

How to Cite This Article: Tabassum, R, Saleem, A., & Kashif, M. F. (2023). Investigation of Customer Experience, Customer Engagement, Corporate Reputation and Word of Mouth in Banking Sector: Evidence from Pakistan. *Journal of Social Sciences Review*, 3(2), 60–69. <https://doi.org/10.54183/jssr.v3i2.206>



Academic Efficacy as Correlate of Students' Performance: A Study on Adolescents of Lahore

Rabia Tabassum	Lecturer, Department of STEM Education, Lahore College for Women University, Lahore, Punjab, Pakistan.
Aimen Saleem	MS Education, Lahore College for Women University, Lahore, Punjab, Pakistan.
Mahvish Fatima Kashif	Assistant Professor, Department of STEM Education, Lahore College for Women University, Lahore, Punjab, Pakistan.

Vol. 3, No. 2 (Spring 2023)

Pages: 60 – 69

ISSN (Print): 2789-441X

ISSN (Online): 2789-4428

Key Words

Academic Efficacy, Students' Performance, Adolescents, Lahore, Pakistan

Corresponding Author:

Rabia Tabassum

Email: rgreat786@yahoo.com

Abstract: The study aimed to investigate the role of Academic efficacy (AE) as a correlate of academic achievement. The study was designed on a quantitative paradigm which included 12 dimensions of academic efficacy. The population of this study were 800 college students, including 400 male and 400 female, which were gathered by multistage sampling technique. A standardized research instrument was adopted for measuring academic efficacy, while the last exam's percentage of students was used to measure academic performance. Data were analyzed using a t-test and Pearson correlation r. Results indicated a significant correlation between Academic efficacy (AE) and academic performance. It is therefore recommended that the teachers and parents should play their role in enhancing students' Academic efficacy (AE) to improve their quality of performance

Introduction

Academic efficacy (AE), as a correlate of the academic performance of students, has been the subject of much research in recent years. Academic efficacy (AE) refers to a student's beliefs in their ability to succeed academically (Kuznekoff et al., 2015; Siddique et al., 2006), while academic achievement relates to a student's actual performance in their academic endeavours (Aarkrog, 2017).

This concept is rooted in Bandura's theory of social learning, according to which "Students' ideas about their capacities to successfully do tasks, or self-efficacy (SE) beliefs, are substantial predictors of their ability to accomplish such tasks," thus paving the way for research on the topic of social cognitive theory

(Fakhrou, A., & Habib, L. H. 2022). Researchers further narrate that the concept of self-efficacy (SE) is synonymously used for self-confidence and self-reliance, which are parameters of intellectuality, i.e., intellectually gifted students are more likely to think they can finish a task, and this belief is a strong incentive for outstanding performance. Thus, students who have feelings of confidence in their abilities show greater persistence to combat and overcome challenges (Mah & Ifenthaler, 2018; Yeung et al., 2014; Zimlich, 2015). Clendenbeard (2014) asserted that self-efficacy (SE) is directly proportional to academic success, i.e., the students who cling to work and have faith in success instead of cursing their destiny achieve their life goals and vice versa. On these grounds, he narrated that

accepting one's own weaknesses and trying to overcome them without blaming fate are also characteristics of gifted students.

Today's students encounter a wide range of hurdles in their academic pursuits. Because every student is unique and comes from a distinct background, including a different socioeconomic status and a different set of ideas and views, the ways in which they approach issues linked to their education might vary widely. As described in the first paragraph, the definition of Academic efficacy (AE) relates to the student's beliefs over their selves to do well in school and complete their assignments; the observation of these practices is observed in the strict discipline of schools and colleges. But, in the schools, the students are not yet mentally mature, and they are usually observed to follow the teacher rather than have their own creative thoughts. The observation this phenomenon is better to be observed among college-level students, as this is called a true formal operational stage as per Erikson; the study was made to observe college-level students.

Although several types of research were conducted on both of these variables individually or in combination with the other variables, there still remains a gap in this regard, i.e., how this mechanism works in adolescent students and either a does a relationship exist at the college level or not. Also, because adolescence is a complex age in which they are neither children nor adults, they transition from a school atmosphere, which is strict and limited in many areas, to college, which is a completely different environment with new challenges. It results in a lack of confidence and uncertainty in adolescent students. This leads to trembling their self-confidence regarding their academic achievement, and therefore, it is the main reason to conduct this research.

Therefore it has become imperative to perform a thorough analysis of the connection between college students' academic effectiveness and their academic success. To determine

whether or not a connection exists between self-efficacy (SE) and academic accomplishment is the main reason for the research, and how this affects college students and the gender difference.

The study was therefore designed to explore the relationship between Academic efficacy (AE) and the academic performance of college students. Gender was taken as the only demographic factor for the study. The following section gives further support to the study rationale in light of previous research.

Literature Review

Social learning theory states that a person's conduct, intelligence, sentiments and circumstances all have a role in determining their actions and behaviours. Bandura was also concerned with how people alter their own motivations, mental processes, emotional states, and behavioural patterns via the notions of personal and mutual efficacy. He emphasized the importance of a person's self-perception and how it might influence their behaviour. Individuals who believe they are capable of learning or doing activities at present levels have a significant sense of self-efficacy (SE). Students' self-efficacy (SE) in connection to their capability to effectively complete duties is also discussed by McCombs and Marzano (2010). Self-efficacy (SE) was defined by him as "beliefs about one's potential to learn or execute tasks at predetermined levels" in his theory of human functioning developed by Albert Bandura. Bandura defined self-efficacy (SE) as a person's appraisal of their competence to plan and carry out the sequence of behaviours necessary to achieve specified objectives and performances. It is the conviction that one is capable of effectively completing a specific activity or action. After including elements such as intrinsic motivation and self-control, Bandura rebranded his social learning theory as the social cognitive theory. During that period, 36 investigations analyzing the association between self-efficacy (SE) and

academic accomplishment were conducted between 1977 and 1988 (Khanna et al., 2018).

Social cognitive theory has self-efficacy (SE) theory as its most prominent part (Caprara et al., 2000; Hosseini et al., 2015; Sancassiani et al., 2015), while self-efficacy (SE) and the faith that comes with it are a component of a larger set of self-theories that influence motivation and performance, according to the social-cognitive theory of mind. Self-efficacy (SE), goals, regulating the self, and academic achievement are all impacted by latent ideas about one's intelligence (Bhati et al., 2022). If intelligence is fixed and determined only by intrinsic ability, incremental theorists invest a lot of effort into their ideas because they believe that intellect is flexible and influenced by effort. In addition, academic motivation and goal clarity are affected by beliefs in latent intelligence (Chow, 2011; Khanna et al., 2018).

Ersanlı (2015) conducted a study on self-efficacy (SE) and students' belongingness and found a variance of 14% accounted for self-efficacy (SE). Efficacy beliefs are still being studied in more depth via other studies. Bandura pointed out four basic means of self-efficacy (SE) beliefs, mastery experience, observational learning, social motives, and physiological markers.

Institutional theorists, for example, are less likely to set mastery goals, less likely to use strategies of metacognition like elaboration, planning and monitoring, more likely to give up when things get difficult, and more likely to interpret requests for more effort as indicators of a lack of motivation (Van Rooij et al., 2017). On the contrary, incremental theorists are more inclined to stay positive and aspire to mastery when confronted with difficult tasks (Elliott & Clifford, 2014; Syafii & Yasin, 2013). Self-efficacy (SE), desire, metacognitive attention strategies, and self-handicap abilities are all characteristics of advocates of incremental theory (Pym et al., 2014).

Normative goal theory says that one's self-efficacy (SE) beliefs can moderate one's performance goals. Consider how the question's self-efficacy (SE) component connects to college student's academic success. Human activity is predicated when a person believes in his own capabilities (Nomaan et al., 2016; Tahira et al., 2016). According to Bandura's theory of self-efficacy (SE), it is debatable whether or not beliefs have an impact on human performance via motivational, judgmental, and affective mechanisms. When a person has a strong belief in their own abilities, they can accomplish anything they set out to do. Having this kind of belief can increase an individual's eagerness, but college students are still in their adolescent years, making it difficult for them to adjust to and comprehend this concept alongside the other bodily, psychological, emotional, and academic challenges they face as adolescents (Tunstall et al., 2014).

Even while academic self-efficacy (SE) and its connection to academic accomplishment have been extensively studied, little is known about how this mechanism functions in adolescents and if Academic efficacy (AE) and academic achievement have a link or not (Hodges, 2008). The independent variable of the study was the Academic efficacy (AE) of students, which was measured through its twelve dimensions of self-efficacy (SE), whereas the dependent variable was only the academic achievement of pupils at the college level. This is the reason why academic self-efficacy (SE) is given utmost importance when studying different kinds of students. Academic self-efficacy (SE) was defined by Bandura as the process of analyzing ourselves and our abilities so that we can organize and execute required actions so that we can achieve academic success and perform academic activities. A student who has a high level of confidence and he thinks he can successfully perform some specific academic tasks is also known as academic self-efficacy (Hayat et al., 2020).

There are also some theories that explain the behaviours and attitudes of the person when it comes to self-efficacy (SE) and academic success. The theory which is the most well-known has attempted to explain the mechanisms that motivate and control behaviour is, without a doubt, the Social Cognitive Theory by Bandura. According to Social Cognitive Theory, there exists an amalgamation of factors that are internal and also have an influence on ourselves, along with external social systems, and this regulates and motivates our behaviour (D. H. Schunk & Pajares, 2002; D. Schunk & Miller, 2002). Numerous psychological disciplines have also tried to find out the impact of self-efficacy (SE) in domains such as academic achievement, workplace conduct, sportsmanship and performance, dietary behaviour modification, addiction and rehabilitation, and quitting smoking (Mehmood et al., 2014; Pritchard et al., 2007).

Bandura pointed out that the sense of self-efficacy (SE) of a student has a significant impact on academic accomplishment. Academic accomplishment is influenced by factors like abilities relating to cognition, timely academic preparation, achievement, gender, behaviour toward academic tasks, and perceived efficacy of self. Students having different levels of self-efficacy (SE) also influences their attitudes towards academic success or failure.

In order to achieve their objectives, pupils who possess a high level of self-efficacy (SE) make a determined struggle to stay on task, and when this isn't possible, they devise creative solutions to overcome the obstacles they face. Students who lack self-efficacy (SE) are more likely to drop out of school and fail to overcome barriers to learning and achievement (Mazanai, 2012; Pym et al., 2014).

The age of adolescence, which is an ever-changing period with a lot of fluctuations in moods and behaviours, also has a profound effect on the academic self-efficacy (SE) of college students, which in turn also affects their academic performance (Al-Abyadh & Abdel

Azeem, 2022). Adolescence is also a time when the student is in college and still searching for his or her identity, developing a unique personality, and experiencing ups and downs in his or her mood, self-esteem, and sense of self-worth, not to mention fluctuating levels of Academic efficacy (AE) (Hosseini et al., 2015; Sancassiani et al., 2015). In order to fill this knowledge gap on college students' academic self-efficacy (SE), the researcher conducted an investigation to find if a relationship exists between Academic efficacy (AE) and academic achievement of college students.

Material and Methods

The study was quantitative in nature, and a correlational research design was used. The population consisted of all students from colleges of the Lahore district. A multistage sampling technique was applied. The target participants of this research were 400 male and 400 female college students of intermediate level whose ages ranged from 16-18 and from different programs of study like F.sc., ICS, I.Com, and F.A. from public and private sector colleges. Eight colleges of Lahore city were taken in which 16872 students are enrolled. The colleges were selected on the basis of gender, sector, and convenience.

Following the typical quantitative research design, a questionnaire was utilized as a data collection instrument. The final instrument of the study comprised two basic sections, i.e., the first section included demographic questions, along with the question for the previous percentage/results of the respondents, while the second part included a Likert scale questionnaire in determining the self-efficacy (SE) of the students. The standardized tool for self-efficacy (SE) was used for the study, i.e., the self-efficacy (SE) scale prepared by an Indian author, Dr Abdul Gafoor, which included twelve dimensions of self-efficacy (SE), i.e., the learning process, reading, comprehension, memory, curricular activities, time management, teacher-student relationships, peer relationships, resource

utilization, goal orientation, adjustment, and examination (Gafoor, 2009).

Respondents were requested to fill in data regarding their demographics on the questionnaire, write their percentage in the last examination and respond to the academic self-efficacy (SE) scale.

The SPSS statistical package was used to analyze the data. The plan of analysis comprised descriptive statistics, which included frequency distribution to obtain % of demographics, as well as a histogram to represent the normality of data, while inferential statistics included Pearson's correlation in determining the correlation between Academic efficacy (AE) and academic achievement and independent samples t-test to find out the gender difference regarding academic efficacy.

Results and Findings

Analysis to find out the Correlation between Academic Efficacy (AE) and Academic Achievement

Pearson's correlation coefficient test was applied to find out the correlation between Academic efficacy (AE) and academic achievement, as well as the twelve dimensions of Academic efficacy (AE) and academic achievement. A good correlation was defined as between 0.5 and 1.0, and anything below that was deemed to be either low or non-existent. A correlation coefficient equal to or above 0.90 is considered very strong, 0.80 as strong, 0.70 as good, 0.60 as moderate and 0.50 or below as weak or non-existent, as cited (Seeram, 2019). Increasing the first variable's value raises the second variable's value while decreasing the first variable's value lowers the second variable's value and vice versa. A correlation with a positive value demonstrates this relationship. The results of the correlation are discussed in the following table, which shows the correlation between Academic efficacy (AE) and its dimensions with academic achievement.

Table 1

Correlation of Academic efficacy (AE) and its dimensions with Academic Achievement

	Academic Achievement	
	Pearson's r	Sig. (2-tailed)
Academic Efficacy	.95*	.000

Table 1 indicates Pearson's correlation coefficient between Academic efficacy (AE) and academic achievement. It is indicated by the table that there is a significant correlation between the two

variables ($p=.00<.05$). Similarly, the value of correlation coefficient $r=.95$ also lies in the very strong correlation criteria, as indicated in the above paragraph.

Table 2

Correlation of dimensions of Academic efficacy (AE) with academic performance

	Academic Achievement	
	Pearson's r	Sig. (2-tailed)
Reading	.93*	.000
Examination	.92*	.000
Teacher-Student Relationship	.89*	.000
Peer Relationship	.85*	0.001

Comprehension	.84*	.000
Learning Process	.80*	0.002
Goal Orientation	.80*	.000
Memory	.78*	0.001
Adjustment	.76*	.000
Time Management	.65*	0.001
Curricular Activities	.60*	.000
Utilization of Resources	.59*	.000

* Correlation is significant at the 0.05 level (2-tailed).

Table 2 shows the Pearson's r correlation coefficient between all twelve dimensions of Academic efficacy (AE) (i.e., learning process, reading, comprehension, memory, curricular activities, time management, teacher-student relationship, peer-relationship, utilization of resources, goal orientation, adjustment and examination) and academic performance. The table is organized in descending manner of the value of correlation r to make a quick gist. The results clearly indicate that all twelve dimensions under study had a significant correlation with the academic performance of students ($p=.00 < .05$). Moreover, it was also obvious from the table that reading had a maximum correlation ($r = 0.93$), while the utilization of resources had minimum

correlation ($r = 0.59$) to the academic performance.

Analysis to find out the effect of demographics on Academic Efficacy

Demographics, including gender comparison, were examined for their influence on Academic efficacy (AE) using the t -test. The study's results were significant only if they exceeded a '0.05' significance criterion. If the P -values are less than 0.05, it shows a significant difference between the means of distinct groups, whereas if P -values are greater than 0.05 shows no significant difference. The following table shows the results regarding gender comparison in relation to academic efficacy.

Table 3

Gender Comparison on Academic Efficacy

	N	Mean	SD	SEM	t-value	p-value	Mean difference
Female	400	63.87	8.59	.76	3.680	0.92	4.12
Male	400	63.78	7.96	.71			

Table 3 indicates that the P -value is equivalent to 0.92, which is greater than 0.05, and it implies that there is no significant difference in the Academic efficacy (AE) of both male and female college students.

Discussion

The findings of this research showed the existence of a relationship between Academic efficacy (AE) and academic achievement, as well as the twelve dimensions of Academic efficacy

(AE) and academic achievement of college students. It also showed how there is no substantial difference between the Academic efficacy (AE) of male and female college students. In light of various research, the following is a brief discussion of the research findings.

The correlation coefficient of 0.95, which shows a very high positive correlation, and the value of $P=0.000$, which is less than the 0.05 threshold of significance, proves that there is a strong positive correlation between Academic

efficacy (AE) and academic achievement. College students' academic success hinges on their self-belief in their own abilities to study and achieve at a high level (Hill, 2002). To quote Gardner, "their capacity to plan and carry out the courses of activity required to establish a given course of action" is characterized as "self-efficacious" (C. Gardner, 2016; R. Gardner & Wright, 2008). In their research, Chow (2011) and Khanna et al. (2018) found numerous types of self-efficacy (SE), including academic self-efficacy (SE). According to their findings, this category indicates students' self-perceived abilities in proportion to the academic demands placed on them. This is followed by self-regulation, which is the act of engaging and sustaining one's thoughts, emotions, and behaviours in order to achieve one's objectives (Borup et al., 2013).

Achieving goals that include both learning and self-belief necessitates the development of self-regulatory learning strategies. Learners who self-regulate have the capacity and desire to learn, as well as confidence in their own abilities. Self-efficacy (SE) and academic learning abilities go hand in hand, and this boosts motivation and makes learning a reality for them. Both academic self-efficacy (SE) and cognitive capacity have been shown to be reliable predictors of academic success, as stated by Köseoglu (2015).

In terms of academic efficacy, male and female college students showed no major differences. According to the results of the study, the P value was equal to 0.92, which is a higher value than the 0.05 significance level. Hence it proves that there is no significant difference between the Academic efficacy (AE) of male and female college students. Male and female students' Academic efficacy (AE) was not significantly different, but female students were somewhat more successful. Possibly this is owing to women's stronger predisposition for open communication and political participation, both of which are associated with more emotional and expressive outbursts. A study by Sakiz (2011) indicated no substantial difference between the

academic achievement of male and female college students, with the exception that males are better able to adjust to new environments.

Conclusion

In this study, a researcher observed a correlation between pupils' Academic efficacy (AE) and their academic achievement. It also showed that students who are self-confident and self-efficacious in their academic abilities work hard and make adjustments to achieve their educational goals. Students that are academically self-efficacious are open to new experiences, get high marks, outperform their classmates, and use their results to demonstrate their brilliance. Students who have poor self-efficacy (SE) feel that they will not be able to perform effectively or progress over time and that they will not be able to thrive in college, according to this study's results. A lack of focus on goals and mastery has resulted in low academic achievement for these students.

Twelve important dimensions of academic efficacy (AE) were studied, out of which it was also indicated that the student's study habits are foremost important to achieve better academic performance, followed by exams anxiety, relationships with teachers, relationships with peers, their powers to comprehend contents, goal-oriented learning skills, memorization, classroom or school adjustments, and time management. At the same time, the curricular activities and utilization of resources lie at last.

It was therefore concluded that the self-efficacious students believe in their own abilities, and they are more likely to use metacognitive policies with variations and resources to improve their grades. There are students that thrive on effort management when presented with dull or tough course content, such as those with self-efficacy (SE). Because they are self-motivated and able to function without aid from their classmates or teachers, these pupils tend to do well in school.

Self-efficacy (SE) seems to influence academic performance by increasing self-control and determination, whereas poor self-efficacy (SE) lowers both confidences in one's own abilities and drive to study, both of which may contribute to worse academic accomplishment (Pajares, 1999). Students' hard effort, perseverance, and ability to deal with stress were shown to have no influence on academic effectiveness, and the findings support the idea that both male and female college students may be academically effective in college and that difference in gender has no impact on a student's self-efficacy (SE).

Recommendations

For policymakers, stakeholders, educators as well as future researchers, findings from this study might be valuable. Being able to integrate learning processes such as reading, comprehension, memory, and curriculum activities, as well as time management, teacher-student relationships and relationships between peers as well as resource utilization, as well as a focus on achieving goals and making adjustments is one of the twelve dimensions of academic self-efficacy (SE) identified by Gafoor in 2012. Incorporating approaches based on these characteristics may be a way for educators to assist their pupils in increasing their self-efficacy (SE). Success and failure may be handled by students who are given the opportunity and tools to learn from successful people as role models. They can also come up with strategies for overcoming difficulties and coping with performance anxiety.

Therefore, establishing goals that are reasonably easy to achieve and letting kids experience success can help them grow and strengthen their self-efficacy (SE). Giving specific examples of how people should act in various scenarios are also likely to increase students' self-confidence in their skills and performance and help them adapt to new settings and academic problems.

Additionally, because fear and worry can quickly change accustomed behaviour, teaching students effective coping strategies can be a crucial part of raising self-efficacy (SE) and inspiration and, as a consequence, accomplishing deeper learning and performance as well as handling novel and difficult academic tasks like examinations.

Time management and self-control are additional abilities that may be taught to students. Using self-regulatory skills to persist through tough and complicated activities may be taught to students who need assistance in grasping the significance of mastering targets. Educators may stress the relevance of the subject matter and the need to make an attempt to assist students in developing their driving convictions.

Promoting both positive peer relationships and teacher-student relationships also plays a crucial role in developing self-efficacy (SE) and confidence, as well as good communication skills, so separate classes should be conducted in which teachers and students and students with each other are given a chance to understand and bond with each other, as well as promoting a culture and habit of sharing and guiding one another so performing well academically becomes easier for all the students.

As this research was limited to college students, a larger sample of students from other schools and universities, as well as from a wider range of cultural backgrounds and self-perceptions of Academic efficacy (AE) and academic achievement, would provide more robust evidence of the presence of a relationship between Academic efficacy (AE) and academic achievement.

The questionnaire can also be translated into the Urdu language, which will further expand this study, as students from the Urdu-medium education system will also be able to participate in the research.

Finally, it is also recommended to obtain the consent of students and authorities and

access academic percentages/marks from official records instead of self-reporting in order to minimize potential mistakes and further improve the study results.

References

- Aarkrog, V. (2017). Developing Schemas for Assessing Social competencies among Unskilled Young People. *International Journal for Research in Vocational Education and Training*, 4(1), 47–67. <https://doi.org/10.13152/IJRVET.4.1.3>
- Abdul Gafoor, K., & Muhammed Ashraf, P. (2012). Contextual influences on sources of academic self-efficacy (SE) : A validation with secondary school students of Kerala. *Asia Pacific Education Review*, 13(4), 607–616.
- Al-Abyadh, M. H. A., & Abdel Azeem, H. A. H. (2022). Academic Achievement: Influences of University Students' Self-Management and Perceived Self-Efficacy. *Journal of Intelligence*, 10(3). <https://doi.org/10.3390/jintelligence10030055>
- Bhati, K., Baral, R., & Meher, V. (2022). Academic Self-Efficacy and Academic Performance among Undergraduate Students in Relation to Gender and Streams of Education. *Indonesian Journal of Contemporary Education*, 4(2), 80–88. <https://doi.org/10.33122/ijoce.v4i2.3>
- Borup, J., Graham, C. R., & Davies, R. S. (2013). The Nature of Parental Interactions in an Online Charter School. *The Amer. Jrnl. of Distance Education*, 27(December), 40–55. <https://doi.org/10.1080/08923647.2013.754271>
- Caprara, G. V., Barbaranelli, C., Pastorelli, C., Bandura, A., Zimbardo, P. G., Sapienza, L., & Rome, ". (2000). Prosocial Foundations of Children's Academic Achievement. *Psychological Science*, 11, 302–306. <https://www.uky.edu/~eushe2/Bandura/Bandura2000PS.pdf>
- Chow, H. P. H. (2011). Procrastination Among Undergraduate Students: Effects of Emotional Intelligence , Efficacy. *Alberta Journal of Educational Research*, 57(2), 234–240.
- Elliott, S., & Clifford, M. (2014). *Principal assessment: Leadership behaviors known to influence schools and the learning of all students* (Document No. LS-5). September, 40. <http://cedar.education.ufl.edu/tools/literature-syntheses/>
- Ersanlı, C. Y. (2015). The Relationship between Students' Academic Self-efficacy and Language Learning Motivation: A Study of 8th Graders. *Procedia - Social and Behavioral Sciences*, 199, 472–478. <https://doi.org/10.1016/j.sbspro.2015.07.534>
- Gardner, C. (2016). Networked Learning as Experiential Learning. *Educause Review*, 51(1), 70–71. <http://er.educause.edu/articles/2016/1/networked-learning-as-experiential-learning>
- Gardner, R., & Wright, T. (2008). *What Makes A Good Lecturer? The Student Perspective*. 1–4.
- Hayat, A. A., Shateri, K., Amini, M., & Shokrpour, N. (2020). Relationships between academic self-efficacy, learning-related emotions, and metacognitive learning strategies with academic performance in medical students: A structural equation model. *BMC Medical Education*, 20(1), 1–11. <https://doi.org/10.1186/s12909-020-01995-9>
- Hosseini, S., Zangouei, A., Ramroodi, M., & Akbaribooreng, M. (2015). Relating emotional intelligence and social competence to academic performance in high school students. *International Journal of Educational and Psychological Researches*, 1(2), 75. <https://doi.org/10.4103/2395-2296.152218>
- Khanna, L., Singh, S. N., & Alam, M. (2018). Multidimensional Analysis of Psychological Factors affecting Students' Academic Performance. *Computer and Society*, 5(1), 1–16.
- Kuznekoff, J. H., Munz, S., & Titsworth, S. (2015). Mobile Phones in the Classroom: Examining the Effects of Texting, Twitter, and Message Content on Student Learning. *Communication Education*, 4523(December), 1–22.

- <https://doi.org/10.1080/03634523.2015.1038727>
- Mah, D. K., & Ifenthaler, D. (2018). Students' Perceptions Toward Academic Competencies: The Case of German First-Year Students. *Issues in Educational Research*, 28(1), 120–137.
- Mazanai, M. (2012). Impact of just-in-time (JIT) inventory system on efficiency, quality and flexibility among manufacturing sector, small and medium enterprise (SMEs) in South Africa. *African Journal of Business Management*, 6(17), 5786–5791. <https://doi.org/10.5897/AJBM12.148>
- Mehmood, T., Shaukat, M., Author, C., & Mehmood, T. (2014). *Life Satisfaction and Psychological Well-being among Young Adult Female University Students*. 2(5), 143–153.
- Nomaan, S., Hanif, R., & Rehna, T. (2016). Factors Underlying Academic Underachievement Among Pakistani Secondary School Students. *Pakistan Journal of Psychological Research*, 31(1), 311–330. <http://www.pjprnip.edu.pk/pjpr/index.php/pjpr/article/viewFile/366/383>
- Pritchard, M. E., Wilson, G. S., & Yamnitz, B. (2007). What predicts adjustment among college students? A longitudinal panel study. *Journal of American College Health*, 56(1), 15–22. <https://doi.org/10.3200/JACH.56.1.15-22>
- Pym, J., Goodman, S., & Patsika, N. (2014). Does belonging matter? Exploring the role of social connectedness as a critical factor in students. *Reading & Writing Quarterly*, 1(2), 1–3. <https://doi.org/10.1037/a0019682>
- Sancassiani, F., Pintus, E., Holte, A., Paulus, P., Moro, M. F., Cossu, G., Angermeyer, M. C., Carta, M. G., Lindert, J., Bemdt, T. J., H Aarnoudse-Moens, C. S., Smidts, D. P., Oosterlaan, J., Duivenvoorden, H. J., Weisglas-Kuperus, N., H Aarnoudse-Moens, C. S., Weisglas-Kuperus, N., Smidts, D. P., Oosterlaan, J., ... Ritchie, K. H. (2015). *The Features and Effects of Friendship in Early Adolescence*. 21–40. <https://doi.org/10.1007/s10802-009-9327-z>
- Schunk, D. H., & Pajares, F. (2002). The development of academic self-efficacy. *Development of Achievement Motivation*, 1446, 15–31. <https://doi.org/10.1016/b978-012750053-9/50003-6>
- Schunk, D., & Miller, S. (2002). *Self-efficacy and adolescents' motivation*. Information Age.
- Siddique, H. I., LaSalle-Ricci, V. H., Glass, C. R., Arnkoff, D. B., & Díaz, R. J. (2006). Worry, Optimism, and Expectations as Predictors of Anxiety and Performance in the First Year of Law School. *Cognitive Therapy and Research*, 30(5), 667–676. <https://doi.org/10.1007/s10608-006-9080-3>
- Syafii, W., & Yasin, R. M. (2013). Problem Solving Skills and Learning Achievements through Problem-Based Module in Teaching and Learning Biology in High School. *Asian Social Science*, 9(12), 220–228. <https://doi.org/10.5539/ass.v9n12p220>
- Tahira, R., Kiani, A., & Dahar, M. A. (2016). Impact of School Resources on the Academic Achievement of Students At Secondary Level in District Layyah. *SECTION B Sci.Int.(Lahore)*, 28(6), 175–179.
- Tunstall, H., Mitchell, R., Pearce, J., & Shortt, N. (2014). The general and mental health of movers to more- and less-disadvantaged socio-economic and physical environments within the UK. *Social Science and Medicine*, 118(C), 97–107. <https://doi.org/10.1016/j.socscimed.2014.07.038>
- Yeung, A. S., Craven, R. G., & Kaur, G. (2014). Influences of Mastery Goal and Perceived Competence on Educational Outcomes. *Australian Journal of Educational and Developmental Psychology*, 14(SPEC. ISS.), 117–130.
- Zimlich, S. L. (2015). Using technology in gifted and talented education classrooms: The teachers' perspective. *Journal of Information Technology Education: Innovations in Practice*, 14(1), 101–124. <https://doi.org/10.28945/2209>