

**ЭМПИРИЧЕСКИЕ ИССЛЕДОВАНИЯ**  
EMPIRICAL RESEARCH

## Relationship Between Big Five Personality Traits and Media Multitasking Behavior of the Indian Sample

**Shanu Shukla**

Indian Institute of Management Indore, Indore, India

ORCID: <https://orcid.org/0000-0002-5602-8462>, e-mail: shanu.shukla11@gmail.com

Media multitasking (MMT) is a growing phenomenon among Indian college students. Previous studies on other nationalities highlight that user's personality traits play an important role in engaging them in this behavior. Using a sample of Indian college students, this study examined the relationship between MMT and the Big Five personality traits. It also examined the impact of age on the dynamics between personality and MMT. Results suggested that after controlling the socio-demographic factors, traits like openness to experience, extraversion, and neuroticism are positively related with high MMT. However, these observations are found to be moderated by age. These findings may help designing separate intervention techniques for alleviating excessive MMT behavior for different age groups considering their personality traits.

**Keywords:** age, Big Five personality, Indian students, MMT.

**Funding.** University Grants Commission (UGC), Government of India.

**Acknowledgements.** Indian Institute of Technology Indore for all the technical support.

**For citation:** Shukla S. Relationship Between Big Five Personality Traits and Media Multitasking Behavior of the Indian Sample. *Kul'turno-istoricheskaya psikhologiya = Cultural-Historical Psychology*, 2021. Vol. 17, no. 1, pp. 50–58. DOI: <https://doi.org/10.17759/chp.2021170108>

## Взаимосвязь «Большой пятерки» черт личности и медиа-многозадачности: исследование на индийской выборке

**Ш. Шукла**

Индийский институт управления Индаур, Индаур, Индия

ORCID: <https://orcid.org/0000-0002-5602-8462>, e-mail: shanu.shukla11@gmail.com

Медиа-многозадачность (media multitasking, MMT) — явление, всё чаще встречающееся среди студентов индийских университетов. Предыдущие исследования, проводившиеся на выборках других национальностей, показывают, что личностные черты пользователей играют существенную роль в возникновении такого поведения. В настоящей работе на выборке индийских студентов изучалась взаимосвязь между MMT и «большой пятеркой» черт личности, а также влияние возраста на их взаимоотношение. Полученные результаты свидетельствуют, что, помимо социо-демографических факторов, положительно коррелируют с высоким MMT такие черты личности, как открытость опыту, экстраверсия и нейротизм. Вместе с тем обнаружена и возрастная специфика наблюдаемой корреляции. Результаты исследования могут оказаться полезными при разработке методик для коррекции поведения, связанного с MMT, ориентированных на разные возрастные группы и учитывающих различные конфигурации черт личности.

**Ключевые слова:** возраст, «Большая пятерка», индийские студенты, MMT.

**Финансирование.** Комиссия по университетским грантам (UGC), Правительство Индии.

**Благодарности.** Автор благодарит Индийский институт технологий Индаур за техническую поддержку в проведении исследования.

**Для цитаты:** Шукла Ш. Взаимосвязь «Большой пятерки» черт личности и медиа-многозадачности: исследование на индийской выборке // Культурно-историческая психология. 2021. Том 17. № 1. С. 50–58. DOI: <https://doi.org/10.17759/chp.2021170108>

## Introduction

Advancement in technology and the penetration of new media have caused burgeoning growth of media multitasking (MMT) in our society. MMT is the simultaneous consumption of different media like print, TV, web etc. Some examples are listening to music while doing physical exercise, and text messaging while watching television. MMT is growing with leaps and bounds. Youngsters, particularly, are very tech-savvy, have lower self-regulatory skills and indulge in higher task switching activities [27]. High MMT can have positive and negative consequences. It may instil positive emotions like enjoyment, and satisfies user's need for connectivity, and increases their well being [28; 30]. However, it may also make people depressed, anxious and can have long-lasting impacts on user's cognitive abilities [2; 19]. Hence, it is essential to understand what factors lead to MMT. There are several external (or 'forcers', e.g. work requirements) and internal (or 'drivers', e.g. boredom avoidance) reasons for MMT [26]. Since they are mostly short term, and situation-specific, this paper considers the predictors focussing on more stable traits like the Big Five personality traits of media multitaskers. Besides, the results of the previous studies may not apply to India, and they do not study the influence of age on the dynamics between personality and MMT.

Hence, the present study particularly looks into: a) the relationship between the Big Five personality traits and MMT, and b) the impact of age on the dynamics between personality and MMT.

## Media multitasking (MMT) habits of the Indians

MMT is gaining popularity around the world and in India, too [21]. Table 1 shows that many of the global social media users are Indians. Since media factors like the availability of media, and smartphone usages are flourishing rapidly, Indians may display high MMT, and young Indians may succumb more.

Table 1  
Social media usage: Global and Indian users<sup>1</sup>

Medium	Global	Indian
Facebook	2.4 billion	260 million
LinkedIn	675 million	64+ million
Instagram	1+ billion	80 million
YouTube	1.9 billion	245 million

<sup>1</sup> Source [9; 23; 24; 25].

## Media Multitasking

This study is based on the Ophir, Nass and Wagner [17] MMT concept. MMT is a trait multitasking which is a fairly stable attribute of behavior developed for a long time. It is measured through widely used Media Multitasking Index (MMI) [19]. Several researchers utilized MMI to measure MMT of a sample of students, and have studied its association with the cognitive abilities or academic performances. They found that MMT has predominantly negative effects on the cognitive abilities [17] and it also leads to poor academic outcomes [19]. However, MMT is increasingly being popular (especially among the youngsters) [28]. Hence, to understand users' media choice, several researchers investigated individual differences variable like personality that helps identify the factors leading to MMT. The present study investigates this connection.

## Personality as a predictor of MMT

There are several personality traits like sensation seeking and impulsivity which are positively associated with multitasking [18]. A study on smartphone multitasking suggested the 'need for cognition' to be an important predictor, and due to its interaction with sensation-seeking increases the tendency of MMT [13]. Hence, sensation seeking, impulsivity, and the need for cognition were considered to be general predictors of MMT. However, the relationship between personality traits and MMT should be analyzed using the Big Five factors. Personality psychologists agree that the five domains of the Big Five factors demarcate the individual differences in personality traits, and this model may be the basis of many other models. This study examines the relationship between MMT and the Big Five factors which arise from the Five Factor model of Personality. This highly comprehensive model consists of five higher-order, bipolar factors: openness to experiences, conscientiousness, extraversion, agreeableness, and neuroticism [11].

## Openness to experience and MMT

Openness to experience reflects a curious, imaginative, artistic, and unconventional behavioural pattern. It positively influences motivational goals of self-direction and stimulation values (novelty and excitement). Some

studies [17; 20] found no relationship between MMT and openness to experience. Contrarily, others [6] demonstrated that an increase in openness to experience favors social media use. Also, openness to experience is inversely related to the completion time of an interrupted task [16]. Hence, high scores in openness to experience implies less time in completing an interrupted task. Since MMT involves interruptions, high scores in openness to experience may imply a high degree of MMT.

Hypothesis 1 (H1): Openness to experience is positively related to MMT.

### **Conscientiousness and MMT**

Conscientious individuals are competent, self-disciplined, orderly, and non-impulsive [11]. They may have a structured internal plan helping them retrieve an interrupted task quickly. Since MMT demands an interruption of one or more tasks, it is intuitively expected that conscientiousness may be related with the MMT ability. Some researchers found a direct relationship between conscientiousness and the time to complete an interrupted task because of a self-control behavioral strategy when interruptions occur. But, some other [17; 20] found none. A study [5] inferred an indirect relationship between the two through impulsivity which is negatively related to conscientiousness, and is positively related to multitasking, and hinted that conscientiousness may be negatively related to MMT. Hence it may be expected that the more flexible an individual is in planning and personal structure, the less is the interruption cost. In contrast, a high level of conscientiousness may lead to high interruption cost hindering MMT.

Hypothesis 2 (H2): Conscientiousness is negatively related to MMT.

### **Extraversion and MMT**

Individuals high on extraversion are sociable, energetic, optimistic, friendly and assertive [11]. Earlier studies on multitasking and task switching suggested that extraversion favors multitasking. For instance, highly extrovert participants perform better in multitasking situations due to their low baseline level of catecholamines (multitasking is assumed to be an arousing situation increasing the level of catecholamines). Contrarily, introvert participants failed to perform well in nonverbal decoding during multitasking [12]. A personality and social media use study [31] based on twenty countries found that extraversion is positively related to social media use. This may be because high extraversion helps people connect and socialize with others. However, it was also suggested that either extraversion is not a predictor of multitasking performance or has no significant relationship [17; 20; 28]. This may be explained if we consider that extroverts have a higher working memory capacity than others [12] which makes them successful multitaskers in demanding situations [28]. But, self-selected MMT behavior hardly requires the fullest of the

working memory making extraversion less relevant in those situations.

Hypothesis 3 (H3): Extraversion is not related to MMT.

### **Agreeableness and MMT**

Agreeableness leads to warm, co-operative, and considerate behavior. Individuals displaying high agreeableness are often altruistic, tender-minded, trustworthy, modest, straightforward, and compliant. Investigations could not establish a consistent relationship between multitasking and agreeableness so far [5; 17]. Researchers found that different types of multitasking (media-media, media non-media, non-media non-media) are not related to agreeableness [20]. However, a study [29] found that higher agreeableness among university lecturers (non college student sample) is positively related to higher MMT. Since the present study considers only college students (like the studies previously mentioned), we hypothesize that.

Hypothesis 4 (H4): Agreeableness is not related to MMT.

### **Neuroticism and MMT**

Individuals high in neuroticism often are anxious, impulsive, depressive, vulnerable, and self-conscious. This trait is juxtaposed to the emotional stability of an individual. Researchers suggested that a high level of neuroticism is related to poor multitasking performance due to the anxiety generated while multitasking. Other studies found that neuroticism is not related with MMT, but both of them are closely related to depression and social anxiety [2]. However, some studies highlighted that neuroticism is one of the important predictors of multitasking behavior and neurotic individuals are more prone to MMT [28]. According to a study [15], highly neurotic persons in a workplace environment display shorter focus duration on computer screens and perform excessive task switching. Another study regarding driving and multitasking found that neuroticism is related to distraction due to high level of anxiety [10]. Others found a positive relationship between neuroticism and MMT during info seeking and sharing activities [8].

Hypothesis 5 (H5): Neuroticism is positively related to MMT.

### **Is the relationship between MMT and personality affected by age?**

Researchers found that the personality traits vary with age. Youths and adults, despite sharing certain similar traits, have certain distinctive personality traits developed according to their environmental situations, circumstances and developmental trends. According to Soto (2015) [22], extraversion behavior of youths shows a steady decline across childhood and early adolescence.

However, in the male participants, the mean level of openness to experience is consistent from early to middle childhood, declines from middle childhood into late adolescence and then increases from late adolescence into early adulthood. Similarly, other personality traits like neuroticism, agreeableness and conscientiousness differ from early childhood to early adulthood. In a study on the British and German samples, agreeableness was observed to have a positive association with age, while extraversion and openness were found to have a negative association [7]. A preliminary study on the Indian population [14] also reported an association between age and personality traits. Besides, a longitudinal study [1] on a sample of two groups of young participants suggested that activities like participation in sports and screen-time viewing (predominantly television and computer games) are associated with personality trait development among two groups of young participants. For example, an increased screen time among 10–12 years old group is related to an increase in introversion. Since MMT involves different media and screens, we suggest that the association of MMT with personality may differ with age. As there is a lack of research on this, we couldn't pose any hypothesis, but simply expect that the relationship between MMT and personality traits differs with age.

In summary, we find that age may influence the personality traits of an individual, and it is a universal predictor of MMT. Unlike the older people, the younger generation grew up using modern media devices. So, differences in MMT may emerge among people from different age groups. We have also theorized that MMT behavior is closely associated with one's personality traits. However, the studies reported so far have not examined whether the relationship between the personality traits and MMT vary with age group. Hence, we also investigate the following research question:

Research Question 1 (RQ1): Does the relationship between the personality traits and MMT vary when the age groups in a sample differ?

## Methodology

### 1. Sample

152 hostelite students of 18–24 years of age pursuing Bachelor of Technology at an Indian institute of national importance voluntarily participated in the study. Participation was anonymous and informed consent was taken. As a note of thanks for their voluntary participation, small gifts were given to the participants. The research protocol was defended before a research progress committee of the Indian Institute of Technology Indore, India. Research progress was monitored periodically by the committee.

### 2. Measures

#### 2.1. Socio-demographics

Each participant was asked to report their age (age was asked as an open-ended question and was included as a continuous variable in the analysis), gender (it had three options male/female/others), and the duration of

ownership of media which had three response categories: category 1 (0 to 6 months), category 2 (6 months to 1 year), and category 3 (more than 1 year).

### 2.2. MMT

MMT of the participants was measured using the Media Use Questionnaire (MUQ) [17] addressing twelve media activities- print, television, computer-based video, music, non-music audio, video/computer/mobile games, fixed telephone/mobile phone voice calls, instant messaging (IM), SMS, e-mail, web-surfing, and other computer-based applications. A pilot study with five participants found the test-retest reliability (within a time gap of 10 days) to be 0.97 ( $p < 0.01$ ).

Participants reported the total time spent by them on each media on an average day (during the past one month). They also reported the frequency of combining the use of a primary medium and other 11 media on a four-point rating scale with the following options: 'most of the time', 'some of the time', 'a little of the time', and 'never'.

### 2.3. Personality Traits

Personality traits were measured through the Big Five Inventory (BFI) [11], a 44-item inventory that measures Big Five personality factors (dimensions) of an individual such as openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. In the current study the Cronbach's alpha for each dimension was, openness to experience = 0.74, conscientiousness = 0.69, extraversion = 0.74, agreeableness = 0.70, neuroticism = 0.70.

## 3. Procedure

A pen and paper based cross-sectional questionnaire study was conducted in a strict laboratory setting. The study was administered in English which is the medium of instruction in participants institution. To avoid any recall-based errors, they were instructed to fill in the questionnaires taking into account their media multitasking activities in the past one month (starting from the date of conduction of study).

## Results

Out of 152 students, the final data were taken from a sample of 120 (Male = 84) students. To understand the MMT behavior, MMI was calculated, and then multivariate analysis was performed. All analyses were done with IBM SPSS 20 software.

### 1. Media Multitasking Index (MMI)

Calculation of MMI involves calculating media use, and MMI.

#### 1.1. Media Use

Participants reported the average time spent using twelve different media on an average media use day. We found that participants usually spend on average 14.57 hours in media-related activities, and they spend maximum time on web surfing, IM, and music.

**1.2. MMI**

The formula for MMI reads:

$$MMI = \sum_{i=1}^{12} \frac{m_i h_i}{h_{total}}$$

where  $m_i$  is the number of media typically used with primary medium  $i$ ,  $h_i$  is the total number of hours spent on an average day using primary medium  $i$ , and  $h_{total}$  is the total number of hours spent on an average media usage day with all primary media. From the individual MMI score we obtain a relatively normal distribution with a mean of 4.24 and a Standard deviation of 1.27. Hence, the participants use approximately 4 media simultaneously in their typical media usage hour. The Cronbach's alpha reliability for the MMI is 0.78.

**1.3. Gender and MMI**

An independent sample t-test was conducted between male and female MMI and no significant difference ( $t(118) = 0.241, p = 0.217$ ) in their MMT was found.

**2. Relationship between Personality and MMT**

Hierarchical multiple regression analysis was conducted to examine the relationship between Big Five factors of personality and MMT (Table 2).

Hypothesis H1 was supported. Openness to experience remains significant after controlling participants' socio-demographic variables,  $\beta = 0.28, p < 0.0005$ . Thus, participants with higher openness to experience tend to be high media multitaskers.

Hypothesis H2, which suggested that conscientiousness was negatively related to MMT, is not supported,  $\beta = -0.08, p = 0.17$ .

Hypothesis H3, which stated that extraversion is not related to MMT, is not supported,  $\beta = 0.14, p < 0.05$ . Hence, people with higher level of extraversion tend to be higher media multitaskers.

Hypothesis H4, which suggested no relationship between agreeableness and MMT is supported,  $\beta = -0.01,$

$p = 0.90$ . Finally, Hypothesis H5 is supported,  $\beta = 0.33, p < 0.0005$ . In sum, the block of the control variables of the model explained 39.8% (adjusted  $R^2$  was 0.38) of the variance of MMI,  $F(3, 116) = 25.57, p < 0.0005$ . In the second block, when the five big factors of personality were included,  $R^2$  increased to 68.1% (i. e. the variance explained increased by 28.3%) and this increase was statistically significant,  $F(8, 111) = 29.596, p < 0.0005$ .

**3. Relationship between Personality and MMT in different Age groups**

To examine if the relationship between personality and MMT is moderated by age, we used SPSS PROCESS version 3.5 Model 1. Five separate moderation analyses were conducted for each dimension of Big Five and MMI with age as a moderator.

The results suggest that age moderates the relationship between MMI and conscientiousness ( $\Delta R^2 = 0.0325, F(1, 116) = 4.92, P = 0.02, P < 0.05$ ). To interpret the interaction among conscientiousness, age and MMI, a simple slope analysis was conducted (Fig.1). It suggests that younger participants having high conscientiousness have low MMI. On the contrary, older participants having high conscientiousness have high MMI.

Similarly, it is observed that age moderates the relationship between MMI and extraversion ( $\Delta R^2 = 0.0193, F(1, 116) = 4.06, P = 0.04, P < 0.05$ ). On examining an interaction plot (Fig.2), it has been observed that MMI is higher for older participants when extraversion is low. However, this difference in MMT behavior among different age groups reduces when extraversion increases.

Further analysis reveals that age does not moderate the relationship of MMI and openness to experience ( $\Delta R^2 = 0.0067, F(1, 116) = 1.49, P = 0.22$ ). Power of the moderation analysis is 0.24. Similarly, age does not moderate the relationship of MMI and agreeableness ( $\Delta R^2 = 0.0029, F(1, 116) = 0.43, P = 0.51$ ), power is 0.10. Also, no moderation is observed for MMI and neuroticism ( $\Delta R^2 = 0.0090, F(1, 116) = 2.19, P = 0.14$ ), power is 0.32.

Table 2

Hierarchical multiple regression analysis<sup>2</sup>

Variable	Model 1			Model 2		
	B	B	P value	B	β	P value
Constant	-2.132		0.178	-6.044		0.001
Gender	0.134	0.049	0.505	0.357	0.129	0.022
Age	0.000	0.123	0.169	0.000	0.125	0.063
Duration of Ownership of Media	1.404	0.545	0.000	0.630	0.245	0.001
Openness to Experience				0.092	0.280	0.000**
Conscientiousness				-0.31	-0.076	0.171
Extraversion				0.045	0.137	0.045*
Agreeableness				-0.003	-0.007	0.896
Neuroticism				0.098	0.328	0.000**
R <sup>2</sup>	0.398			0.681		
Adjusted R <sup>2</sup>	0.383			0.658		

<sup>2</sup> Note. N = 120, B = Unstandardized regression coefficient; β = Standardized coefficient; \* p < 0.05, \*\*p < 0.0005.

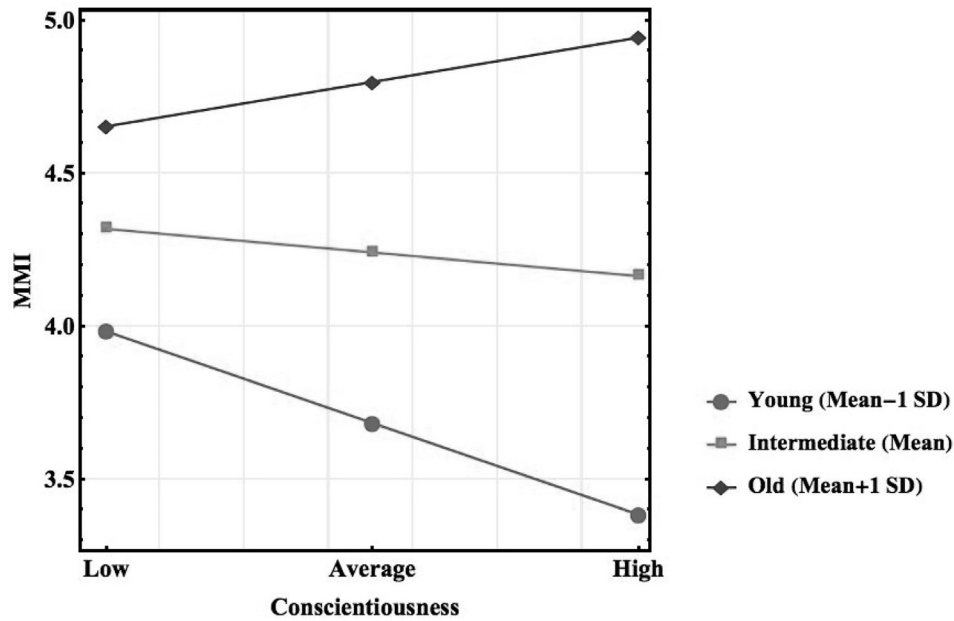


Fig.2. Age moderates the relationship between MMI and conscientiousness

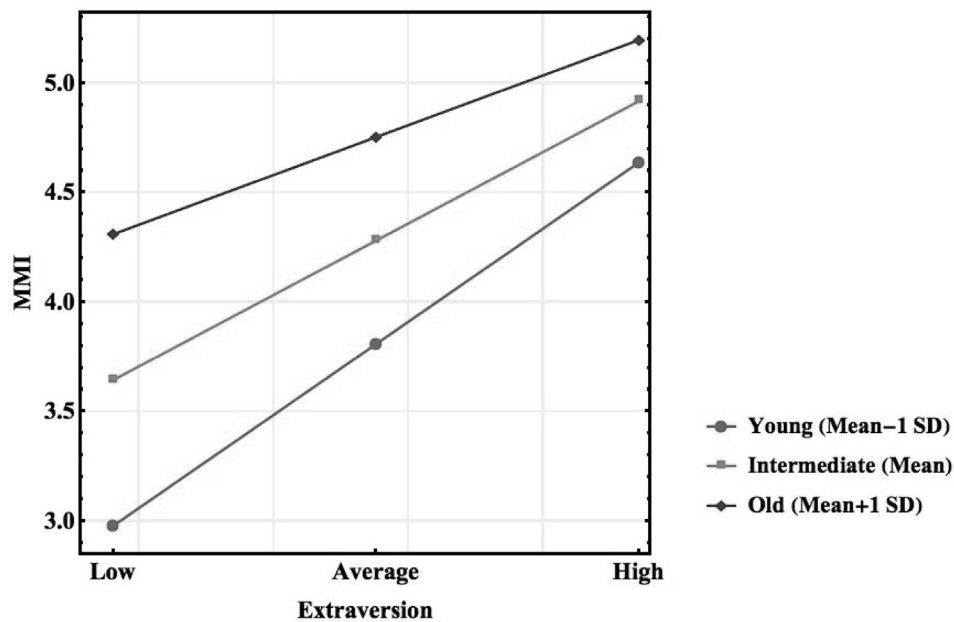


Fig. 2. Age moderates the relationship between MMI and extraversion

### Discussion

The study contributed to the literature by analyzing the relationship between simultaneous media use and the Big Five personality traits. Though some previous studies established relationships between MMT and several other personality traits, there was a dearth in understanding how the Big Five factors directly affect MMT. Those studies could not control the socio-demographic variables like gender, age and the duration of ownership of media. This study incorporated these controls and looked into the effect of the Big five factors on MMT. It involved college students from India which has one of the largest internet user bases in the world, but barely explored. The study also scrutinized whether

the relationship between personality and MMT differs with age.

The study suggested that neuroticism, extraversion, and openness to experience are the predictors of MMT behavior. Earlier studies found neuroticism to be an important predictor of MMT [10; 15; 28] reemphasizing that emotional instability is an important antecedent of MMT. Neurotics are often at risk of showing behavioral dysregulation and impulsivity. They easily become victims of problematic use of smartphone, Instagram, etc. leading them to MMT.

In contrast with [28], this study found high extraversion to be related with high MMT behavior. People high in extraversion have a high desire to connect to people and need for belonging favoring MMT [31]. Since India

possesses a collective social structure in which socialization is much prevalent, MMT may be a prominent behavior in Indian society. The fact that the participants media multitask mostly with IM, and then with SMS in the current study, also favors the statement.

We observed a positive relationship between openness to experience and MMT, supporting other studies [e.g. 8]. College students with high openness to experience may indulge in MMT in search of new things and excitement.

With reference to conscientiousness and media multitasking, our study did not find any evidence of an existing connection. It, however, suggested a negative relationship between conscientiousness and MMT supporting a previous study [5]. Laziness, aimlessness or disorganized behavior may not be important for self-selected MMT which involves deliberate choice of media.

Lastly, consistent with the previous findings, agreeableness was not found to be related to MMT.

Among the control variables, duration of ownership of media is consistently significant in both the models (Table 2). This may be because frequent exposure of media might increase MMT. Future studies may explore more explicitly the role of type, or duration of ownership of media on MMT.

We also noticed that gender becomes significant when personality variables are added in the model. Since there is no gender difference in our study related to MMT, there is a possibility that it may moderate the relationship between personality and MMT. This may be an interesting research to pursue.

Since both MMT and personality traits differ with age, we further investigate the relationship between the

former two, keeping age as a moderator. We observe that MMI is higher for older participants. This may be because India is very diverse which has a wide digital gap among the residents. Hence, students starting their undergraduate studies in an institute of national repute might have varying media usage experience.

We observed that the relationship between MMT and conscientiousness differs among different age groups. A highly conscientious young participant media multitask less than a highly conscientious old participant. This result differs from previous studies suggesting that conscientiousness is usually negatively related with social media, general internet use, or gaming behavior [3]. Researchers suggested that less self-disciplined individuals may be using different media as a source of distraction or for procrastination [4]. However, our study suggests that considering the similar educational environment, even self-disciplined older participants may show high MMT possibly due to peer pressure or to balance their hyper-connected lives. Future researchers may seek whether life satisfaction or mental health problems differ between high media multitaskers having high and low conscientiousness.

We also noted that age moderates the relationship between extraversion and MMI. Highly extrovert individuals of different age groups tend to indulge in high MMT.

Our study did not find any significant effect of age on the relationship between openness to experience/agreeableness/neuroticism and MMT. However, since the powers of the analyses are very low (0.24, 0.10, and 0.14 respectively), the study may be replicated with comparatively larger sample size.

## Литература

1. Voorveld H.A.M. [et al.] Investigating the Prevalence and Predictors of Media Multitasking Across Countries [Journal] // International Journal of Communication. 2014. Vol. 8. P. 2755–2777. URL: <https://ijoc.org/index.php/ijoc/article/view/2556>
2. Wang Zheng and Tchernev John M. The “Myth” of Media Multitasking: Reciprocal Dynamics of Media Multitasking, Personal Needs, and Gratifications [Journal] // Journal of Communication. 2012. Vol. 62. № 3. P. 493–513. DOI:10.1111/j.1460-2466.2012.01641.x
3. Xu Shan, Wang Zheng and David Prabu Media multitasking and well-being of university students [Journal] // Computers in Human Behavior. 2016. Vol. 55. P. 242–250. DOI: 10.1016/j.chb.2015.08.040
4. Becker Mark W., Alzahabi Reem and Hopwood Christopher J. Media Multitasking is Associated with Symptoms of Depression and Social Anxiety [Journal] // Cyberpsychology, Behavior, and Social Networking. 2013. Vol. 16. № 2. P. 132–135. DOI:10.1089/cyber.2012.0291
5. Schuur Winneke A. van der [et al.] The consequences of media multitasking for youth- A review [Journal] // Computers in Human Behavior. 2015. Vol. 53. P. 204–215. DOI:10.1016/j.chb.2015.06.035
6. Tokan Fatih Media as multitasking: An exploratory study on capturing audiences' media multitasking and multiple

## References

1. Allen Mark S., Vella Stewart A. and Laborde Sylvain Sport participation, screen time, and personality trait development during childhood. *British Journal of Developmental Psychology*, 2015. Vol. 33, pp. 375–390. DOI:10.1111/bjdp.12102
2. Becker Mark W., Alzahabi Reem and Hopwood Christopher J. Media Multitasking is Associated with Symptoms of Depression and Social Anxiety. *Cyberpsychology, Behavior, and Social Networking*, 2013. Vol. 16, no. 2, pp. 132–135. DOI:10.1089/cyber.2012.0291
3. Brailovskaia Julia and Margraf JuÈrgen What does media use reveal about personality and mental health? An exploratory investigation among German students. *PLOS ONE*, 2018. Vol. 13, no. 1, pp. e0191810. DOI: 10.1371/journal.pone.0191810
4. Butt Sarah and Phillips James G Personality and self reported mobile phone use. *Computers in Human Behavior*, 2008. Vol. 24, pp. 346–360. DOI: 10.1016/j.chb.2007.01.019
5. Cain Matthew S. [et al.] Media Multitasking in Adolescence. *Psychonomic Bulletin & Review*, 2016. Vol. 23, no. 6, pp. 1932–1941. DOI: 10.3758/s13423-016-1036-3
6. Correa Teresa, Hinsley Amber Willard and Zúñiga Homero Gil de Who interacts on the Web?: The intersection of users- personality and social media use. *Computers in Human Behavior*, 2010. Vol. 26, pp. 247–253. DOI:10.1016/j.chb.2009.09.003

media use behaviours. Unpublished Master's Thesis. 2011. URL: <https://aaltdoc.aalto.fi/handle/123456789/2754>

7. Shukla Shanu and Sharma Pritee Emotions and Media Multitasking Behavior Among Indian College Students [Journal] // Journal of Creative Communications. [s.l.]: Sage. 2018. Vol. 13. № 3. P. 197–211. DOI:10.1177/0973258618790794

8. Jain Sorav YouTube Users Stats and Facts [2019 Update with Infographic] [Online] // Social Media and Digital Marketing Blog. 2019. URL: <https://www.soravjain.com/youtube-users-stats-facts-2019-infographic>

9. Statista Leading countries based on number of Facebook users as of January 2020 (in millions). 2020. URL: <https://www.statista.com/statistics/268136/top-15-countries-based-on-number-of-facebook-users/>

10. Statista Leading countries based on number of Instagram users as of January 2020 (in millions). 2020. URL: <https://www.statista.com/statistics/578364/countries-with-most-instagram-users/>

11. Statistics [Online] // LinkedIn Newsroom. URL: <https://news.linkedin.com/about-us#statistics>

12. Ophir E., Nass C. and Wagner A.D. Cognitive control in media multitaskers [Journal] // Proceedings of the National Academy of Sciences of the United States of America. 2009. Vol. 106. № 37. P. 15583–15587. DOI:10.1073/pnas.0903620106

13. Sanbonmatsu D.M. [et al.] Who multi-tasks and why? Multi-tasking ability, perceived multi-tasking ability, impulsivity and sensation seeking [Journal] // PLOS ONE. 2013. Vol. 8. № 1. DOI:10.1371/journal.pone.0054402

14. Lim Sohye and Shim Hongjin Who Multitasks on Smartphones? Smartphone Multitaskers' Motivations and Personality Traits [Journal] // Cyberpsychology, Behavior, and Social Networking. 2016. Vol. 16. № 3. P. 223–227. DOI:10.1089/cyber.2015.0225

15. John O.P. and Srivastava S. The Big-Five trait taxonomy: History, measurement, and theoretical perspectives [Book Section] // Handbook of personality: Theory and research / book auth. Pervin L. A. and John O. P.. New York: Guilford Press, 1999. Vol. 2.

16. Shih Shui-I A Null Relationship between Media Multitasking and Well-Being [Journal] // PLOS ONE. 2013. Vol. 8. № 5. P. 1–10. DOI:10.1371/journal.pone.0064508

17. Correa Teresa, Hinsley Amber Willard and Zúñiga Homero Gil de Who interacts on the Web?: The intersection of users' personality and social media use [Journal] // Computers in Human Behavior. 2010. Vol. 26. P. 247–253. DOI:10.1016/j.chb.2009.09.003

18. Mark Gloria Multitasking in the digital age. Synthesis Lectures on Human-Centered Informatics [Book] // In ed. Carroll John M. — [s.l.]: Morgan and Claypool Publishers, 2015. Vol. 8. № 3. P. 1–113. DOI:10.2200/S00635ED1V01Y201503HCI029

19. Cain Matthew S. [et al.] Media Multitasking in Adolescence [Journal] // Psychonomic Bulletin & Review. 2016. Vol. 23. № 6. P. 1932–1941. DOI:10.3758/s13423-016-1036-3

20. Liberman Matthew D. and Rosenthal Robert Why Introverts Can't Always Tell Who Likes Them: Multitasking and Nonverbal Decoding [Journal] // Journal of Personality and Social Psychology. 2001. Vol. 80. № 2. P. 294–310. DOI:10.1037/0022-3514.80.2.294

21. Zuniga Homero Gil de [et al.] Personality Traits and Social Media Use in 20 Countries: How Personality Relates to Frequency of Social Media Use, Social Media News Use, and Social Media Use for Social Interaction [Journal] // Cyberpsychology, Behavior and Social Networking. 2017. Vol. 20. P. 540–552. DOI:10.1089/cyber.2017.0295

7. Donnellan Brent M and Lucas Richard E Age differences in the big five across the life span: Evidence from two national samples. *Psychology and Aging*, 2008. Vol. 23, no. 3, pp. 558–566. DOI: 10.1037/a0012897

8. Hwang Yoori and Jeong Se-Hoon Information Seeking and Sharing while Media Multitasking Demographic, Psychological, and Cultural predictors. *Journal of Media Economics and Culture*, 2018. 3: Vol. 16, pp. 78–109. DOI:10.21328/JMEC.2018.8.16.3.78

9. Jain Sorav YouTube Users Stats and Facts [2019 Update with Infographic]. *Social Media and Digital Marketing Blog*, 2019. URL: <https://www.soravjain.com/youtube-users-stats-facts-2019-infographic>

10. Johansson Ole J. and Fyhri Aslak “Maybe I Will Just Send a Quick Text...” — An Examination of Drivers' Distractions, Causes, and Potential Interventions. *Frontiers in Psychology*, 2017. Vol. 8, p. 1957. DOI:10.3389/fpsyg.2017.01957

11. John O. P. and Srivastava S. The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of personality: Theory and research*. Book auth. Pervin L. A. and John O. P. New York: Guilford Press, 1999. Vol. 2.

12. Liberman Matthew D. and Rosenthal Robert Why Introverts Can't Always Tell Who Likes Them: Multitasking and Nonverbal Decoding. *Journal of Personality and Social Psychology*, 2001. Vol. 80, no. 2, pp. 294–310. DOI:10.1037/0022-3514.80.2.294

13. Lim Sohye and Shim Hongjin Who Multitasks on Smartphones? Smartphone Multitaskers' Motivations and Personality Traits. *Cyberpsychology, Behavior, and Social Networking*, 2016. Vol. 16, no. 3, pp. 223–227. DOI:10.1089/cyber.2015.0225

14. Magan Dipti [et al.] Age and gender might influence big five factors of personality: a preliminary report in Indian population. *Indian Journal of Psychology and Pharmacology*, 2014. Vol. 58, no. 4, pp. 381–388. URL: [https://www.ijpp.com/IJPP%20archives/2014\\_58\\_4/381-388.pdf](https://www.ijpp.com/IJPP%20archives/2014_58_4/381-388.pdf)

15. Mark Gloria [et al.] Neurotics Can't focus: An in situ Study of Online Multitasking in the Workplace. CHI'16. San Jose, CA: ACM, 2016, pp. 1–6. DOI:10.1145/2858036.2858202

16. Mark Gloria Multitasking in the digital age. *Synthesis Lectures on Human-Centered Informatics*. In Carroll John M. (ed.) [s.l.]: Morgan and Claypool Publishers, 2015. Vol. 8, no. 3, pp. 1–113. DOI: 10.2200/S00635ED1V01Y201503HCI029

17. Ophir E., Nass C. and Wagner A. D. Cognitive control in media multitaskers. *Proceedings of the National Academy of Sciences of the United States of America*, 2009. Vol. 106, no. 37, pp. 15583–15587. DOI:10.1073/pnas.0903620106

18. Sanbonmatsu D. M. [et al.] Who multi-tasks and why? Multi-tasking ability, perceived multi-tasking ability, impulsivity and sensation seeking. *PLOS ONE*, 2013. Vol. 8, no. 1, DOI:10.1371/journal.pone.0054402

19. Schuur Winneke A. van der [et al.] The consequences of media multitasking for youth- A review. *Computers in Human Behavior*, 2015. Vol. 53, pp. 204–215. DOI:10.1016/j.chb.2015.06.035

20. Shih Shui-I A Null Relationship between Media Multitasking and Well-Being. *PLOS ONE*, 2013. Vol. 8, no. 5, pp. 1–10. DOI:10.1371/journal.pone.0064508

21. Shukla Shanu and Sharma Pritee Emotions and Media Multitasking Behavior among Indian College Students. *Journal of Creative Communications*. [s.l.]: Sage, 2018. Vol. 13, no. 3, pp. 197–211.

22. Soto Christopher J. The Little Six Personality Dimensions From Early Childhood to Early Adulthood: Mean-



22. Widyahastuti Rizki and Anwar Zainul Effect Of Personality (Big Five Personality) To Multitasking [Conference] // *Advances in Social Science, Education and Humanities Research, Proceedings of the 3rd ASEAN Conference on Psychology, Counselling, and Humanities (ACPCH 2017)*. [s.l.]: Atlantis Press, 2018. P. 230–235. DOI: 10.2991/acpch-17.2018.48
23. Mark Gloria [et al.] Neurotics Can't focus: An in situ Study of Online Multitasking in the Workplace [Conference] // CHI'16. (San Jose, CA: ACM, 2016.). P. 1–6. DOI:10.1145/2858036.2858202
24. Johansson Ole J. and Fyhri Aslak "Maybe I Will Just Send a Quick Text..." – An Examination of Drivers' Distractions, Causes, and Potential Interventions [Journal] // *Frontiers in Psychology*. 2017. Vol. 8. P. 1957. DOI:10.3389/fpsyg.2017.01957
25. Hwang Yoori and Jeong Se-Hoon Information Seeking and Sharing while Media Multitasking Demographic, Psychological, and Cultural predictors [Journal] // *Journal of Media Economics and Culture*. 2018. Vol. 16. № 3. P. 78–109. DOI:10.21328/JMEC.2018.8.16.3.78
26. Soto Christopher J. The Little Six Personality Dimensions From Early Childhood to Early Adulthood: Mean-Level Age and Gender Differences in Parents' Reports [Journal] // *Journal of Personality*. 2015. P. 1–14. DOI:10.1111/jopy.12168
27. Donnellan Brent M and Lucas Richard E. Age differences in the big five across the life span: Evidence from two national samples [Journal] // *Psychology and Aging*. 2008. Vol. 23. № 3. P. 558–566. DOI:10.1037/a0012897
28. Magan Dipti [et al.] Age and gender might influence big five factors of personality: a preliminary report in Indian population [Journal] // *Indian Journal of Psychology and Pharmacology*. 2014. Vol. 58. № 4. P. 381–388. URL: [https://www.ijp.com/IJPP%20archives/2014\\_58\\_4/381-388.pdf](https://www.ijp.com/IJPP%20archives/2014_58_4/381-388.pdf)
29. Allen Mark S., Vella Stewart A. and Laborde Sylvain Sport participation, screen time, and personality trait development during childhood [Journal] // *British Journal of Developmental Psychology*. 2015. Vol. 33. P. 375–390. DOI:10.1111/bjdp.12102
30. Brailovskaia Julia and Margraf Juergen What does media use reveal about personality and mental health? An exploratory investigation among German students [Journal] // *PLOS ONE*. 2018. Vol. 13, № 1. P. e0191810. DOI: 10.1371/journal.pone.0191810
31. Butt Sarah and Phillips James G Personality and self reported mobile phone use [Journal] // *Computers in Human Behavior*. 2008. Vol. 24. P. 346–360. DOI: 10.1016/j.chb.2007.01.019
- Level Age and Gender Differences in Parents' Reports. *Journal of Personality*, 2015, pp. 1–14. DOI:10.1111/jopy.12168
23. Statista Leading countries based on number of Facebook users as of January 2020 (in millions), 2020. URL: <https://www.statista.com/statistics/268136/top-15-countries-based-on-number-of-facebook-users/>
24. Statista Leading countries based on number of Instagram users as of January 2020 (in millions), 2020. URL: <https://www.statista.com/statistics/578364/countries-with-most-instagram-users/>
25. Statistics. LinkedIn Newsroom. <https://news.linkedin.com/about-us#statistics>.
26. Tokan Fatih Media as multitasking: An exploratory study on capturing audiences' media multitasking and multiple media use behaviours. Unpublished Master's Thesis. 2011. URL: <https://aaltoodoc.aalto.fi/handle/123456789/2754>
27. Voorveld H.A.M. [et al.] Investigating the Prevalence and Predictors of Media Multitasking Across Countries. *International Journal of Communication*, 2014. Vol. 8, pp. 2755–2777. URL: <https://ijoc.org/index.php/ijoc/article/view/2556>
28. Wang Zheng and Tchernev John M. The "Myth" of Media Multitasking: Reciprocal Dynamics of Media Multitasking, Personal Needs, and Gratifications. *Journal of Communication*, 2012. Vol. 62, no. 3, pp. 493–513. DOI:10.1111/j.1460-2466.2012.01641.x
29. Widyahastuti Rizki and Anwar Zainul Effect of Personality (Big Five Personality) To Multitasking. *Advances in Social Science, Education and Humanities Research, Proceedings of the 3rd ASEAN Conference on Psychology, Counselling, and Humanities (ACPCH 2017)*. [s.l.]: Atlantis Press, 2018, pp. 230–235. DOI: 10.2991/acpch-17.2018.48
30. Xu Shan, Wang Zheng and David Prabu Media multitasking and well-being of university students. *Computers in Human Behavior*, 2016. Vol. 55, pp. 242–250. DOI: 10.1016/j.chb.2015.08.040
31. Zuniga Homero Gil de [et al.] Personality Traits and Social Media Use in 20 Countries: How Personality Relates to Frequency of Social Media Use, Social Media News Use, and Social Media Use for Social Interaction. *Cyberpsychology, Behavior and Social Networking*, 2017. Vol. 20, pp. 540–552. DOI:10.1089/cyber.2017.0295

### **Information about the authors**

Shanu Shukla, PhD (Psychology), Academic Associate, Indian Institute of Management Indore, Indore, Madhya Pradesh, India, ORCID: <https://orcid.org/0000-0002-5602-8462>, e-mail: shanu.shukla1@gmail.com

### **Информация об авторах**

Шану Шукла, PhD (психология), Индийский институт управления Индаур, Индаур, Мадхья-Прадеш, Индия, ORCID: <https://orcid.org/0000-0002-5602-8462>, e-mail: shanu.shukla1@gmail.com

Получена 06.04.2020

Принята в печать 01.03.2021

Received 06.04.2020

Accepted 01.03.2021