

The Relationship between Optimism and Academic Achievement among University Students in Pakistan

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Abstract:

The students' academic achievement cannot be studied in isolation as optimism shares a relationship with students' academic performance. The previous studies suggested the association between optimism and academic achievement. Moreover, the males were found optimistic as compared to females. In the light of previous findings, the first hypothesis was there would be a relationship between optimism and academic achievement. Second hypothesis was males would be more optimistic than females in collectivistic culture whereas the third hypothesis was females would have high academic achievement than males. There were two hundred and ninety-six students who were randomly selected for this study and they were administered a questionnaire that was Revised Life Orientation Test (LOT-R) which aimed to measure the level of optimism and pessimism. The achievement of the students measured through their Cumulative Grade Point Average (CGPA). The males and females were significantly different across the variable academic achievement. On contrary to this, no significant difference found between both the sexes across optimism. Furthermore, no remarkable relationship reported between optimism and academic achievement. The collectivistic culture of Pakistan could be the cause behind non-significant results.

Keywords: Optimism, Collectivistic Culture, Pakistan, Academic Achievement

I. Introduction

Previously, the psychologists and psychiatrists were occupied in curing the mental diseases and weaknesses of the patients whereas the positive psychology highlighted the importance of strengths of the people (American Psychiatric Association, 2002). According to Singh and Jha (2013), optimistic thinking in every phase of life is called optimism. An optimistic person expects positive outcome than the pessimistic person. Moreover, the authors suggested there are two components of the optimism; dispositional and learned. Dispositional optimism is when the optimism is one of the person's personality traits whereas learned optimism is to become aware and understand the optimism through different strategies. This is the concept emerged from positive psychology (Pluskota, 2014; Rasmussen et al., 2009).

Optimism can be enhanced by having positive expectation about future, by becoming kind towards oneself and the educational institutes could also play role in making the students optimistic (Shapira & Mongrain, 2010). Adler (2017) explained that optimistic students have positive thinking about the future and perseverance which means they remain determined regardless of the situations. Optimism and pessimism affect the students differently as optimistic students solve their problems through healthy coping mechanisms than the pessimistic students (Singh & Jha, 2013). This was the similar findings suggested by Goleman (1995), students who are aware of their emotions and optimistic are better academic performers.

Yeager and Dweck (2014) concluded that the resilient and optimistic students do not lose their hope regardless of the situation. It has been suggested that if there is a mindset that anything can be changed then learning life with hope and optimism can be learned. Research (Cooperrider, 1990) had been conducted where students were told that they have potential and this positive mindset helped them to perform academically better. Similarly, the unhelpful thinking style can be substituted with positive cognitions.

Academic achievement is recorded by the performance of a student at his/her institute. It was contented that the female students score higher than the males (Arshad et al., 2015; Joshi & Srivastava, 2009; Twinomugisha, 2008). Both the genders' academic achievement was found similar. It was also found the female students are less confident than the males but still achieve better grades than the males (McCulloch, 2006). The performance can be measured through scores and CGPA (Cumulative Grade Point Average) (Singh & Jha, 2013). Puskar et al. (2010) found out that men have better mental health and self-esteem as compared to female which diminish their chances of suicidal ideation. El-Anzi (2005), conducted a study on college students of Kuwait to ascertain the relationship of academic achievement across optimism, self-esteem, pessimism and anxiety. He concluded that culture of Pakistan promotes more freedom for men and provide them more opportunities than their females.

According to Adler (2017), the student's academic achievement is improved by instilling optimism in them. Furthermore, optimism also ensures mental health of the students. According to Singh and Jha (2013), the optimistic students are better at coping strategies than the pessimistic ones. According to Scheier and Carver (1993), it was also suggested those students who remain optimistic show less physical complaints as compare to pessimistic students during period of exams. Furthermore, it was found males are more optimistic than the females because they possess high self-esteem which ensure their mental health and happiness (Aydin et al., 2014; Puskar et al., 2010). Cenik and Demir (2015) found males and females were not different across optimism.

Orozco et al. (2018) concluded from their research study, students who fail more than two courses are vulnerable to depression and may experience suicidal ideation. Moreover, those students also suffered from suicidal ideation because of financial issues which increased their workload along with the management of academic performance. According to another study Okechukwu et al. (2022), similar results were reported. Positive correlation was found between the academic stress and suicidal ideation and negative correlation was reported between the resilience and academic stress. Resilience is found out to be the outcome of optimism (Yeager and Dweck, 2014).

Furthermore, it is important to educate the students about optimistic mindsets and how to cope up with the hardships of life. The concept of hope, optimism and positive thinking are important to teach to students because they experience the stress due to the workload, social connections and family issues. Moreover, they also experience transitions in their lives due to hormonal changes, shift from school to college and university (Besser & Zeigler-Hill, 2014; Morton et al., 2013). It was also concluded that the stress of the students gets exaggerated because of the difficult subjects which also affect their self-esteem. Therefore, in order to get through the time, positive mindset is created (Gomez-Moliner et al., 2018; Yildirim et al., 2017).

According to Newcomb-Anjo et al. (2017), university students are vulnerable to depression because of workload, perceived stress and loss of interest. World Health Organization predicted in 2000 that depression will be major cause of suffering for both the genders in 2020 (Layous et al., 2011). Kwok and Gu (2016) reported that the symptoms of depression include loss of interest, suicidal ideation, failure to maintain relationships, loneliness and sadness. Furthermore, it was concluded that the tough times in life bring unhealthy emotions however having a positive mindset (this too shall pass) help go through the time.

Similarly, according to the report of The Nation (2021), fifteen out of twenty people end their lives every day in Pakistan. Also, this trend has been skyrocketed among students of Pakistan. 42.6% students from school, 23.5% from colleges and 22.1% from universities committed suicide from 2010-2017 (Shakil, 2019). Furthermore, Kumar (2019) reported that education for Pakistani students is doing more harm than good as several students took their lives out of the failure of examination, parental and academic pressure. Reportedly, it has become the need of an hour to inculcate optimism among university students so that they can work at the best of their potential at their academic institutions and in their life.

The chief question raises on the increased rate of students' suicidality, in spite of getting raise in the level of education, their mental health is getting deteriorated. This question was somehow answered by Demetriou and Schmitz-Sciborski (2011) as they have concluded that those students who participate in extracurricular activities and have healthy and entertaining activities to focus on other than studies perform better at the academics. Moreover, students' self-esteem (what do they think about themselves) play a great role in determining the mental health and academic performance. In addition to that, teachers play an important role in the lives of students. It was found out that, if the teachers are approachable and have good rapport with their students, they are consulted first than the mental health counselors (Fabio & Bucci, 2015, Hayat et al., 2022).

Another important variable i.e. self-esteem which will not be the part of the current study, have a positive correlation with academic achievement and optimism (El-Anzi, 2005; Puskar et al., 2010). It was reported that positive self-concept is related to better mental health and happiness and the boys are found to have high self-esteem than the girls. Its reason could be that Pakistan is a male dominant culture where women are forced to get married at earlier age whereas men have the freedom to enjoy life on their own terms.

According to Antonczyk and Salzmann (2014) the followers of individualistic culture were found more optimistic than the followers of collectivistic culture. Furthermore, it was also found those who follow individualistic culture achieve their goals and fulfill their dreams than those who belong to collectivistic culture (Heine et al., 1999). According to Smokowski et al. (2013), Japanese follow collectivistic culture, who do not much focus on their self and goals rather their goals are much more according to families or based on group. The collectivistic culture is being followed in Pakistan and the research conducted in Japanese can also relate to Pakistan.

The purpose of doing this research is to explore two important variables (optimism and academic achievement) among the students of Pakistan where collectivistic culture is followed. This is the need of hour to ascertain the relationship between optimism and academic achievement as the studies (Kumar, 2019; Shakil, 2019) reported that the students in Pakistan are battling with mental health issues because of academic pressure. Therefore, the students' optimism and academic achievement are the chief variables of the study.

A. Objectives

- To find the link between optimism and academic achievement.
- To determine the difference between both the variables across both the genders.

B. Hypotheses

According to the prior findings the hypotheses of this study are as follow

H₁: High optimism will have positive relationship with high academic achievement.

H₂: Males will be more optimistic as compared to the females.

H₃: Females will have high academic achievement than the males.

C. Method

The objective of this research is to study the association between optimism and academic achievement and also the difference of both variables across both the genders. This part subsumed the following.

D. Research Design

Considering the literature review Correlation research design was found to fit for finding the relationship between optimism and academic achievement.

E. Sample

The sample size selected for this study was based on previous studies with the same variables. Singh and Jha (2013) researched anxiety, optimism and academic achievement among three hundred and forty six private medical students. Similarly, there was another study conducted on self-esteem, hope, academic achievement and parental involvement by Aydin et al. (2014) with two hundred and ninety-seven respondents. Similarly, two hundred and ninety-six students were randomly selected from one of the private institutes of Lahore which is one of the cities of Pakistan. Out of two hundred and ninety-six there were 129 males and 167 females. Furthermore, there were 22.6% freshmen, 29.4% sophomore, 20.3% junior and 27.7% senior.

F. Sampling Technique

The sample of two hundred and ninety-six Baccalaureate students was selected through systematic random sampling. This sampling technique gives everyone equal chance to participate in the study. In this technique, the researcher chooses every X participant, and this number is based on the fraction of total size of population divided by sample size ($X = \text{population size} / \text{sample size}$). This technique works out when the population size is not determined. For that, it is important to select X participant and to sustain this procedure for the period of one week at different timings. In this way, everyone can get a chance to participate and the sampling bias is avoided (Creswell, 2014; Hayes, 2022).

For this research study, the list of the students was not accessible therefore the population for this was uncertain. As aforementioned, if population size is unknown, then any X participant is contacted to be part of the study depending on their consent. In this study, every second student was decided to contact for the study and sampling bias was avoided by collecting the data outside each building at different timings until the required sample size was acquired.

G. Demographic form

This form was administered to record demographic information which constituted of age, gender, study level (freshmen, sophomore, junior and senior), birth order (first born, middle born, last born and only) and Cumulative Grade Point Average (CGPA).

H. Revised Life Orientation Test (LOT-R)

LOT-R constitutes ten items and from the total items three record optimism and three aim to measure pessimism whereas left items act as fillers. Four options are given in front of every statement which is called a Likert Scale (Scheier et al., 1994). Cronbach alpha found to be for this measure is 0.80 (Chiesi et al., 2013).

I. Academic achievement

CGPA of the students was recorded in order to measure the variable academic achievement.

II. Procedure

This research work began from writing of research proposal under the supervision and later it was being approved from the staff of Psychology supervisors and Board of Ethics. It was followed by collecting the data from the participants. There were two hundred and ninety-six participants who were randomly selected by the researcher from the population of Baccalaureate students.

The university buildings were chosen where two hours for two days were spent outside each building and got the questionnaires filled. Outside each building the researcher offered every second student to participate in the study. Those who had time and wanted to take part in the study were being explained about the study. The respondents were informed about their right of withdrawal from the study. Furthermore, the participants were assured that their filled questionnaires will be kept confidential and anonymous. The forms were made anonymous by giving numbers to them and neither the names nor the roll numbers were being mentioned. There were two questionnaires that

were administered to the participants named as demographic form and Revised Life Orientation Test (LOT-R).

Once the data was gathered after two hours each day outside the selected building the forms were kept in the office of the supervisor. In this way the forms were remain protected and confidential. The forms were given a bird's eye view to have the complete form filled, in case of missing information the participant was contacted again. On their unavailability, the forms with missed information was discarded. The gathering of the data was followed by entering the data in the SPSS version 22 for analyzing it.

A. Ethical Consideration

While doing the research study ethical consideration was ensured. The participants were informed about their rights related to the research. They have the complete right to withdraw from the study anytime. In order to assure ethical consideration, the data was kept confidential and was protected under the supervision of the supervisor. Furthermore, the collected data was kept anonymous as there was no name or roll number was being mentioned by the respondent. If the participant did not have time and left the form in the middle of their attempt, they were thanked for their participation as they had the right to withdraw anytime from the research. Those students who had person concerns for not revealing their CGPA was completely respected to refuse to participate in the study anytime for any reason.

B. Statistical Analyses

The collected data was entered in SPSS version 22. This aimed to find descriptive and inferential statistics. Pearson Product Moment Correlation was used to explore the link between optimism and academic achievement. Similarly, another analysis called t-test was run to find the difference between males and females across optimism and academic achievement.

III. Results

This research study had two main variables which were optimism and academic achievement. The previous studies suggested the association between optimism and academic achievement whereas males were contented as more optimistic than females. On contrary to this, the females ace the academic career than the males. This section included the descriptive and inferential statistics.

Table 1: Gender, level of education and birth order are the characteristics of sample given in the table below

Variables	f	%
Gender		
Male	129	43.6
Female	167	56.4
Birth order		
First	94	22.6
Middle	117	29.4
Last	82	20.3
Only	3	27.7
Education		
Freshman	67	22.6
Sophomore	87	29.4
Junior	60	20.3
Senior	82	27.7

Total	296	100
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The above demographics depicts that out of two hundred and ninety-six participants there were more females (56.4%) as compare to males (43.6%) and the middle born (29.4%) are more than the other birth order. Similarly, there are more sophomores (29.4%) than the others (freshmen (22.6%), junior (20.3%) and senior (27.7)).

Table 2: Characteristics of continuous variables (age and CGPA) are given in the following table

Variables	M	SD
Age	20.7375	1.89986
CGPA	3.1560	0.49429

The mean and standard deviation of age of two hundred and ninety six respondents were 20.375 and 1.89986 whereas the mean and standard deviation of CGPA were 3.1560.

Table 3: The reliability analysis of Revised Life Orientation Test (LOT-R) is given in the following table

Scales	Number of Items	α
LOT-R	10	.63

Cronbach alpha of LOT-R found out to be 0.63

Table 4: The difference between optimism and academic achievement across genders analyzed using t-test.

Variables	Groups	M	SD	t	p	95% Confidence interval of the difference	
						Lower	Upper
Optimism	Male	23.697	6.022	1.716	.087	-.16281	2.3845
	Female	22.586	5.100				
Academic achievement	Male	3.054	6.022	-3.086	.002	-.29461	-.06505
	Female	3.234	5.100				

** $p < 0.05$

The above table depicted that the males and females were not different across optimism whereas the difference found on basis of academic achievement across both genders is significant. The difference between the means of both the groups (males and females) across academic achievement is very minimal which is reflected as the effect size. This small effect size showed that the difference between the genders across academic achievement is negligibly significant.

Table 5: The association between optimism and academic achievement was revealed through Pearson Product Moment Correlation

Variables	Optimism	Academic achievement
Optimism	---	.072
Academic achievement	.072	---

** $p < 0.01$

The above table depicted non significant relationship between optimism and academic achievement.

A. Summary of Results

The results of this study were given through descriptive and inferential statistics. From the descriptive statistics it was found that there were 43.6% males and 56.4% females and the respondents were more sophomores (29.4%) and middle born (29.4%). Mostly, the students were of the age 20 with the CGPA of 3.1. Furthermore, the inferential statistics revealed that there was no significant relationship found between optimism and academic achievement and this was analyzed through Pearson Product Moment Correlation. In order to find the difference between genders across the variables; optimism and academic achievement, independent samples t-test was conducted. The results showed the significant difference between males and females across academic achievement. Whereas there was no significant difference found across gender on basis of optimism.

IV. Discussion

The first and foremost aim of conducting this research was to study the relationship between optimism and academic achievement among university students. There is a plethora of studies (Kumar, 2019; Shakil, 2019) about optimism and academic achievement which suggested that optimism is the key to mental and physical fitness. Furthermore, it was also explained high optimism has positive relationship with academic achievement (Gomez-Molinero et al., 2018). Those students who are optimistic perform much better in studies than the pessimistic (Adler 2017; Scheier & Carver, 1993). But those studies were conducted in other part of the world.

The researcher aimed to conduct the study specifically in Pakistan which follows the collectivistic culture. The culture does play a significant role in defining the variables such as optimism. Through the study, it was found followers of individualistic culture are more optimistic than the other. Furthermore, those who belong to individualistic culture are optimistic in fulfilling their dreams and achieve their goals (Heine et al., 1999). Therefore, optimism and academic achievement was to be explored among the Pakistani students. According to Puskar et al. (2010) gender difference was found on basis of optimism. It was found females maintain to achieve high grades than the males albeit they are less confident (Arshad, et al., 2015).

In order to conduct the research, the researcher prepared the research proposal which was based on the previous findings regarding the main variables (optimism and academic achievement). Once the research proposal was prepared it was presented to the faculty of Psychology. Later, it was presented to Board of Studies and IRB for Ethical consideration. Once it was approved the research was begun by collecting the data.

The data was collected from one of the private universities of Pakistan where different buildings were decided by the researcher. Each building was specified for two days where data was collected for two hours for the selected days. Every second student was selected for the study and this was called random sampling technique. Through this method two hundred and ninety-six students were selected. They were asked to participate in the study. Those who agreed to take part in the study were given details about the study. The participants were ensured their physical and mental safety. Furthermore, they were informed they could leave the study anytime.

Once, the ethical considerations were made sure, Life Orientation Test-Revised (LOT-R) was administered on the participants and they were instructed neither to mention their name or roll numbers and their data was kept anonymous and confidential. The collected data was entered in the SPSS version 22 and analyzed the results.

The descriptive statistics highlighted that there were one hundred and sixty-seven females and one hundred and twenty-nine males who participated in the study. The participants were mostly middle born and first born and they were one hundred and seventeen and ninety-four respectively. Moreover, the participants were in the Sophomore (87 students) and senior year (82 students). The students were mostly twenty years old with a CGPA of 3.1. Furthermore, Cronbach alpha of the administered instrument (LOT-R) turned out significant which reflected that the items of the scale were relevant to each other.

The inferential statistics was conducted in which Pearson Product Correlation and Independent Samples t-test were done to study the variables across the sample. The non-significant relationship was found between optimism and academic achievement. One of its reason could be that Antonczyk and Salzmann (2017) concluded individualistic culture is more optimistic than the collectivistic culture. As Pakistan follows collectivistic culture therefore the results from the current study turned different from the previously done studies. In addition to that, LOT-R was administered on the participants to measure one of the variables i.e. optimism. As these tools are standardized on the western world, therefore the results turned out different.

Furthermore, significant difference was found between males and females across the other variable of the study i.e. achievement. The previous studies concluded that the females perform better at academics than the males in spite of low self-esteem and less freedom (Abdul-Khalik & Lester, 2017). This part of result is congruent with the previous literature. The reason could be that Pakistan is a developing country where children are more directed towards studies therefore the results turned out significant. The girls remain in home as the culture of Pakistan does prefer girls to stay outside of home or to be back home before evening (Aydin et al., 2014).

V. Conclusion

No significant results found neither regarding the relationship between optimism and academic achievement nor between genders on the basis of optimism. Furthermore, the hypothesis was supported regarding the difference between the genders on basis of academic achievement.

VI. Implications

- The teachers can play their role by arranging the sessions/talks with their students on different topics to optimize the mental health.
- The teachers can have keen observation as the student's health and academic performance deteriorate. They can be further referred for counseling.
- Sometimes, mental health issues remain untold that take a toll further on students' health and they become suicidal because of burden of number of worries in their life. Therefore, institutes can also contribute their role to favor

their students by giving them petitions related to the units of subjects (quiz, mid-term, presentation or final term) pertaining to their mental health issues.

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