



## PERSONALITY PATTERN AMONG HIGH ACHIEVERS BASED ON THE MYERS BRIGGS TYPE INDICATOR (MBTI)

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### ABSTRACT

*Personality is the overall behavior characteristics unique to each individual. Different individuals have their own different personalities. In education, information about the personalities of learners plays a significant role in the teaching and learning process. Nowadays, how learners interpret knowledge differs greatly from what used to be perceived by the teachers. Also how the teachers deliver the knowledge may not match the expectations of the learners. As a result, teachers' instructional methods became inefficient and learners failed to learn. The dramatic change in learners should be balanced by an equal change in teachers' instruction especially among high achievers. This paper examines the personality pattern of high achievers, the relationship between genders and achievement with respect to their personalities. The respondents comprised 214 students from Maktab Rendah Sains Mara (MRSM) Bitara and some fully boarding schools (Sekolah Berasrama Penuh (SBP) in Kelantan. The Myers Briggs Type Indicator (MBTI) was modified and validated according to the research needs. The results showed that 116 students (54.2%) were of the EN type (Extrovert-Intuition), 43 students (20.1%) were ES (Extrovert-Sensing), 31 or (14.5%) IN (Introvert-Intuitive) and 24 students (11.2%) of the IS (Introvert-Sensing). The data also showed that among the male EN>IN>ES>IS whilst for the female students EN>ES>IN>IS. This data differs from the personality pattern obtained for the normal students. Thus, the personality trait of learners should be identified and appropriate steps taken to ensure that there are no mismatch between instruction of teachers and personalities of learners.*

### INTRODUCTION

An educational innovation toward the end of the century was the recognition that students learn differently from each other. With this revelation, a lot of groundbreaking work has laid a solid foundation for understanding individual differences, such as personality types, learning styles, and multiple intelligences. As we enter a new millenium, differentiation has become enormously important in the delivery of services to all students (Silverman, 2000). Unfortunately methods of instruction remain more or less the same for the normal students or the high achievers in the classroom. This causes much frustration especially to the high achievers as a result of the mismatch between their learning and instruction.

According to Marland (1972) in S.Deborah, (1998: pg. 277), high achievers and talented students are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are students who require differentiated educational programs and services beyond those normally provided by the regular school program in order to realize their contribution to self and society. Students capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas singly or in combination:

1. General intellectual aptitude
2. Specific academic aptitude
3. Creative or productive thinking
4. Leadership ability
5. Visual and performing arts

Thus high achievers have different needs compared to the normal students. However, many educators including teachers in schools and instructors in institution of higher education did not recognize this difference, thus are generally disappointed at their attitude towards knowledge and their lack of motivation to learn. High achievers come to the class unprepared and are easily bored by the traditional teaching method that is being practiced by teachers. As a result, teachers are not grooming the high achievers and also high achievers are not developing their own abilities. The

failure of helping the high achievers to develop and expand their abilities is a lost to the country as well as the community.

It is clear that teachers or the academic instructors should change their teaching strategies and materials to cater to high achievers' needs and preferences. Personality is very much related to learning style and is not new in the educational field. Many research related to this theory indicate that students' personality contribute significant differences in their learning output. For example, Durling, Cross and Johnson (1996) stated that a person's learning style is linked with the broader cognitive and personality characteristics, and may be readily observed as preferences for certain forms of teaching or types of media. So, it is critically important that a better understanding of students' personality especially for the high achievers, will allow appropriate instructional materials or strategies to be developed according to the diversity of the learners. The Myers-Briggs Type Indicator (MBTI) is an instrument that has been used extensively many such research (Silverman, 2000).

### MYERS BRIGGS TYPE INDICATOR (MBTI)

The MBTI is a very widely used tool to determine the personality types in both education and business. This model classifies individuals according to their preferences into four dichotomies, which are "E" vs. "I" for Extrovert and Introvert; "S" vs. "N" for Sensing and Intuitive; "T" vs. "F" for Thinker and Feeler; "J" vs. "P" for Judging and Perceiving (Myers, 1985). The E-I scale measures an individual's preferred attitude, either towards outer world or inner world of concept. The S-N scale measures the kind of perception an individual prefers. The T-F scale measures the kind of judgment an individual prefers. The J-P scale measures whether an individual prefers to use judging or perceiving mode in dealing with outer world. The MBTI helps an individual understand themselves and increases their potential effectively. However, only Extrovert vs. Introvert and Sensing vs. Intuitive will be used in this study. Below is a brief description for these two dichotomies.

*Table 1: MBTI Categories*

Personality Type	Description
E-Extrovert	People who prefer extraversion tend to focus on the outer world of people and things. Examples are sociability, interaction, multiplicity of relationships, expenditure of energies, and interest in external events.
I-Introvert	People who prefer introversion tend to focus on the inner world of ideas and impressions. Examples are territoriality, concentration, internal, depth, intensive, limited relationships, conservation of energies, and interest in internal reaction.
S-Sensing	People who prefer sensing tend to focus on the present and on concrete information gained from their senses. They are experience, past, realistic, perspiration, actual, down-to-earth, utility, fact, practicality, and sensible.
N-Intuitive	People who prefer intuitive tend to focus on the future, with a view toward patterns and possibilities. They are hunches, future, speculative, inspiration, possibility, fantasy, fiction, ingenuity and imaginative.

Type theory expects specific differences to be found in specific individual and enables educators to cope with people's differences more constructively. Type theory is related to academic achievement, aptitude, application and interest (Myers & Myers, 1980). Type theory can help to explain the advantages that some individuals may have over the others, the strengths of some individuals in solving problems, perceiving information and making judgments. Teachers may use the MBTI as a diagnosis tool for students having academic difficulties. A teacher may administer the instruments to the students, gives them the results and describes the characteristics of their type. If the descriptions seem accurate to the students, the teacher may help them devise remedial approaches that not only capitalize on their strengths but also use their weaker mode, when doing so is the more appropriate learning approach.

## STATEMENT OF PROBLEM

There is no difference of educational system for the high achievers or the normal students in Malaysia. High achievers learn the same lessons in the same manner as the normal students in the classroom. They use the same curriculums, teaching strategies, learning approaches and materials as the normal students. The lack of creative and innovative teaching strategies among the teachers is attributable to consequences upon the knowledge and skills in high achievers (Che Mah Yusof & Mariani, 2001). Chiam (1992) stated that the high achievers will be disappointed to the passive learning environment. As a consequence of this matter, high achievers became unwilling, less motivated and are trapped into becoming underachievers. Thus, the purpose of this research was to identify personality of the high achievers that will help teachers to know the high achievers behavior and characteristics in order to design appropriate teaching strategies and materials.

The specific objectives of the research related to this purpose were:

- To investigate the personality patterns among the high achievers.
- To determine the relationship between genders and personality patterns among the high achievers.
- To determine the relationships between PMR achievement and personality patterns among the high achievers.

## METHOD

A case study using the survey was employed in this research. Data were collected through Myers-Briggs Type Indicator (MBTI) to categorize the students into the four personality type, namely Extrovert-Intuitive (EN), Extrovert-Sensing (ES), Introvert-Intuitive (IN) and Introvert-Sensing (IS). The gathered data were analyzed by using Statistical Package for the Social Science and presented as percentages, frequencies, and Pearson Chi-Square.

A total of 214 students from a population of 714 form four students enrolled in colleges namely, Maktab Rendah Sains Mara (MRSM) Bitara and some fully boarding schools (Sekolah Berasrama Penuh (SBP) in Kelantan were selected randomly as samples. MRSM and SBP were chosen in this study as they were considered as high achievers as the students must score 6As and above in Penilaian Menengah Rendah (PMR). The selection of samples was done by proportionate random sampling procedure (Wiersma, 1991). The samples who participated in the research comprised of 107 male, and approximately the same numbers of females.

## RESULTS AND DISCUSSION

Tables 2-8 below showed the results of this research. A complete description of demographic information from high achievers in the PMR examination is presented in Table 1. Most of them scored 8As in PMR, about 72.9% and 16.4% scored 7As. Only 9.8% scored 9As and the rest (0.9%) scored 6As.

**Table 2:** Demographic Information from Respondents in PMR Examination

<b>PMR ACHIEVEMENT</b>	<b>FREQUENCY (f)</b>	<b>PERCENTAGE (%)</b>
9As	21	9.80
8As	156	72.90
7As	35	16.40
6As	2	0.90
<b>TOTAL</b>	<b>214</b>	<b>100.00</b>

To determine the high achievers personality types, data collected were analyzed into two dichotomies, namely the Extrovert-Introvert and Intuitive-Sensing. For the dichotomy Extrovert-Introvert 74.3% of high achievers belonged to the Extrovert personality while 25.7% showed introvert personality. In the dichotomy Intuitive-Sensing a majority of respondents were Intuitive (68.7%). The rest (31.3%) were Sensing as summarized in Table 3. This result was similar to several previous research findings. Eysenck & Cookson (1961); and Anthony, 1977 found that the high achievers tend to possess extrovert

type. Extrovert types tend to be friendly, talkative, sensitive and outgoing; able to communicate and connect with others; energetic; ingenious, imaginative, and creative with a global perspective; decisive, organized and efficient; curious, flexible and unpredictable; logical and analytical (Barron & Tieger, 2000). For those are intuitive, they are willing to adopt new methods, to be visionary and to see new possibilities of change. The finding in Hawkins's research (1997/98) suggested that type preferences of the Mathematic and Science students were consistent with type preferences of high achievers. The high achievers students shared large numbers of N (Intuitive) type characteristics. The high achievers students require educational environments which support their unique N style of learning in order to excel in their academic achievement.

These two dichotomies (Extrovert-Introvert and Intuitive-Sensing) intersect each other and form four temperaments that represent the personal categorical personality types, namely Extrovert-Intuitive (EN), Extrovert-Sensing (ES), Introvert-Intuitive (IN) and Introvert-Sensing (IS). The result indicated more than 50% of high achievers have EN personality, an abstract and active learning style. They are action-oriented innovators. About 20.1% of them possess the ES personality, action-oriented realists; about 14.5% tended to have IN personality, thoughtful innovators while about 11.2% have the IS personality, thoughtful realists, as shown in Table 4.

**Table 3:** Comparison of Personality for Dichotomy Extrovert-Introvert vs. Intuitive-Sensing

DICHOTOMY EXTROVERT-INTROVERT	FREQUENCY (f)	PERCENTAGE (%)
Extrovert	159	74.30
Introvert	55	25.70
<b>TOTAL</b>	<b>214</b>	<b>100.00</b>
DICHOTOMY INTUITIVE-SENSING	FREQUENCY (f)	PERCENTAGE (%)
Intuitive	147	68.70
Sensing	67	31.30
<b>TOTAL</b>	<b>214</b>	<b>100.00</b>

**Table 4:** Respondents' Categorical Personality Type

MBTI PERSONALITY TYPE	FREQUENCY (f)	PERCENTAGE (%)
EN (Extrovert-Intuitive)	116	54.20
ES (Extrovert-Sensing)	43	20.10
IN (Introvert-Intuitive)	31	14.50
IS (Introvert-Sensing)	24	11.20
<b>TOTAL</b>	<b>214</b>	<b>100.00</b>

Table 5 showed the comparison of personality types among the male and female high achievers. Findings indicated that majority of the male and female high achievers are EN personality and this is consistent with research finding by Eysenck (1979) that there is no significant difference between male and female index scores for personality type. The results also implied that minority of the male and female high achievers are of the IS personality. The results conclude that male high achievers possess the following personality types: EN > IN > ES > IS whilst the female high achievers were EN > ES > IN > IS. As anticipated, results showed personality patterns for male similar to the female.

**Table 5: Comparison of Personality Type for Sex**

MBTI PERSONALITY TYPE	MALE		FEMALE	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
EN ( <i>Extrovert-Intuitive</i> )	63	58.9	53	49.5
ES ( <i>Extrovert-Sensing</i> )	14	13.1	29	27.1
IN ( <i>Introvert-Intuitive</i> )	18	16.8	13	12.1
IS ( <i>Introvert-Sensing</i> )	12	11.2	12	11.2
<b>PERSONALITY TYPE IN ORDER OF MERIT</b>	<b>EN&gt;IN&gt;ES&gt;IS</b>		<b>EN&gt;ES&gt;IN&gt;IS</b>	

Table 6 illustrated the comparison of personality type with respect to PMR examination. Findings indicated that 9As high achievers are of the EN type, followed by ES. About the same numbers of 9As high achievers are of the IN and IS personality. The results also implied that 8As and 7As high achievers have the personality type: EN, ES, IN and finally IS.

**Table 6: Comparison of Personality Type With Respect to PMR Examination**

MBTI PERSONALITY TYPE		PMR ACHIVEMENT				Total
		9As	8As	7As	6As	
EN ( <i>Extrovert-Intuitive</i> )	f	17	79	20	0	<b>116</b>
	%	81.0%	50.6%	57.1%	.0%	<b>54.2%</b>
ES ( <i>Extrovert-Sensing</i> )	f	2	34	6	1	<b>43</b>
	%	9.5%	21.8%	17.1%	50.0%	<b>20.1%</b>
IN ( <i>Introvert-Intuitive</i> )	f	1	24	5	1	<b>31</b>
	%	4.8%	15.4%	14.3%	50.0%	<b>14.5%</b>
IS ( <i>Introvert-Sensing</i> )	f	1	19	4	0	<b>24</b>
	%	4.8%	12.2%	11.4%	.0%	<b>11.2%</b>
<b>Total</b>	f	<b>21</b>	<b>156</b>	<b>35</b>	<b>2</b>	<b>214</b>
	%	<b>9.8%</b>	<b>72.9%</b>	<b>16.4%</b>	<b>.9%</b>	<b>100.0%</b>

Pearson chi square analyses revealed that the personality type index has no significant correlation with the genders and PMR examination among the high achievers which means no relationship exists between personality type and genders or PMR examination (See Table 7 and Table 8). This result was not parallel to the research finding of Johnson (1997), which showed that there was a significant relationship between personality and academic achievement.

**Table 7: Association between Personality Type and Genders**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.901(a)	3	.075

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.00.

**Table 8: Association between Personality Type and PMR Achievement**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.046(a)	9	.273

a 8 cells (50.0%) have expected count less than 5. The minimum expected count is .22.

## CONCLUSIONS

In this paper, personality types among high achievers from some selected schools were determined and described clearly. However, further research need to be conducted to determine if the results of

this study may be generalized to the whole population of high achievers in Malaysia, and whether similar results could be obtained from other MRSM or SBP. Also teachers of MRSM or SBP could utilize the research results to design their teaching strategies by incorporating the learners' needs and preferences according to their personality. The use of personality theory is found to improve learners' performance and motivation in teaching and learning.

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