

Do Personality Traits Moderate the Impact of Social-Media Multi-Tasking on Academic Competence? Higher Education Perspective.

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Abstract

The aim of this research study is to investigate the impact of social media multitasking on academic competence. Furthermore, this study also is looking for a moderating role of personality traits including, Openness, Extraversion, Neuroticism, Conscientiousness, and agreeableness. As to answer the research questions and hypotheses testing, researchers collected data from different universities that exist in Gujranwala, Pakistan, and valid response from 572 respondents was recorded, including teachers and students. The results were obtained by using M-plus software. The findings of this research indicates that social media multitasking has significant negative effect on academic competence and the indicated that personality traits significantly moderate among social media multitasking and academic competence except agreeableness which shows insignificant moderation effect between social media multitasking and academic competence. This research study suggested that it is necessity for teachers and parents to motivate students for self-regulation of laptops, mobile phone and multi-tasking behaviors, the significance of encouraging students to acquire self-efficacy and learning. This is the first-time study in Pakistan which investigate a comprehensive model by using social media multi-tasking as an independent variable and academic competence as a dependent variable and drill the five dimensions of personality traits as moderators in this study.

Keywords: Social Media, Multi-Tasking, Academic Competence, Personality Traits

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1. Introduction

By means of the introduction of multiple kinds of movable digital technologies, questions about our capability to participate in multitasking behaviors have become progressively more under watch both in the popular media and in research (Benbunan-Fich, Adler and Mavlanova, 2011; Brasel and Gips, 2011). Youth around the world is suitably described as digital natives for their convenience and skill with technology hardware and content (Chokalingam, Matthee and Hattingh, 2019). The Internet is extensively used by adults and children, who usually have a high degree of competence with expertise, its distinctive features, and key advantages, for instance extremely engaging and encouraging cybernetic components, multitasking tools that provide consumers with easy and quick access to the computers and mobile among the youth (Bou-Hamad, 2020). Recent investigation shows that most children and adolescents use the Internet, mobile phones and other mobile devices (Subrahmanyam and Greenfield, 2011). In recent years, social media have become indispensable part of student's lives (Hazari, Sonnert, Sadler & Shanahan, 2010; Klonsky & May, 2015). These latest technologies are famous with teen-agers, on the other hand parents and other viewers frequently see it as a destructive impact (Subrahmanyam & Greenfield, 2011). The role and effect of technology in cooperation of our individual and working survives is constantly growing.

Social media usage in American adults has increased from 12% in 2012 to 90% in 2015. Social networking also develops the ability of students to create their interests and interest in academic subjects and learners will more conveniently talk with professionals by using social media. In educational institutions, more than one social media platform has been used at a time to collaborate with students and meanwhile to share different files and introduces tools as well (Liu, 2017). Furthermore, e-textbook functionality has also been improved to a greater extent. Students in universities are being connected via social tools for collaboration but in a restricted manner (May, 2018). The enhancements made in internet technologies have changed patterns of interactions, communications, learning, education, and knowledge building.

Although, there has been a lot of work in field of social media multitasking but the studies that examined it as predictor of academic competence are limited. Furthermore, a very few studies that investigated social media multitasking as predictor of academic competence have never considered the role of different persona traits i.e. "Openness, conscientiousness, agreeableness, extraversion and neuroticism" in such relationship. It means there is no study found in literature investigating the impact of SMM on academic competence with moderation of five personality traits and particularly among Pakistani students. Therefore, this study is first one of its types in Pakistan. As per Vallerand (2012), Stated that social media multitasking has a greater influence in life of every individual. Social media multitasking has several benefits as well as disadvantage in every individual life, but it is depending on how to use it in his life. for example, a study of Cheever, Peviani and Rosen (2018) indicated that social media multitasking has negative impact on a person success in his business filed. Another study of Demirbilek and Talan (2018) which was conducted at college student indicated that SMM have negative

influence on student academic and non-academic performance. However, study of Schuur et al. (2018) indicated that students who have a proper use of social media multitasking play a role to relax them from tired work of academic. So, in the literature social media multitasking has huge investigation. On the other hand, personality traits also are factors which play role in individual life. This study based of university students that's why the researcher analyzed all published work which mostly related to student performance. The objective of the research study is to investigate the moderating role of individual differences i.e., big five model personality traits in between "social media multitasking and academic performance".

To analyze the impact of multitasking on the academic performance of the university students.

To have deep knowledge about the moderating role of personality traits in the relationship among social media multi-tasking and students' academic performance in Pakistani universities.

Other parts of the paper will be structured to have literature review in the second portion, research methodology in the third portion, data analysis in portion four and discussion, conclusion, implications of the study and limitations in the fifth portion.

2. Literature Review

2.1. Supporting Theory

2.1.1. Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) describes how users embrace and accept new technologies. Fred Davis (1989) proposal, it has been frequently applied in the study of information systems. The TAM is predicated on the idea that a user's desire to use a technology is decided by their perception of the technology's utility and perceived simplicity of usage.

TAM consists of two main concepts.

1. Perceived Usefulness: is the user's assessment of how much a certain technology will improve their ability to accomplish their duties or carry out their jobs. If users think a technology will help them or increase their productivity, they are more inclined to adopt it.
2. Perceived Ease of Use: These measures how easy a user perceives using a piece of technology to be. If users believe a technology is simple to use, comprehend, and learn, they are more likely to adopt it.

2.2. Social Media Multitasking and Academic Competence

Veen suggested the term "Homo Zappiens", mentioning to the new generation of students who, according to him, in contrast to their precursors, study in a significantly different manner. Veen (2006) said that children who belong to this generation grow the metacognitive - independently and without teaching skills needed for research-based education, based on discoveries learning, interacted learning, experimental learning, collaboration learning, active learning, self-organization and self-regulation, problem solving, and making their own implicit (i.e. tacitly) and explicitly knowledge that is specific to others (Veen and Vrakking, 2006). Beastall (2008) stated that, Today's

generation of adults and children have advance relationship with technology as they see it right after their birth. Such intense use of media impedes multitasking, which supplementary aggravate academic outcome of students after adjusting for demographics and previous academics, and there were prominent, indirect effect of social networking on GPA. Hence, based on theoretical grounds, the 1st hypothesis of the present study is proposed below:

H1: There is a significant negative relationship among social media multitasking and academic competence.

2.3. Moderating Role of Five Personality Traits

Many psychologists are now convinced that the five-factor model provides the best representation of the structure of traits (Soto et al., 2011). Each of these aspects denotes the common variation between a great set of more specific features or facets, called "Neuroticism versus Emotional Stability (N); Extraversion or Surgery (E); Openness to experience or intellect, imagination or culture (O)"; The concordance against antagonism (A); and Consciousness or Will to Attain (C). These measurements can be established in the adjectives of traits, along with in the questionnaires made to operationalize a range of personality theories (Pulver, Allik, Pulkkinen, and Hämäläinen, 1995; Vedel, 2016). Thus, capability, personality, interest arrays, and motivational qualities (e.g., success motivation, basic self-evaluations (CSEs) fall in the individual difference's sunshade, while variables that are brief, for example mood, or that are strictly allied to the particulars of the work setting (e.g., turnover intentions or perceived organizational climate), do not. Numerous methodological and theoretical developments directed to a revival of persona research (Chamorro-Premuzic, 2016). Based on theoretical grounds and support of SLT, following hypotheses regarding moderation of personality traits are proposed in the current study:

H2: Individual differences moderate the relation of social media multitasking and academic competence.

In addition, according to the researcher Wilfred Wf Lau (2017), the association among personality traits, SMM, and academic competence is discussed sporadically. The researcher Calderwood, Ackerman, and Conklin (2014) in his research recognized the traits of big five personalities as the main source of competence and stated that conscientiousness is the most trait of personality that strongly affects the academic competence. According to the researcher Alzahabi and Becker (2013), conscientiousness is one of the key factors that impact individual competence to learn something. In accordance with the researcher Jacobsen and Forste (2011) the traits of the big five personalities have a significant and substantial power to determine the inspirational directions. In accordance with the researcher Flanigan and Babchuk (2015) when the style of the learning of a person is very intensive and effective then it will ultimately make the association of SMM and educational competence very weak and plus will show good and improved influence on the student performance and similarly, other aspects of the individual difference moderate their association negatively or positively.

H2 (a): Openness positively moderates the relationship among social media multitasking and academic competence.

In accordance with the researcher Cain et al. (2016) openness is the most difficult and highly discussed dimension of personality trait. The cause for this uncertainty is that the factor of openness involves both "Creative Component" such as reflecting contemplative and artistic interests and the "Intellect Component" that shows interest and approach to learning. According to the researcher Brasel and Gips (2011), the intellect curiosity or interest component drives the associations among openness and academic competence. In addition, the intellect curiosity component as well as appears to account for the relationships among openness and social media multitasking. The researcher Liu and Campbell (2017) conducted the research on personality traits among university students and the outcomes of the study showed that openness significantly and positively moderates the association among social media multi-tasking and academic competence. Therefore, the above-mentioned studies provide enough support for the positive moderating role of openness in the linkage among social media multitasking and academic competence.

H2 (b): Extraversion positively moderates the relationship among social media multitasking and academic competence.

In accordance with the research of De Feyter et al. (2012), Gareau, Chamandy, Kljajic, and Gaudreau (2019), Górnik-Durose (2019), and Naseer, Bouckenooghe, Syed, Khan, and Qazi (2019) the trait of extrovert positively impacts the association among social media and academic competence. Furthermore, the researcher Mahmood and Farooq (2014) stated that people who are extrovert are very open and social and most of their time is passed in interacting with their relatives and friends through using social networking sites such as Twitter, Facebook or any other social networking medium. More extraverted individuals are better at looking for assistance from teachers and friends when they come across with learning problems. This facilitates better comprehension, however, it as well as makes the learner more noticeable to the instructor (Poropat, 2014). In accordance with the researcher Rashid and Asghar (2016) individuals high on extraversion are usually more educationally encouraged and have higher goal for learning (Clark and Schroth, 2010). However, they are as well as interested to spend their time with peers, take part in events and societies, explore the social atmosphere and so forth (Cain et al., 2016).

H2 (c): Neuroticism negatively moderates the relationship among social media multitasking and academic competence.

In accordance with the previous research De Feyter et al. (2012), Schmitt (2007), Steptoe et al., (1995), and Tabak, Nguyen, Basuray, and Darrow (2009) the impact of the trait of neuroticism on SMM and academic competence is negative. The researcher Duff et al. (2014) stated that individuals who have the personality of neurotic are commonly involved in the situations, which are related to the tension. In addition, the researcher Burak (2012) stated that the involvement of neurotic personality in such type of conditions make them unable to concentrate on multi or number of different activities and tasks, they can only perform 1 task or activity at one time because of their disordered and confused considerations and perceptions. Hence, the above-mentioned studies and

their findings provide good insights about the role of neuroticism in determining the impact of SMM on the academic competence of students.

H2 (d): Conscientiousness negatively moderates the relationship among social media multitasking and academic competence.

According to Jacobsen and Forste (2011) more conscientious individuals actually score more highly on factors that are related to learning for example determination, class attendance, attainment motivation and the use of self-regulatory approaches of learning as compared to their non-conscientious counterparts. All these aspects consistently forecast learner accomplishment; therefore, these relations may account for the relationship between academic competence and conscientiousness (Van Der Schuur et al., 2015). Moreover, conscientious individuals have been revealed to more highly task concentrated and employ more problem focused handling approaches, which enables their academic performance and learning in the face of difficulty (Baumgartner et al., 2014). The researchers De Feyter et al. (2012), Eisenberg, Duckworth, Spinrad, and Valiente (2014), Rouis, Limayem, and Salehi-Sangari (2011), Stead and Bibby (2017) and Van Der Schuur et al. (2015) have examined the nexus of conscientiousness on SMM and academic competence.

The research proving enough understanding that conscientiousness can suppress the negative impact of SMM on their academic competence and performance.

H2 (e): Agreeableness positively moderates the relationship among social media multitasking and academic competence.

The investigator Brasel and Gips (2011) stated that people with the trait of agreeableness like to help other people to accomplish their tasks. The researcher Duff et al. (2014) stated that these types of people perform several tasks at a time. In accordance with the past studies, a person who belong to the trait of agreeableness are very effective in establishing associations with other people (De Feyter et al., 2012; Hefner and Vorderer, 2016; Stead and Bibby, 2017; Van Der Schuur et al., 2015).

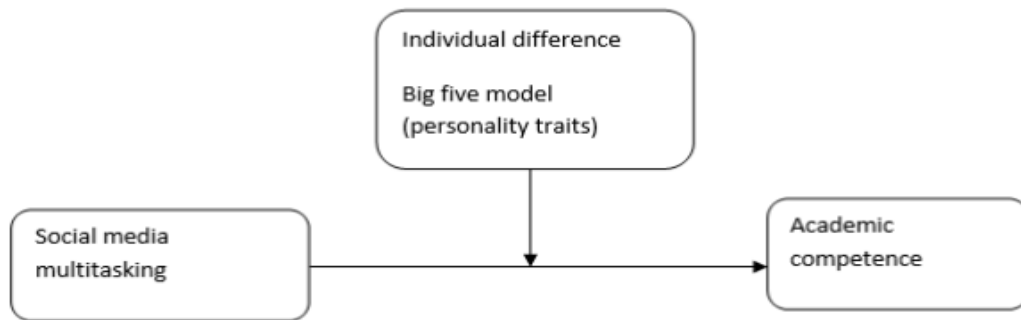


Figure 1: Theoretical Framework

According to Kaya and Bicen (2016) social media multitasking has an adverse influence on academic competence, whereas individual difference significantly moderates the association between them together with the moderation impact of big 5 traits of personality excluding the agreeableness trait. It means that these researchers

suggest that the agreeableness has no impact on the relationship among SMM and academic competence. However, some researcher suggested that all five big traits of personality tend to influence the behavior of person towards SMM which is the ultimate forecaster of the academic performance of students (Komarraju et al., 2011; Soto et al., 2011; Zhong et al., 2011). Hence, this hypothesis of the current study about the agreeableness is also sufficiently supported through past research.

3. Research Methodology

3.1. Nature of Study

The researchers have been used quantitative method for the purpose of obtaining responses from the respondents. The data was gathered at individual level and for purpose of testing the hypothesis. The method of data collection of this study was cross sectional.

3.2. Measurements of Scales

The measuring instrument is adopted from Zhong et al. (2011) which consists of four items e.g. I frequently discover myself using some media technological devices at the same time. I frequently open and usage multiple programs simultaneously on my computer. This is measured on “five-point likert scale from 1(strongly disagree) to 5 (strongly agree)”. For social media multitasking scale from (Zhong et al., 2011) was used with 5 items and sample items from it is SMM-1: I often find myself using several media technological devices simultaneously. The scale was used in the past in the studies of (Nordberg et al., 2013) and (Rolland et al., 2014). For academic competence, scale from (Diperna & Elliott, 1999) was used with 4 items including fluency of reading. Used in the studies of (Busse et al., 2010), (Canivez and Beran, 2011) and (Reid et al., 2014) as well. For personality traits, scale of Samuel et al, 2003 was used with 10 items with one item of “I see myself as extraverted, enthusiastic”. The scale was also used in the studies of (Levett-Jones et al., 2011), (Rolland et al., 2014) and (Samuel et al., 2010).

3.3. Data Collection, Sample and Demographics

Primary data were gathered through a self-administered questionnaire of students. Simple random sampling technique was used for data collection. The tool for students has three portions. The investigator distributed 620 questionnaires to students. Out of these, 48 responses are not considered owing to incomplete response in which 48 incomplete responses from students. Finally, 572 respondents are qualified as final sample size. The response rate remains 92% from universities in Pakistan, 170 respondents from GIFT University, 122 respondents from University of Lahore, 150 respondents from University of Punjab, and 130 respondents from University of Sargodha. Out of 572 respondents 300 respondents were male and 272 were female.

4. Data Results and Analysis

4.1. Reliability and Validity

Cronbach alpha (α) is designed for testing the reliability of the data. The value of Cronbach alpha would be equal to 0.7 or bigger than 0.7, in other words, we can say the threshold value of the Cronbach alpha is $\alpha \geq 0.7$ (Cronbach (1951). The AVE of the construct threshold value is 0.5 to be considered valid (Sabir, Majid, and Masood, 2021).

To determine composite reliability the value must surpass the threshold value of 0.6 to be considered reliable (Cohen, 1988; Pervaiz, Pervaiz, and Manzoor, 2022).

Table 1: Reliability and Validity

Construct	Cronbach Alpha (Above 0.70)	CR (Above 0.60)	AVE (Above 0.50)
Social Media Multitasking	0.80	0.92	0.794
Academic Competence	0.90	0.87	0.675
Individual Differences	0.86	0.782	0.765

4.2. Regression Analysis

The ultimate purpose of a study is to check the impact of the independent variables on the dependent variable. For this purpose, researcher used M-plus software to obtain results regarding study hypotheses and researcher questions. Table 2 shows the regression results. The below-mentioned table shows the results of regression analysis for this study and elaborates the status of the study hypothesis. There is one independent variable in all six models studied in current study i.e., social media multitasking however the moderator in each model is different i.e., different types of personality traits. In model 1, Social media multitasking showed significant negative impact on academic competence because its coefficient is -0.117 which means that if social media multitasking increases by one unit it will decrease academic competence by 11.7%. This result indicated that the 1st hypothesis of this research study is accepted. In model 2, the results of the moderating effect of extraversion between SMM and academic competence show that it significantly and positively moderated the relationship between these two variables. It can be seen in results of model 2 that extraversion significantly positively moderated this relationship by 5%. In model 3, the results of agreeableness as moderator between social media multitasking and academic competence are insignificant because p value against them is more than 0.1 that's why the hypothesis of this study related to moderation of agreeableness is rejected. In model 4, Conscientiousness has a significant negative moderating impact on relationship among social media multitasking and academic competency by -.087, it's mean that it moderates the relationship of SMM and adamic competence negatively by 8.7 percent. Which mean that the conscientiousness of the personality among the student has negative moderation for example if one unit of conscientiousness applied on the relationship of SMM and academic competency it will bring play the role to reduce the association between social media multi-tasking and academic performance by 8.7 time. In model 5, openness also significantly moderated association between SMM and academic competence because it caused moderating impact of 2 percent on this relationship. Which mean that the openness of the personality among the student has positive moderation for example if one unit of openness applied on the relationship of SMM and academic competency it will bring 2-time speedy enhancement on this assortment. In the last model i.e., model 6, Neuroticism also showed significant and negative moderation between social media multitasking and academic competence, which indicated that it has a negative moderating impact between social media multitasking and academic competence. Personality traits is considered to have a

strong impact on student performance. Based on results, which is shown by table 2 there is one hypothesis of this study is rejected and other remaining hypotheses of this study are accepted.

5. Discussion

This study was conducted to know about “The impact of social media multitasking on the academic performance of the student in the presence of moderating role of five personality traits that are, openness, extraversion, neuroticism, conscientiousness and agreeableness”. The first hypothesis of the present study is, “Social media multitasking negatively affects academic competence.” This hypothesis has been accepted in accordance with the results of this study. And this result is aligned with other studies that have studied on this relationship, for example, (Junco, 2015; Lau, 2017; Liu, Kirschner & Karpinski, 2017; Terry, Mishra and Roseth, 2016). All these studies depicted in their research that there is negative relationship of SMM on academic competence (Rostaminezhad, Porshafei and Ahamdi, 2019). The reason behind this result is that if students get involved in multi tasks by using social media like if a student is involved in doing his/her homework by searching data through internet as well as he/she is busy in texting her friend or busy in surfing the face book or Instagram then he/she will not be able to pay full attention on his/her homework due to a lot of task he/she is handling at a time which will then give bad impact on the performance of the student and he will not be able to achieve the target of his success which he has decided in his life (Hameed et al., 2022). That’s why SMM decreases the performance and competence of the student in the field of academia.

The 2nd hypothesis of the present study is, “Individual differences moderate the relation of social media multitasking and academic competence.” Individual differences play very important role in the human life towards his performance and attitude towards his actions. This hypothesis has also been accepted through the outcomes and it is conformed that individual difference moderates the association of media multitasking and academic competence. This result is same as that of previous studies in which following authors are included (Carrier et al., 2015; Hanus and Fox, 2015; Meier et al., 2016; Mekler et al., 2017). The reason behind this, is the learning style, aptitude, personality, and emotional intelligence of the person, if the learning style of a person is effective and focused then it will make the relationship of SMM and academic competence weak and will give good impact on the performance of the student and in the same way, other factors of the individual difference moderate their relationship positively or negatively.

The 3rd hypothesis of the present study is, “Openness positively moderates the relationship between social media multitasking and academic competence.” This hypothesis has also been accepted through this study and it is confirmed that openness positively moderates the relationship among social media multitasking and academic competence. This result is aligned with other studies as well in which following authors are included; (De Feyter et al., 2012; Hanus and Fox, 2015; Mekler et al., 2017). The reason behind this fact is that the students who have this trait of openness have ability to manage time very effectively and they can manage their time in all activities including multi-

Table 2: Summary of Random Coefficient Model Results

Predictor	Model 1 Academic competence		Model 2 Academic competence		Model 3 Academic competence		Model 4 Academic competence		Model 5 Academic competence		Model 6 Academic competence	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Education	0.094	0.051	0.090	0.051	0.091	0.051	0.100*	0.051	0.093	0.051	0.098	0.050
Age	0.007	0.009	0.007	0.009	0.006	0.009	0.002	0.009	0.007	0.009	0.007	0.009
Gender	-0.033	0.067	-0.029	0.067	-0.038	0.068	-0.031	0.067	-0.034	0.068	-0.034	0.067
Social Media Multitasking	-0.117***	0.033	0.026*	0.121	0.093	0.125	0.365**	0.110	0.173	0.125	0.150	0.126
Extraversion			0.186	0.140								
Social Media Multitasking X Extraversion			0.050**	0.021								
Agreeableness					0.016	0.130						
Social Media Multitasking X Agreeableness					0.008	0.037						
Conscientiousness							0.248	0.127				
Social Media Multitasking X Conscientiousness							-0.087**	0.036				
Openness									0.079	0.131		
Social Media Multitasking X Openness									0.021*	0.009		
Neuroticism											-0.030	0.135
Social Media Multitasking X Neuroticism											-0.010*	0.005
$\Delta \chi^2 (\Delta df)$												
ΔR^2												

Note. N=573. Gender was coded as 2 = Female, 1 = Male. Education was coded as 1= Under Graduation, 2 = Graduation, 3=Post Graduation. Age Was Calculated in Years. *p < .10; **p < .05; ***p < .01; a Social Media Multitasking; b Academic Competence; c Big Five Personality Traits;

tasking in social media along with their studies and it does not give bad impact to their academic performance because of their broad mind, wide variety of interest along with their insightful and imaginative traits. As these traits make them able to use their mind in different tasks at a time effectively without affecting any task they are doing. The 4th hypothesis of the present study is, "Extraversion positively moderates the relationship between social media multitasking and academic competence." In accordance with this study, this hypothesis is also accepted, and it is verified that extrovert trait positively affects the relationship of multitasking on social media and performance of the student. This result is same as that of previous studies that were conducted on this relationship before. For example, (De Feyter et al., 2012; Gareau et al., 2019; Górnik-Durose, 2019; Naseer et al., 2019). Extrovert people are very social and their most of the time is passed in communicating with their friends and relatives by using social media like face book or any other medium. That extrovert trait also affects their performance in their class as they have good and strong relations with class fellows, and they use their relationship in getting notes from their friends to complete their homework. Therefore, extroversion personality affects the relationship of SMM and academic competence. The 5th hypothesis of the current study is, "Neuroticism negatively moderates the relationship between social media multitasking and academic competence." This hypothesis was also accepted in accordance with the outcomes of this study as well as in accordance with the results of previous studies that were conducted on this relationship. For example, (De Feyter et al., 2012; Schmitt, 2007; Steptoe et al., 1995; Tabak et al., 2009). Students who have neurotic personality are mostly involved in stressed situations due to which they are not capable to emphasis on multi tasks; they can do one task at a time due to their confused thoughts and intuitions.

The 6th hypothesis of the current study is, "Conscientiousness negatively moderates the relationship among social media multitasking and academic competence." This hypothesis has also been accepted in accordance with the results of this study and this result is aligned with the outcomes of the prior studies that have studied the relation of Conscientiousness that moderates the association between SMM and academic competence. The studies that have supported this result are as follows; (De Feyter et al., 2012; Eisenberg et al., 2014; Rouis et al., 2011; Stead and Bibby, 2017; Van Der Schuur et al., 2015). The reason behind this relationship is that conscientious students are more intelligent as compared to non-conscientious students because they are more organized and well-disciplined, and they have strong known how about the management of the time as well as management of the task in their lives. They mostly prefer to do one task at a time and do it perfectly without any mistake.

6. Conclusion

This study was directed to know the SMM and its relationship with academic competence on the top of the moderating role of the big five personality traits. For this purpose, data was collected by using the questionnaires that were filled from the students and their respective teachers at different universities as they were the best targeted sample to gather data on this topic. After analyzing the results, it was revealed that all the hypothesis of this study were accepted except one hypothesis that was concerned with the moderation effect of agreeableness on the relationship of SMM and performance of the students. The findings showed that the relationship among SMM and academic

performance of the students at Pakistani Universities is significant so, the SMM influences their academic performance in negative way potentially. Furthermore, it has been revealed that the trait of students related to “openness to experience” plays significant positive moderating role in this relationship because this trait enhances the likelihood of negative impact of social media multitasking on academic performance of students. It means that more a student possesses the personality trait of openness, more he/she is likely to be involved in SMM and more the academic performance of student will be negatively influenced. The findings about the moderating role of extraversion trait of personality revealed that extraversion also has the role of significant moderator in this relationship because it has the great potential to influence “The impact of social media multitasking on academic performance”. It means that the extraversion of a student has the potential to increase the impact of his/her SMM on his/her academic performance. Hence, more a student is extrovert, more the involvement of student in SMM and thus more, the academic performance of student gets influenced negatively because the extrovert students tend to be involved in numerous social activities and time-wasting practices on social media so, they spend less time on their studies and academic tasks. Consequently, their academic performance and grades significantly declines due to this increase social media multitasking. The findings about the moderating role of neuroticism revealed that a student having personality trait of neuroticism does not tend to be involved in social media multitasking.

7. Implications of the study

The present study contributes to research on social media multi-tasking and student’s academic competence in numerous ways. The theoretical contribution of the current study can be seen by looking at the enhancements of literature of social media multitasking, personality traits and academic performance of students that will be made by the current study. The current study has added a value empirical evidence to the literature about the association of SMM and academic performance while examining the moderation of different types of personality traits. There will be a great addition of significant research and findings to the literature of “Bandura’s Social Learning Theory” (SLT) so, the current study is expected to enhance SLT with significant findings and discussion. Furthermore, the current study is expected to diminish the scarcity of literature on the association between SMM and academic performance because there is very few research in existing literature that examine SMM behavior and academic competence of university students in Pakistani cultural settings. Little, however known about SMM and academic competence. The findings of this research are very accurate and clear due to which the empirical evidence of the study enhanced as well. In addition, the literature on the impact of SMM in academic competence with the moderating role of personality traits will be enhanced as well in particular context of Pakistan because there is no similar study conducted in Pakistan ever before. Moreover, the current study will as well as be beneficial and helpful for the scholars who will conduct a study on the impact of social media multitasking in academic competence with the moderating role of persona traits. This study is expected to open the doors to some new research areas for future researchers as well.

8. Limitations and future research recommendations

The current study is limited to the only three variables: personality traits, social-media multi-tasking and academic competence. The context of study is limited to the higher education sector of Pakistan. The current study and findings have made clear that how the SMM can affect the academic performance of students in negative manner so, it has made important suggestions and guidelines to the students that how can they manage and enhance their academic performance by controlling their social media multitasking. It is suggested that students should not be involved in social media activities and social media multitasking excessively because they can hamper their academic performance and they can face failure. The students with personality having trait of openness and extraversion must realize that their excessive involvement in social activities, new networks, new social media multitasking can lead them to the real time challenging situation regarding their academic performance because their excessive involvement in social media multitasking causes them to spend less or no time on their studies and academic tasks so, they may suffer with failure or declined grades in exams due to the lack of attention and hard work on studies.

Ethical Consideration

The authors declare that this submission follows the policies of AJSS as outlined in the Guide for Authors and in the Ethical Statement. Full consent was obtained from the participants prior to the study and all procedures were carried out in accordance with approved ethical standards.

Informed Consent

Respondents were interviewed based on informed consent. A fully informed, considered, and freely given decision about whether or not to participate in the study, without the exercise of any pressure or coercion.

Declaration of Interest Statement

The authors declare that we have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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