MBTI Personality Temperaments Assessment and Audience Persuasion in Using Media

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Abstract— *Media effectiveness assessment, the importance of persuasion and the role of mass media in shaping public opinion has received great attention in today's world. The meaning of the persuasion process is the changes in beliefs, behavior and understanding of audiences with the objective of accepting whatever is presented. Once media content is able to change audiences' perspectives which consist of cognitive, behavioral and emotional elements, then the persuasion process is complete since the presented content is accepted by the audience. By identifying personality temperaments using the MBTI test, content can be produced for specific audiences and by changing perspectives, audience requirements are met. Therefore, producing media content based on personality temperaments will have great impact on audiences' persuasion process. The purpose of this paper is to assess the relationship between personality temperaments and audience persuasion in using media. The correlation method is used for this research. The sample used consisted of 100 employees from an IT company as the media audience who were selected by stratified sampling from the target audience. The MBTI personality questionnaire was used to assess the variable of interest. In this research, the criterion for audience persuasion is meeting audience media requirements. Also, correlation coefficient statistical analysis and multi variable regression were used to analyze gathered data. Results indicate that there is a significant relationship between personality temperaments and audience satisfaction. Furthermore, multiple regression analysis on the relationship between personality temperaments and audience persuasion by media entry is shown.*

Index Terms—*personality temperaments, media audience, persuasion and satisfaction theory.*

I. INTRODUCTION

Humans are God's most mysterious creation and are both spiritual and materialistic. This unique nature creates specific conditions and features. In the era of communications and information technology, the need to understand human personality dimensions precisely in social environments is of more importance compared to the past. In this context, understanding humans and their potentials will not be possible without understanding their various personality aspects. How can the recognition of humans' true character in different social settings be achieved? What level of understanding do we have of people around us in various environments? How can we understand them as they are? Is there mutual understanding of each other's inner personality?

Identifying audience requirements is the key to many of the mysteries about media impact and social communication sustainability. The issue of audience identification is one of media studies main topics. Each audience contains individual preferences. Each person's behavior which may seem coincidental is actually predictable and the reasons behind them are understandable. To understand audience behaviors, their intrinsic personality must be taken into account. Each situation causes different reactions which creates different personality temperaments. It is worth noting that people's personalities in various conditions have significant compatibility and adaptability. In assessing presented theories about audiences, mass communication theories are divided in to three categories: 1) views based on passive audiences 2) views based on active and ardent audiences 3) views based on intelligent audiences. In the second category of theories, as opposed to the first category where the audience is expected to accept the content presented, emphasis is made on the tenacity of audiences in accepting media content. Indexes must be defined to assess audiences' level of media content acceptance. Persuasion theories, media fulfillment and enjoyment, communications influence, and ardent audience strengths can be counted among this group.

II. PERSUASIVE COMMUNICATIONS

In a communication's process, when the message is sent audiences' response is shown in three different ways: rejection, indifference, and satisfaction. In the case of acceptance, the receiver is persuaded. The main objective of any communication is acceptance which shows satisfaction. An effective communication is where the receiver is persuaded. Persuasion is a type of social communication. Therefore, one could state that persuasive communications has significant place in the communications field. In this regard, when persuasive communications is considered at macro level, public debate (conscience and hidden) to change beliefs, values, attitudes, behaviors, and perceptions come to mind.

III. PERSUASION PROCESS STEPS

Convincing the message receiver will not occur randomly. Researchers in social psychology have defined specific steps for the publication and enforcement of new phenomena in

social classes. These are stated below:

- *Awareness***:** during this step, individuals are informed of a new message or new phenomenon one way or another.
- *Attention and interest:* the interest of audiences must be gained in order for them to accept the new message.
- *Theoretical evaluation:* addressing audience questions such as why? Where? How would I know?
- *Practical examination:* audiences test the new message to reach a definitive conclusion.
- *Acceptance and follow-up:* the final stage of this process which begins with awareness.

IV. AUDIENCES PERSONALITY IDENTIFICATION

Personality is defined as a collection of relatively stable and durable characteristics which distinguishes individuals from each other. Sometimes, personality is used to describe the most notable individual feature. When assessing personalities, psychologists pay attention to individual differences i.e. characteristics which distinguish individuals from one another. The MBTI (Myers-Briggs Type Indicator) personality type test, which is the results of a century of scientific investigation, highlights human behavior, manners, and thinking ways. It shows conflicts and confusion escape routes so lives can be lived more successfully and is in fact the key in reaching the inner essence of human beings. This method is the most accredited and advanced method of understanding human personality to this day. Requirements, desires, interests, skills, values and personalities of audiences are different. Each viewer may show interest or dislike towards various media based on their personalities and tastes. Therefore, since media production is to address viewer's needs and desires, media production managers must understand audiences' personality temperaments in order to make appropriate adjustments. Thus, understanding media audiences' personality temperaments is of vital importance. The meaning of personality types owes its existence to Swiss psychologist Carl Jung and two American women called Katharine Briggs along with daughter Isabel Briggs-Myers. Jung, a psycho-analyst and Freud follower concluded that behaviors which may seem unpredictable may be identified and understood by recognizing the intellectual foundation, perceptions and attitudes of individuals. After a detailed examination, they concluded four personality preferences and sixteen personality types. Each of these personality types are based on four aspects of human personality and are created by answering the following questions:

1) How does the individual interact with the world, how do they receive their energy?
2) What information can be found by the individual naturally?
3) How does the individual make decisions?
4) Does the individual prefer to work in organized conditions or do they prefer more independence?

In answering the first question, it is determined whether the individual is an introvert or extrovert. The second question determines whether the individual is intuitive or sensing. The third question is to determine whether the individual is emotional or intellectual. Finally, it is determined whether the individual is perceptive or judgmental. Some characteristics of personality type aspects are stated below:

- Introverts attain their energy from within, do not wish to be the center of attention, evaluate issues in their own minds and prefer to listen rather than talk. On the other hand, extroverts obtain energy from being with others, want to be the center of attention, think loudly, and prefer to talk rather than listen.
- Intuitive individuals are inspired by inference, love new ideas, are interested in learning new skills but become bored of them once they are mastered, do not pay attention to details and look to the future. Sensing individuals trust what is certain and are only open to new ideas if they can be implemented. They prefer to use their current skills level and present information gradually and pay attention to details.
- Emotional individuals consider the effect of their decisions on others, naturally desire to satisfy others and are motivated to be appreciated. Intellectual individuals use their own analysis to make decisions, naturally detect errors and criticize. They are motivated by their desire to be successful.
- Perceptive individuals are glad to leave a topic open, define their goals based on receiving new information, and are process oriented (emphasis on how work is done). Judgmental individuals are glad to make decisions, define goals to reach in time, and are product oriented (emphasis on finished work).

Therefore, it can be stated that audiences either pay attention to facts and details or would like to understand relations, meanings, applications and are creative (sensing or intuitive). Audiences make their decisions either visually or by weighing the positive and negative aspects or even based on emotions and the influence of others (intellectual or emotional). A lot of audiences either make decisions easily or are anxious and worried. These individuals either prefer to have specific conditions or think about issues with an open mind before making decisions (judgmental or perceptive).

Based on the MBTI personality type test, audiences can be divided into four temperaments with different personality types:

- ➢ The Guardians (SJ) who are sensing and judgmental
- ➢ The Artisans (SP) who are sensing and perceptive
- ➢ The Thinkers (NT) who are intuitive and intellectual
- ➢ The Idealists (NF) who are intuitive and emotional

In this research, 16 personality types are shown which have been created by combining the above temperaments using character recognition techniques. By understanding each temperament, it is clear that personality temperaments are equally valuable. No personality temperament is better or

worse than another. Personality temperaments have no relation to a person's level of intelligence and success cannot be predicted based on one's temperament. Although, by taking into account audience's personality temperaments their motivation factors can be understood which will enable media managers to produce appropriate content for their audiences. Figure 1 Illustrates 16 personality types:
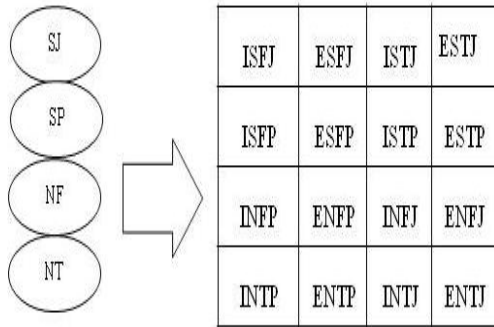

Fig 1- personality types and temperaments classification based on the MBTI personality Recognition test

V. RESEARCH HYPOTHESES

The main objective is to assess simple and multiple relations between personality temperaments and audience persuasion in using media. Therefore, the following hypotheses were considered.
1) There is a relationship between personality temperaments and audience persuasion in using media.
2) There are multiple relationships between personality temperaments and audience persuasion in using media.

VI. RESEARCH METHOD

The research method used was descriptive-correlative. The correlation coefficient shows the relationship between two variables but whenever the effect of one variable on another becomes important, this coefficient is not useful in terms of predicting the changes which result from these effects. Instead, the regression method is used. In this type of research, the researcher aims to find and assess the relationships between variables. The correlation coefficient is used to assess the relationships between variables and the regression method is used to assess the effects variables have on each other. In this context, personality temperaments are considered predictable variables and audience persuasion in using media is considered the criterion variable. When media is mentioned, the following are included:
- Written media such as newspapers, books and magazines
- Audio media such as radio
- Visual media such as television, cinema, internet (social media is also included as modern media)

VII. STATISTICAL METHODS AND TOOLS FOR DATA ANALYSIS

In this research, the MBTI personality type test was used to identify personality temperaments. The Myers-Briggs test is a personality recognition test created by a mother and daughter called Katharine Briggs and Isabel Briggs Myers. This questionnaire consists of 80 questions with 3 options (definitely not, somewhat true, definitely) which determines the individual's personality type. The MBTI test is a great tool for individuals to understand themselves and their differences with others. Therefore, media managers can understand audience's capabilities and aspects that need improving. Today, the mentioned test is used in many developed countries before hiring personnel. Media organizations can produce content by identifying audience's personality temperaments and use this knowledge to achieve their macro objectives. The validity and reliability of Myers-Briggs tools has been assessed in thousands of magazines and case studies. These tools have been used many times by non-psychologists and are even used widely in the business world. In this research, Cronbach's Alpha was used to assess the reliability of the questionnaire. The coefficients are as follows: EI=0.67, SN=0.78, TF=0.61, JP=0.53 In this research, the simultaneous method was used to determine the validity of the questionnaire. The continuous scores that were obtained from four poles had considerable correlation with other indices. Also, there was a significant correlation between the four temperaments and scores obtained. For example, introverts were not as cheerful as extroverts and had more family related problems. There were also significant correlations for the rest of the questionnaire scales. The SPSS statistical software was used to analyze the data obtained. Descriptive statistics (mean, standard deviation, frequency, minimum and maximum marks) and inferential statistical methods (correlation and multi variable regression) were used. Furthermore, the significance level was set at 0.05.

VIII. RESULTS

The results are presented in two sections as descriptive results and hypotheses related results.

A. Descriptive Results

As presented in table 1, the highest average (12) was achieved by the artisans and the lowest average (2.36) was obtained by the idealists. The highest standard deviation (4.2) was associated with the guardians and the lowest standard deviation (1.11) was associated with the idealists. Also, the highest mark (24) was achieved by the artisans with the lowest mark (1) belonging to the idealists.

Table I. Average, standard deviation, maximum and minimum marks for the MBTI questionnaire

Personality Temperaments	Average	Standard Deviation	Maximum mark	Minimum mark
Guardians (SJ)	10	4.2	20	4
Artisans (SP)	12	2	24	5
Idealists(NF	2.36	1.11	9	1

)				
Thinkers(NT)	8	3.7	16	3
Meeting Audience Demands	5.88	3.24	10	2

B. Hypotheses-based Results

As shown in table 2, there is a negative linear correlation between the guardians and audience persuasion in using media is r=-0.36 which is significant at level $p < 0.05$. The correlation between the artisans and audience persuasion in using media is r=0.15 which is not significant at $p < 0.05$. Positive linear correlation between the idealists, thinkers and audience persuasion is r=0.79 and r=0.12 respectively which are significant at $p < 0.05$. Therefore, results validate the first hypothesis in that there is a significant relationship between personality temperaments and audience persuasion in using media. Hence, whenever content is presented based on audiences personality temperaments, their needs and demands are met which results in audience satisfaction.

Table II. Correlation coefficients between audience marks from the MBTI questionnaire with audience persuasion in using media

Personality Temperaments	Audience Persuasion		
	r	p	n
Guardians (SJ)	-0.36	0.004	100
Artisans (SP)	0.15	0.17	100
Idealists(NF)	0.79	0.025	100
Thinkers (NT)	0.12	0.042	100

Guardians are known as sensing judgmental people since their personality type is a combination of sensing and judgmental types. They are strict, trustworthy, realistic, and responsible individuals. Sensing individuals trust facts, are after proven information, appreciate past experiences and believe in information gained from their five senses. Judgmental individuals also prefer an organized world and are interested in making decisions.

Artisan personalities consists of a combination of sensing and perceptive types and are called sensing perceivers. They are adventurous, responsible and independent. These individuals prefer to live in the moment. They are interested in prompt success and can assess their actions in the moment. Rarely do they choose activities which include strict regulations. They welcome risks, are consistent and pragmatic. Idealists or sensing intuitive people are philosophical. They are constantly looking for meanings in their lives and greatly appreciate integrity and authenticity. They are known to value relationships with others by appreciating their potentials and capabilities. Idealists like to catalyze their peer's progression. They are excellent communicators and are responsible for positive changes. Thinkers are known as intuitive intellectuals, have a strong desire to learn and consider high standards for themselves and others. They are extremely curious and can see many aspects of any issue. They understand complexities of real issues and present relevant solutions. As presented in table 3, the regression analysis method was used by repeated entry with the aid of multi variable correlation (MR), determination coefficient (RS), relation (F) and probability (P). Based on results shown, there is a significant relationship between predictable variables which were the four personality temperaments and the criterion variable which was audience persuasion such that all regression coefficients are significant at level $p < 0.05$. The relationship between the multiple correlation coefficient and predictable variable determination coefficient with audience persuasion in using media were MR= 0.63 and RS= 0.014. Hence, the second hypothesis is validated.

Table III. Regression analysis results

Criterion Variable	Predictable Variable	MR	RS	F (P)	Regression coefficients			
					1	2	3	4
Audience persuasion in using media	Guardians (SJ)	0.36	0.0055	1.82 (0.003)	b= -0.6 t=3.61 P =0.12			
	Artisans (SP)	0.002	0.7	7.36 (0.05)	b=0.06 t=1.5 P=0.14	b=0.4 t=4.65 p=0.11		
	Idealists (NF)	0.12	0.053	6.54 (0.11)	b= -0.5 t=3.22 P=0.14	b=0.16 t=1.49 P=0.33	b= -0.7 t=2.37 P= 0.19	
	Thinkers (NT)	0.63	0.014	8.40 (0.01)	b= -0.2 t=1.86 P=0.01	b= -0.2 b=5.22 P=0.44	b= -0.4 t=3.08 P=0.01	b= -0.4 t=2.34 P= 0.34

IX. CONCLUSION

The purpose of this study was to assess the relationship between personality temperaments and audience persuasion in using media. Hypotheses were presented based on this objective. In this context, the MBTI questionnaire was completed and media content was presented based on individual's personality type. Each individual has a personality temperament and no temperament is superior to another. Media content managers should be aware of

audience personality temperaments and understand how they are motivated in order to present appropriate content. Thus, audiences requirements will be met which will result in their satisfaction. As stated in the results relevant to the hypotheses, correlation between personality temperaments and audience persuasion was significant at level $p < 0.05$ therefore the first hypothesis is validated. This research indicates each individual has media preferences based on their personality temperament and behavioral patterns. For example, intuitive viewers see aspects that aren't necessarily visible and have a great imagination so they prefer fictional content. At the end of this research, based on regression analysis results, the significance of relationships between personality temperaments and audience persuasion in using media is clear therefore the second hypothesis is also validated.

REFERENCES

[1] Alexander, Patricia A; Fives, Helenrose; Buehl, Michelle M; Mulhern, Julie (2002); "Teaching as persuasion"; Teaching and Teacher Education; Vol 18; pp 795–813

[2] Rabin, A.M. (1994). Media uses and effects. Hillsdale, NJ: Lawrence Erlbaum Associates.

[3] Nightingale, V & Ross, K. (2003) Critical Readings: Media and Audiences, London: McGraw Hill.

[4] Http://www.iranzehn.com.

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