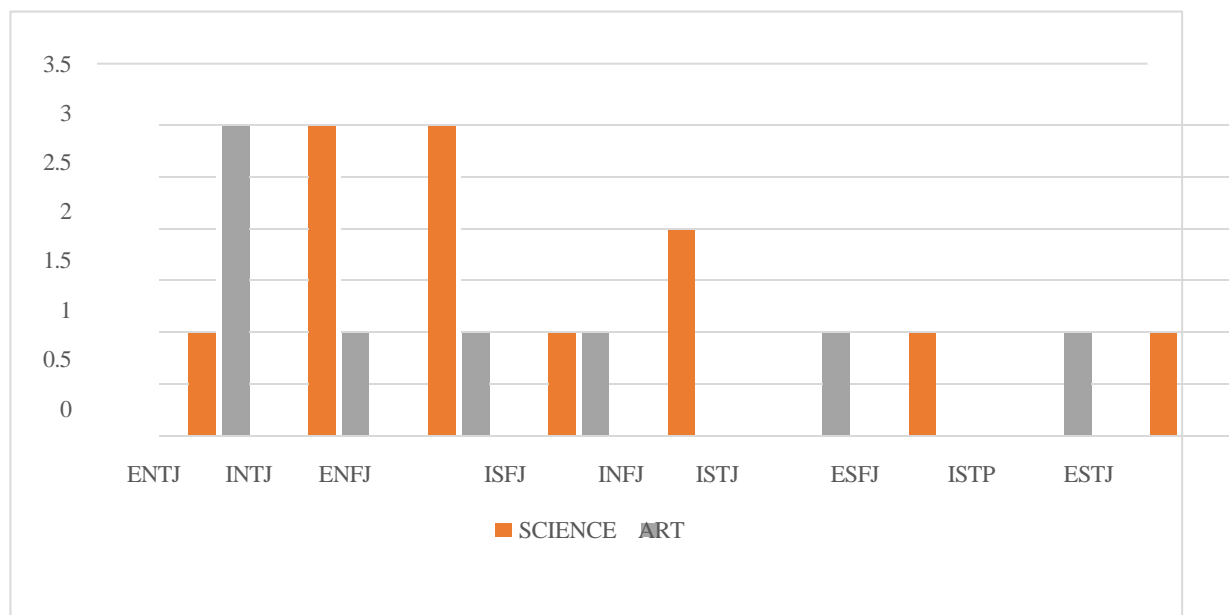


Figure 1 Personality Trait & Children's Educational Preferences

■ 5.0 DISCUSSION & CONCLUSIONS

In conclusion, parents play a crucial role in shaping their children's educational experiences and outcomes. The influence of parents on their children's education is complex and comprises various aspects, including academic achievement, motivation, socio-emotional development, and overall well-being. Understanding the link between parental personality types and children's academic choices can provide insights for educators, parents, and policymakers. This knowledge can help tailor educational interventions to cater to individual preferences and foster a supportive environment for children to thrive academically. Recognizing and appreciating the diversity of parental personalities can contribute to more informed educational strategies, ultimately promoting the holistic development of children in both science and art.

The results of the study further elucidate this relationship, showing that children from INTJ, INFJ, and ENFJ parents' personality types are inclined towards science subjects, while children of ENTJ parents tend to opt for art subjects. This insight highlights the importance of considering parental personalities in understanding and guiding children's academic choices. Moreover, scaling up this assessment across secondary schools could provide invaluable guidance for parents in charting their children's educational paths, enabling them to offer financial assistance and support in pursuing their chosen subjects. Additionally, educators can leverage MBTI assessments to inform educational strategies aimed at nurturing children's passion for science subjects, thereby facilitating informed decision-making about higher education pathways.

Furthermore, the MBTI assessment offers parents insights into their communication styles, decision-making processes, and approaches to conflict resolution. By understanding their own MBTI types, parents can enhance communication and collaboration within the parenting team, fostering a supportive environment for their children's development. This approach serves as a catalyst for personal growth and enables parents to adapt their parenting styles to better meet the needs of their children.

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