Cognitive and Social Influences of Social Media: Examining the Effects of Big Five Personality Traits of Students at Secondary Level

Sehrish Sarfaraz[1], Hina Shoukat[2], Nadia Shaheen[3], Wajid Mahnaz[4]

[1] PhD Scholar, Department of Education, ALHAMD Islamic University, Islamabad
[2] Lecturer, Department of Educational Sciences, National University of Modern Languages, (NUML) Islamabad
[3] PhD Scholar, Fatima Jinnah Woman University, The Mall Rawalpindi
[4] PhD Scholar, Department of Education, ALHAMD Islamic University, Islamabad

Abstract:
The Big Five Personality Traits—openness, conscientiousness, extraversion, agreeableness, and neuroticism—are widely regarded as a comprehensive framework for understanding individual differences. These traits influence various behaviors, including social interactions, learning preferences, and technology adoption. Objectives of the study were; 1) To analyze the usage of Social Network Sites by the students for educational purposes. 2) To investigate the association between social network site preference and Big Five Personality Traits of students. 3) To explore the role of social network sites in social development of students. All 8617 Students of grade 10th of District Attock, (4,868 Boys & 3,749 Girls) at secondary and higher secondary school level in 248 public schools were the population of the study. 816 students were the sample for this study from the population. Proportional Sampling technique was used for sampling. Big Five Personality Tool consists of 39, Usage of Social Network Sites tool consists of twenty nine different items for five basic and commonly used Social Network Sites. Reliability of the tools was found by using Cronbach's Alpha. For content validity, both research tools were validated from the experts of field of education while for construct validity, EFA was performed. The findings indicate a significant positive correlation ($r = .452$, $p < .01$) between social network site usage and their use for educational purposes. This suggests that increased engagement with social network sites is moderately associated with utilizing them for academic-related activities. Hence, it is recommended to integrate social networking platforms into formal educational settings by developing guidelines for their academic use. Teachers and administrators should promote the use of SNS for collaborative learning, resource sharing, and academic discussions.

Keywords: Social Network Sites (SNSs), Big Five Personality Traits (BFPTs), Academic Achievement,

Introduction:
Introduction to Big Five Personality Traits
The Big Five Personality Traits, also known as the Five-Factor Model, emerged from decades of research into trait theory. Initially conceptualized by researchers such as Gordon Allport and Raymond Cattell, the modern framework was solidified in the 1980s and 1990s through factor analysis studies by McCrae and Costa. The model describes personality in terms of five broad

dimensions: openness, conscientiousness, extraversion, agreeableness, and neuroticism, which are considered universal and stable across cultures and time (Explore Psychology, 2025). The Big Five Personality Traits—openness, conscientiousness, extraversion, agreeableness, and neuroticism—describe broad dimensions of human personality. These traits capture individual differences in creativity, discipline, sociability, cooperativeness, and emotional stability. The Big Five Personality Traits are widely regarded as a comprehensive framework for understanding individual differences. These traits influence various behaviors, including social interactions, learning preferences, and technology adoption. For instance, individuals high in openness tend to embrace novel experiences and technologies, while those with high conscientiousness are more likely to engage in structured and goal-oriented activities, such as academic tasks. Extraverts often exhibit strong social networking behaviors, utilizing platforms like Facebook and WhatsApp for social engagement, whereas agreeable individuals show collaborative tendencies, making them more receptive to social connections online. In contrast, neuroticism may lead to negative emotional experiences and reliance on social media for coping, potentially influencing both academic performance and mental well-being (Mahnaz & Kiran, 2024a). A social network site is an interactive verbal exchange platform where users can create an account to join a specific social network site. They usually use their personal accounts to stay connected with their respective individuals in the same way by using social network sites. Social Network Sites are basically used in the field of communication and have gained importance as an effective means of distant communication. Their requirement in the current age had made the massive contribution of modern technology (Mahnaz et al., 2022). Academic performance is the visible scores that are used to show in the form of the number or grade, and it is also used to show that up to which level the students adapted the school work and the educational system. Moreover, an academic performance refers back to the numerical ratings of a scholar's information, representing the diploma of a scholar's variation across multiple academic gadgets (Mahnaz & Kiran, 2024a). The integration of SNS into educational settings offers both opportunities and challenges for secondary school students. On the one hand, platforms like WhatsApp and Google Classroom facilitate collaboration, knowledge sharing, and real-time communication, which can enhance academic engagement and performance. On the other hand, the unregulated use of entertainment-focused platforms, such as TikTok and Instagram, poses risks of distraction and reduced academic focus, particularly for students with certain personality traits. This dichotomy underscores the need for a nuanced understanding of how personality traits influence students' interactions with SNS and their subsequent impact on academic outcomes. By exploring these dynamics, this study aims to provide evidence-based recommendations for leveraging SNS to support educational attainment while addressing the challenges posed by its misuse (Mahnaz & Kiran, 2024b).

Objectives:
Objectives of the study were
1. To analyze the usage of Social Network Sites by the students for educational purposes.
2. To investigate the association between social network site preference and Big Five Personality Traits of students.
3. To explore the role of social network sites in social development of students.

Hypotheses:
H₁: There is a significant relationship between the use of social network sites for educational purpose.
H₂: Big Five personality traits significantly influence students' engagement with social network sites.

H₃: Use of social network sites play positive role in social development of students.

Literature Review:
Introduction to Big Five Personality Traits:
The Big Five personality traits—openness, conscientiousness, extraversion, agreeableness, and neuroticism—are considered significant predictors of behavior, including technology use and academic outcomes. These traits influence how individuals engage with social media platforms like WhatsApp and Facebook, especially for educational purposes. For instance, conscientiousness is associated with goal-oriented behaviors, suggesting that students high in this trait may prefer structured use of these platforms for academic collaboration. Extraversion, characterized by sociability and energy, aligns with active participation in online group discussions (Mehrukh et al., 2022). Research shows varying impacts of neuroticism and openness on social media use. Neuroticism may drive frequent but emotionally charged interactions, while openness encourages innovative applications, including leveraging WhatsApp and Facebook for learning (Shaheen et al., 2022). These traits provide a theoretical foundation for exploring personality's role in technology adoption within educational contexts.

Social Media and Educational Collaboration:
The Big Five Personality Traits provides insights into diverse behavioral tendencies that are essential for understanding digital interactions. For example, extraverts tend to favor interactive platforms like Instagram and Facebook, which cater to their sociable and outgoing nature, whereas conscientious individuals gravitate towards platforms that support goal-oriented activities, such as LinkedIn or educational forums. Conversely, neurotic individuals may use SNS for escapism, often engaging in passive consumption that can hinder productive activities, including academic tasks. These behavioral differences underscore the necessity of studying how personality influences students' engagement with digital tools, especially given the rising integration of technology in educational settings. Moreover, understanding these relationships can guide educators and policymakers in leveraging SNS to enhance learning outcomes and mitigate potential drawbacks (Mahnaz & Kiran, 2024a). Social media platforms have transformed learning environments by enabling seamless communication, resource sharing, and collaborative opportunities. WhatsApp, with its instant messaging and group chat features, has become a favored tool for students to discuss academic topics, share resources, and coordinate study groups (Bouhnik & Deshen, 2014). Similarly, Facebook's groups and forums facilitate educational exchanges, especially for collaborative projects and peer learning (Mahnaz et al., 2023). Recent studies suggest that the integration of WhatsApp and Facebook into education enhances student engagement and knowledge retention. For example, WhatsApp promotes peer support and fosters a sense of belonging, which is critical for academic success. Meanwhile, Facebook encourages critical discussions through its interactive tools (Güler, 2015; Al-Rahmi et al., 2018). These platforms are particularly effective for blended learning environments, where online interactions complement traditional classroom teaching. The Big Five Personality Traits provide a robust framework for understanding individual differences in SNS usage. For instance, extraverts are more likely to engage actively on platforms like Facebook due to their inherent need for social interaction and stimulation (Montag et al., 2020; Roshita & Ningsih, 2021). This heightened engagement can foster a sense of belonging and support, potentially enhancing academic motivation. In contrast, individuals high in neuroticism often use Facebook and WhatsApp for emotional regulation, which may lead to excessive usage and reduced focus on academic tasks (Mahnaz & Kiran, 2024).

Academic Performance as a Mediator:

Academic performance is a central outcome influenced by both personality traits and social media usage. Studies highlight how personality traits directly impact academic success through self-regulation, motivation, and time management skills. Conscientiousness, for example, positively correlates with academic performances, while neuroticism often negatively affects performance due to stress and poor emotional regulation (McElroy & Lubich, 2020). In the context of social media use, platforms like WhatsApp and Facebook can mediate the relationship between personality traits and academic outcomes. For instance, conscientious students may use WhatsApp strategically for task management and peer collaboration, enhancing their performance. On the other hand, students high in extraversion might benefit from the social aspects of Facebook, which can indirectly improve their academic engagement (Brailovskaia & Margraf, 2016). Such mediating effects underscore the nuanced role of academic performance in linking personality-driven social media use to educational outcomes. The interplay between the Big Five personality traits, the adoption of WhatsApp and Facebook for educational purposes and academic performance offers a rich area for research. Understanding these dynamics can inform educators and policymakers on effectively integrating social media tools into learning environments, optimizing both individual and collective academic success. A growing body of research has explored the impact of Facebook and WhatsApp usage on Scholastic Performance, revealing both positive and negative effects. Studies suggest that students with high conscientiousness and extraversion benefit from using WhatsApp and Facebook for academic purposes, such as group collaborations and academic discussions, which contribute to better academic engagement and performance (Mahnaz & Sidra, 2024). However, students high in neuroticism and low in conscientiousness are more prone to distractions from Facebook and WhatsApp, leading to negative academic outcomes due to excessive time spent on non-academic content (Mahnaz & Sidra, 2024).

Theoretical Framework:

The Uses and Gratifications Theory (UGT) is highly relevant to understanding the impact of WhatsApp and Facebook usage on scholastic performance among secondary school students. UGT posits that individuals actively select media and technologies based on their needs and desires, seeking gratifications such as social interaction, information acquisition, entertainment, or emotional support. This theory helps explain why students use platforms like WhatsApp and Facebook, as they may be motivated by both academic and social needs, such as staying connected with peers, sharing study materials, or participating in academic discussions. In the context of this study, UGT can provide insights into how students use WhatsApp and Facebook for academic purposes, such as group study sessions, access to educational resources, and communication with teachers or classmates. These gratifications, driven by specific needs related to Scholastic Performance, might positively influence scholastic performance. For instance, students who use WhatsApp for collaborative study groups may experience enhanced academic engagement (Whelan et al., 2020), while those who use Facebook for educational content or group discussions may see improvements in academic performance as well (Mahnaz & Sidra, 2024). However, UGT also suggests that excessive use of Facebook for recreational purposes, such as socializing or entertainment, could detract from academic focus, potentially leading to negative impacts on scholastic performance. The theory suggests that students' personalities, as reflected in the Big Five traits, may influence their media choices and usage patterns, with conscientious students more likely to use WhatsApp and Facebook for academic purposes, while others may engage with these platforms for social and emotional needs, which could interfere with their academic goals (Mahnaz & Sidra, 2024).

Research Methodology:

Research Design: This study used quantitative research design for analysis of **"**Cognitive and Social Influences of Social Media: Examining the Effects of Big Five Personality Traits of Students at Secondary Level".

Population: All 8617 Students of grade 10th of District Attock, (4,868 Boys & 3,749 Girls) at secondary level in 248 public schools were the population of the study.

Sample and Sampling Technique: Sample of the study consists of 816 students from the population. Proportional Sampling technique was used for sampling. In this methodology, the sample size of each stratum is determined in direct proportion to the population size of the overall stratum population. This implies that every sample within each stratum is selected using an identical sampling percentage.

Research Instruments: Two different types of research tools were used with prior permission from the research to achieve the objectives of the study.

Research Tool No. 1: Big Five Personality Traits Tool (BFPTs) Big Five Personality Tool consist of 39 items for five different factors which are basically the Big Five personality Traits i.e., Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism.

Research Tool No. 2: Usage of Social Network Sites (USNSs) Usage of Social Network Sites tool consists of twenty-nine different items for five basic and commonly used Social Network Sites.

Reliability of the Tools: Reliability of the tools was found by using Cronbach's Alpha. The internal consistency of the items of variables was "Excellent" and overall reliability of the tool was "Good".

Validity of the Research Tools: Content Validity: The research instrument used for this study was improved by the consistent guidelines and input of five different experts in the field of educational research. Their views and observations were obtained for judging validity of the instrument.

Construct Validity: Construct validity refers to the extent to which a measurement tool accurately represents the theoretical construct it is intended to measure. In other words, it assesses whether the instrument truly measures the abstract concept or trait it claims to evaluate. Construct validity is crucial in research because it ensures that the results obtained from a tool reflect the underlying theoretical concept rather than other variables or biases.

Data Analysis Technique
Co-efficient of Correlation
The correlation coefficient is a quantitative indicator of correlation, which denotes a statistical association between two variables. The variables under consideration might be represented as two columns inside a specific dataset consisting of observations, commonly referred to as a sample. Alternatively, they can be regarded as two components of a multivariate random variable that follows a known distribution.

Table 3: Demographic information of the students

Category	Frequency	Percentage
Male	461	56.49
Female	355	43.51
Age 12 to 14 (years)	204	25
Age 15 to 17 (years)	597	73.16
Above 17 years	15	1.84

The demographic data shows that among the participants, 56.49% (461 students) are male, while 43.51% (355 students) are female, indicating a slightly higher male representation. Regarding age distribution, the majority of students, 73.16% (597 students), fall within the 15 to 17-year-old age range. Additionally, 25% (204 students) are aged 12 to 14, and a small proportion, 1.84% (15 students), are above 17 years. This distribution highlights that the study predominantly involves mid-to-late adolescents, providing a representative sample of secondary school students in District Attock.

Hypothesis H₁: There is a significant relationship between the uses of social network sites for educational purpose.

Table 4: Correlation of Usage of SNSs and BFPTs of The Students

Correlations			
		Social_Network_ Sites	Educational_Purpose
Social_Network _Sites	Pearson Correlation	1	.452**
	Sig. (2-tailed)		.000
	N	816	816
Educational_Pu rpose	Pearson Correlation	.452**	1
	Sig. (2-tailed)	.000	
	N	816	816
**. Correlation is significant at the 0.01 level (2-tailed).			

The correlation analysis indicates a statistically significant positive relationship between social network site usage and Educational Purpose, with a Pearson correlation coefficient of 0.452. This correlation is significant at the 0.01 level ($p < 0.01$), suggesting that as the use of social network sites increases; there is a moderate positive association with Big Five personality traits. The sample size for this analysis is 816, ensuring robust results. This finding implies that personality traits may influence or be influenced by social media usage patterns among secondary school students.

Hypothesis H₂: Big Five personality traits significantly influence students' engagement with social network sites.

Table 5: Correlation of Usage of SNSs and Academic performance of the students

Correlations		Big_Five_Personality_ Traits	Social Network_Site_ Usage
Big_Fi ve_Per sonalit	Pearson Correlation	1	.566**
	Sig. (2-tailed)		.000
	N	816	816
Social Network _Site_Us	Pearson Correlation	.566**	1
	Sig. (2-tailed)	.000	
	N	816	816
**. Correlation is significant at the 0.01 level (2-tailed).			

The correlation analysis reveals a statistically significant positive relationship between Big Five Personality Traits and Social Network Sites Usage, with a Pearson correlation coefficient of 0.566.

This correlation is significant at the 0.01 level (p < 0.01), indicating a moderate to strong positive association. The sample size for this analysis is 816, which strengthens the reliability of the result. This finding suggests that increased social network site usage is associated with higher Academic performance, possibly reflecting the role of social media in facilitating learning, collaboration, and academic engagement among secondary school students.

Hypothesis H3: Use of social network sites play positive role in social development of students.

Table 5: Correlation of Usage of SNSs and Academic performance of the students

Correlations

		Social_Development	Social Network_Site_ Usage
Big_Fi ve_Per sonalit	Pearson Correlation	1	.579**
	Sig. (2-tailed)		.000
	N	816	816
Social Network _Site_Us	Pearson Correlation	.566**	1
	Sig. (2-tailed)	.000	
	N	816	816

**. Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis reveals a statistically significant positive relationship between Social Development and Social Network Sites Usage, with a Pearson correlation coefficient of 0.579. This correlation is significant at the 0.01 level (p < 0.01), indicating a moderate to strong positive association. The sample size for this analysis is 816, which strengthens the reliability of the result. This finding suggests that increased social network site usage is associated with higher Academic performance, possibly reflecting the role of social media in facilitating learning, collaboration, and academic engagement among secondary school students.

Findings:
1. The findings indicate a significant positive correlation (**r = .452, p < .01**) between social network site usage and their use for educational purposes. This suggests that increased engagement with social network sites is moderately associated with utilizing them for academic-related activities among the 816 participants.
2. The findings show a significant positive correlation (**r = .566, p < .01**) between Big Five personality traits and social network site usage. This indicates a moderate to strong association, suggesting that individuals' personality traits significantly influence their engagement with social network sites among the 816 participants.
3. The findings reveal a significant positive correlation (**r = .579, p < .01**) between social development and social network site usage. This suggests a moderate to strong relationship, indicating that greater use of social network sites is associated with enhanced social development among the 816 participants.

Discussion:

Finding 1: Positive Correlation Between Social Network Sites Usage and Educational Purpose (r = .452, p < .01)

The moderate positive correlation suggests that as students engage more with social networking sites (SNS), their use for academic purposes also increases. This finding reflects the evolving role of SNS in education. Keles, McCrae, and Grealish (2020) reported that platforms like Facebook and WhatsApp facilitate collaborative learning, resource sharing, and academic discussions among students. Abbas et al. (2019) further emphasized that SNS usage enhances critical thinking and student participation in group learning tasks, particularly in secondary education. Moreover, Rashid and Asghar (2016) highlighted the effectiveness of SNS in supporting independent learning by providing access to educational materials and fostering peer collaboration. These studies collectively underline that SNS usage is no longer limited to social interaction but is progressively utilized for educational benefits.

Finding 2: Positive Correlation Between Big Five Personality Traits and Social Network Site Usage (r = .566, p < .01)

The significant correlation demonstrates that individual personality traits substantially influence the way students engage with SNS. Correa, Hinsley, and de Zúñiga (2017) observed that extraverts are frequent SNS users, leveraging these platforms to build and maintain social connections. Openness to experience also plays a pivotal role, as such individuals often use SNS to explore diverse ideas and perspectives. Jiang, Hou, and Wang (2016) found that agreeable and conscientious individuals engage in SNS to maintain relationships and complete academic tasks, while neurotic individuals are more likely to use SNS for emotional expression and social validation. Additionally, Liu and Campbell (2017) identified that extraversion and openness predict frequent SNS activity, suggesting that personality traits influence not only the frequency but also the purpose of SNS use. These findings confirm that students' Big Five personality dimensions shape their online behavior, fostering distinct interaction patterns on SNS.

Finding 3: Positive Correlation Between Social Development and Social Network Site Usage (r = .579, p < .01)

The strong association indicates that SNS play a significant role in enhancing students' social development. Platforms like Facebook, Instagram, and WhatsApp enable users to form new connections, strengthen existing relationships, and improve interpersonal communication. Ellison, Vitak, Gray, and Lampe (2014) emphasized that SNS are vital for maintaining social capital, particularly among adolescents and young adults. Valkenburg, van Driel, and Tiggemann (2021) noted that online interactions contribute positively to social self-esteem and emotional well-being, fostering a sense of belonging and community. Yang and Brown (2016) further argued that the transition to digital socialization allows students to navigate complex social dynamics, helping them develop emotional intelligence and stronger peer relationships. These studies highlight the importance of SNS in shaping the social skills of secondary school students, enabling them to thrive in both online and offline environments.

Recommendations:

1. Positive Correlation between Social Network Sites Usage and Educational Purpose (r = .452, p < .01). The moderate positive correlation suggests that as students engage more with SNS, their use for academic purposes also increases. Hence, it is recommended to integrate social networking platforms into formal educational settings by developing guidelines for their academic use. Teachers and administrators should promote the use of SNS for collaborative learning, resource sharing, and academic discussions. Additionally, training programs should

be organized for educators and students to enhance their ability to effectively utilize SNS for academic growth.

2. Positive Correlation between Big Five Personality Traits and Social Network Site Usage (r = .566, p < .01). The significant correlation demonstrates that individual personality traits substantially influence the way students engage with SNS. Hence, it is recommended to design personality-specific interventions for SNS use. For instance, extroverted and open students can be encouraged to lead collaborative projects on SNS, while conscientious students can use these platforms for structured academic planning. Programs focusing on digital literacy should also address potential risks for neurotic individuals by promoting balanced and healthy SNS usage patterns.

3. Positive Correlation Between Social Development and Social Network Site Usage (r = .579, p < .01). The strong association indicates that SNS play a significant role in enhancing students' social development. Hence, it is recommended to use SNS as tools for fostering social skills and emotional intelligence. Schools should introduce structured activities on SNS, such as virtual peer discussions and community-building projects, to strengthen students' interpersonal skills. Parents and teachers should also monitor SNS usage to ensure it contributes positively to students' social and emotional well-being while minimizing risks such as cyber bullying or isolation.

Future Study Recommendations:

1. The Role of Social Networking Sites in Enhancing Academic Engagement and Achievement Among Adolescents. To explore how SNS can be effectively integrated into educational settings to improve academic performance and learning behaviors.

2. Influence of Big Five Personality Traits on Social Media Usage Patterns and Their Educational Implications. To examine how individual personality traits influence the way SNS are used for educational purposes, enabling the design of personality-specific interventions.

3. The Impact of Social Network Sites on Adolescents' Social Skill Development and Emotional Intelligence. To investigate how SNS contribute to the development of key social and emotional skills essential for students' personal and academic success.

References

Abbas, J., Aman, J., Nurunnabi, M., & Bano, S. (2019). The impact of social media on learning behavior for sustainable education: Evidence of students from selected universities in Pakistan. *Sustainability*, *11*(6), 1683

Bibi, A., Kiran, S., Mahnaz, W., Sarfaraz, S., & Habib, M. (2023). Relationship Between Vocational Education And Leadership Styles Of Vocational Instructors At Higher Secondary Level An Exploratory Study, *Journal of Positive School Psychology 7 (*6), 903-917, http://journalppw.com

Correa, T., Hinsley, A. W., & de Zúñiga, H. G. (2017). Who interacts on the Web? The intersection of users' personality and social media use, *Computers in Human Behavior*, *63*, 265-272.

Ellison, N. B., Vitak, J., Gray, R., & Lampe, C. (2014). Cultivating social resources on social network sites: Facebook relationship maintenance behaviors and their role in social capital processes, *Journal of Computer-Mediated Communication*, *19*(4), 855-870

Explore Psychology. (2025). Big Five Personality Traits: Here's What You Need to Know. Retrieved from https://www.explorepsychology.com

Jiang, S., Hou, Y., & Wang, Y. (2016). Narcissism, friendship quality, and happiness in adolescents: The mediating role of SNS use. *Journal of Adolescence*, *51*, 77-85.

Keles, B., McCrae, N., & Grealish, A. (2020). A systematic review: The influence of social media on depression, anxiety, and psychological distress in adolescents. *International Journal of Adolescence and Youth*, *25*(1), 79-93.

Khan, M., I., Mehmood, S., Mahnaz, W., Ali, E., Ahmed, M. (2022). The Effect Of Workplace Bullying On Turnover Intention, Mediating Role Of Employee Rumination, A Quantitative Study Of Three Hospitals Located At Khyber Pakhtunkhwa, *Journal of Contemporary Issues in Business and Government28*(02): 138-175, https://cibg.org.au/

Khushid, M., A., Arshad, Q., & Mahnaz, W. (2022). Learners' Confusions In The Usage of the Present Perfect Tense, PAKISTAN JOURNAL OF SOCIETY, EDUCATION AND LANGUAGE (PJSEL), 6 (2), 263-278, ISSN 2521-8123

Kiran, S., Mahnaz, W., Bukhari, S., I., I., Ahmed, M., Shah, S., Z., H., &Ain, Q. (2022). Conflict Management Strategies Adopted By Teachers Of Special Education Schools An Exploratory Study, *Journal of Positive School Psychology 6 (*9), 3150-3161, http://journalppw.com

Liu, D., & Campbell, W. K. (2017). The Big Five personality traits, SNS use, and social adjustment, *Personality and Individual Differences*, *109*, 65-70

Mahnaz, W., & Kiran, S., (2024). Big Five Personality Traits and Social Network Sites Preferences: The Mediating Role of Academic performance in Educational Outcomes of Secondary School Students, Social Science Review Archives, 2 (2), 1353-1370 https://doi.org/10.70670/sra.v2i2.187

Mahnaz, W., & Kiran, S., (2024a). Exploring the Impact of WhatsApp, Facebook Usage and Big Five Personality Traits on Academic performance Among Secondary School Students, Dialogue Social Science Review (DSSR), 2 (4), 1353-1370 https://doi.org/10.5281/zenodo.14280812

Mahnaz, W., & Kiran, S., (2024b). Personality-Driven Adoption of WhatsApp and Facebook for Educational Collaboration: Academic Performance as a Mediator, Social Science Review Archives, 2 (2), 461-1473, https://doi.org/10.70670/sra.v2i2.198

Mahnaz, W., Kiran, S., Mehmood, U., Arif, S., & Taqadees, N. (2023). Effects of Regular Monitoring of Monitoring Evaluation Assistan (MEAs) on The Quality of Schools: A Case Study of Tehsil Jand District Attock, Punjab, *Journal of Positive School Psychology 7 (*6), 967-980, http://journalppw.com

Mahnaz, W., Mehmood, U., & Umar, M. (2022).How Classroom Enjoyment Influence EFL Students' Academic Motivation,*Pakistan Journal of Social Research 4* (3), 659-665. https://doi.org/10.52567/pjsr.v4i03.755www.pjsr.com.pk

Mahnaz, W., Mehmood, U., & Umar, M. (2022).How Classroom Enjoyment Influence EFL Students' Academic Motivation,*Pakistan Journal of Social Research 4* (3), 659-665. https://doi.org/10.52567/pjsr.v4i03.755www.pjsr.com.pk

Mahnaz, W., Mehmood, U., Mehrukh, N., & Shaheen. A., (2022). Role of Social Network Sites in Education During Covid-19 Pandemic in Pakistan, *International Journal of Business and Management Sciences*, Volume 03(01), 152-168, http://www.ijbms.org

Mahnaz, W., Shah, M., N., Muhammad, N., Syed, Z., & Anjum, F. (2022). Self Esteem And Academic Performance Of Students In Public Secondary Schools In Punjab District Attock, *Journal of Positive School Psychology6 (*10), 3020-3033, http://journalppw.com

Mehmood, U., Mahnaz, W., Mehrukh, N., & Shabbir, W. (2022). Relationship Between Utilization Of ICT And Academic Achievement Of Students At Secondary Level,*ParArch's Journal of Archaeology of Egypt / Egyptology, (PJAEE), 19* (2), 317-324,

---

Mehrukh, N., Mahnaz, W., Iqbal, H., & Basit, I. (2022). Attitude Of Teachers Towards Delayed Students In Mainstream Classrooms At Elementary Level In Pakistan, *ParArch's Journal of Archaeology of Egypt / Egyptology, (PJAEE), 19* (2), 409-419,

Rashid, T., & Asghar, H. M. (2016). Technology use, self-directed learning, student engagement and academic performance: Examining the interrelations. *Computers in Human Behavior*, *63*, 604-612.

Shaheen, A., Quratulain, Kiran, S., Basit, I., Mahnaz, W., & Shahzad, M. W. (2022). Implementation of Effective Strategies Regarding Classroom Management in Public and Private Schools: A Comparative Study, Turkish Online Journal of Qualitative Inquiry (TOJQI)13(1): 194-203

Valkenburg, P. M., van Driel, I. I., & Tiggemann, M. (2021). Social media use and adolescents' self-esteem: Heading for a person-specific media effects paradigm. *Journal of Communication*, *71*(1), 56-78.

Yang, C. C., & Brown, B. B. (2016). Online self-presentation on Facebook and self-development during the college transition, *Journal of Youth and Adolescence*, *45*(2), 402-416.