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INFLUENCE OF RESEARCH ATTITUDE ON STUDENTS' ACADEMIC ACHIEVEMENT: A CROSS-SECTIONAL APPROACH

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Abstract

The existing study aimed to scrutinize the impact of research attitude on students' academic achievement. The researcher delineated measures of the research attitude and academic achievement of health and physical education students enrolled in research, the relationship between research attitude and academic achievement of health and physical education students enrolled in research and analyzed the effects of research attitude upon academic achievement of health and physical education students enrolled in research. The study focused on the population of both private and public sector universities in KP, Pakistan. The sample comprised male and female students in the field of physical education who were actively involved in research activities. Data collection utilized an adapted version of the Attitude towards Research (ATR) instrument. A cross-sectional approach was employed for data gathering, and the researcher applied inferential statistics for data analysis. The findings revealed a negative correlation between research attitude and academic achievement. Moreover, the study uncovered adverse effects of research attitude on the academic success of health and physical education students enrolled in research programs.

Keywords: Research; Attitude; Students; Academic Achievements.

Introduction

In this advanced era, research plays a crucial role in our daily lives, helping us retain and refresh memories, improve decision-making skills, and enhance problem-solving abilities (Al-Mutawah, 2015). It has become a vital intellectual asset for those considering lifestyle changes to meet evolving societal needs. In this fast-paced era, research shapes our environment and influences new experiences (Alqahtani, 2019). The majority of studies indicate a positive correlation between a person's

attitude towards an academic subject and their academic performance. However, some argue that attitudes may not accurately reflect academic abilities, raising questions about the claim that attitude strongly predicts academic success (Furaikh & Ganapathy, 2017).

Research is a formal process for revising and validating existing thoughts and ideas (Bravo-Oviedo et al., 2014). It stands as a fundamental tool for societal and educational development, contributing to an improved quality of life (Koneru, 2017). In the contemporary landscape, research has dynamically transformed the world, influencing the lifestyle of individuals across various domains (Gazi, 2009). Notably, it continually uncovers new facts, factors, ideas, thoughts, targets, and goals, particularly in education, science, and technology (Niehaus, 2015). As a fundamental catalyst for change, research enhances the overall quality of life (Costanza et al., 2007), leading to ongoing discoveries and advancements (Richards et al., 2013). Education plays a crucial role in shaping individual behavior. Within educational institutions, the exploration of past theories and developments assists researchers in addressing existing gaps and unexplored areas. Moreover, completion of research work is a prerequisite for students to obtain their degrees in educational institutions (Idris et al., 2012).

A research study conducted in Pakistan among junior faculty in the medical profession revealed that while the majority of students perceived research as a challenging endeavor, their attitude toward it remained notably positive (Scott et al., 2020). Conversely, undergraduate students displayed a negative attitude towards research (Ryan, 2016). Another study on fourth-year medical students indicated a positive perception that research contributes to academic career development and instills a sense of research in students (Bar-Tal & Hameiri, 2020). In contrast, undergraduate students found research to be difficult and challenging, leading to their avoidance of research activities (Butt & Shams, 2020). Postgraduate students, however, demonstrated a positive and serious approach to research, recognizing its value in both academic and practical aspects (Ross & Burrell, 2019).

The research also highlighted differences in attitudes between students in evening and morning programs, with evening program students exhibiting a more positive and enthusiastic stance towards research (Furaikh & Ganapathy, 2017). Additionally,

a distinction was noted in the attitudes of arts and premedical students, with premedical students expressing a positive outlook and perceiving research as vital for both academic and practical aspects (Oguan et al., 2014). Gender differences were evident, with female students displaying a more negative attitude compared to their male counterparts at the secondary level. Male students were found to be more interested and significantly positive towards research (Maqsood et al., 2019).

Examining the attitudes, perceptions, and practices of pre-medical and medical students toward research, it was concluded that the majority acknowledged the importance of research in the medical field. Despite this recognition, students face various challenges, including lack of training, professional supervision, time constraints, and a critical issue of insufficient funding, although they believe that research is a crucial element in their academic pursuits (Bartfay et al., 2010). In contrast, social work students demonstrated less research interest, considering it a tough and challenging subject within the discipline of education (Lamprecht, 2016).

The investigation revealed a notable contrast in the attitudes towards research between students enrolled in evening and morning programs, with those in the evening program exhibiting a more positive and significant outlook. The evening program students demonstrated increased interest and a heightened level of enthusiasm in engaging with research activities (Yaraya et al., 2018).

Conversely, a pessimistic attitude was identified among art students, while premedical students displayed a positive inclination toward research. Premedical students recognized the substantial role of research in both their academic and practical lives, emphasizing its importance (Tufan et al., 2015).

Furthermore, challenges such as inadequate funding, a lack of training, gaudiness in professional training, and limited experience in educational and scientific activities contributed to the development of a negative attitude toward research among students (Oguan et al., 2014). Additionally, the absence of proper maintenance of records and documentation emerged as a factor influencing a negative attitude toward research.

Objectives

1. To measure the research attitude and academic achievement of health and physical education students enrolled in research.

2. To find out the relationship between research attitude and academic achievement of health and physical education students enrolled in research.
3. To analyze the effects of research attitude on academic achievement of health and physical education students enrolled in research.

Materials and Methods

The researcher followed a descriptive research design to gather necessary information and applied a cross-sectional survey method, collecting data from students within a single time frame. The focus was on students in the Health and Physical Education Departments of both Public and Private Sector Universities in Khyber Pakhtunkhwa, Pakistan, encompassing five Public Sector Universities and one Private Sector University, the strength of students in these universities is limited, every student will be included in the survey therefore all the male and female students of physical education students who are in rolled-in research were the population and sample of the study. A total of 188th subjects were chosen through a random sampling technique already participating in various research programs (BS 8th semester, M.Sc. 4th semester/ M.Phil. 3rd semester). For the collection of data, the researcher utilized an adapted version of the Attitudes Toward Research (ATR) scale, originally conceptualized by Papanastasiou in 2005. The assessment of students' attitudes toward research was conducted using the ATR scale, while the evaluation of academic performance took the form of research scores, students' scores were divided into four stratified according to their level of grading (60%, 70%, 80%, and 90 %) and statistical tests such as ANOVA, Pearson correlation, and regression were used for analysis. ANOVA is used to compare means among statistically significant differences in attitudes toward research or academic performance among students in different grading categories (60%, 70%, 80%, and 90%). establish Pearson correlations and explore potential predictive relationships between students' attitudes toward research and their academic performance. and regression analysis to measure the impact of students' attitudes on their academic performance.

Results

Table 1. ANOVA Results - the overall attitude of health and physical education students

Testing Variable	Research Grading	N	$\bar{X}$	std	df	F	Sig.
The overall attitude of health and physical education students toward research	60 %	48	4.4150	.32719	(3, 184)	0.343	.497
	70 %	101	4.3853	.28844			
	80 %	30	4.4368	.31110			
	90 %	9	4.4888	.3879			

a = .05, M = Mean and SD = Standard deviation

The One-way ANOVA aimed to understand health and physical education students' general feelings about research. Students were grouped by grades (60%, 70%, 80%, and 90%). The analysis showed a p-value of 0.497, indicating no statistically significant difference in attitude scores between different research grading levels.

Table 2. Relationship between research attitude and academic achievement, anxiety levels, and academic achievement.

		Academic Achievement
Research Attitudes	Pearson-Correlation	-.746**
	(2-tailed)	0.004
	N	188

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

The table illustrates a detrimental correlation between research attitude and both academic achievement and anxiety levels. The data strongly supports a negative association between research attitudes and academic achievement (r = -.746) at a statistically significant level (P = .004 < .01).

Table 3. Regression Model

Model	R	R^2	Adjusted R^2	F	Sig.
1	-.798[a]	.636	.635	297.145	**.000**

α = 0.05

Table 4. Coefficients

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.014	.097		101.458	.000
Research Attitude	.067	.088	-.746	127.754	.004

a. Dependent Variable: Academic Achievement

The regression model revealed that research attitudes accounted for about 79.8% of the negative change in academic achievement. The negative standardized coefficient beta value (β = -.746) suggested that as research attitudes decrease, academic achievement tends to decrease. Additionally, for every one-unit increase in research attitudes, there was an estimated increase of .088 in academic achievement. The significance level of P=.004 (lower than .01) suggested a strong relationship between research attitudes and academic achievement.

Discussion

In this section, the researcher conducts a comparative analysis between the observed results and findings from previous research. The aim is to ascertain whether the outcomes of the present study are supported or contradicted by the earlier research.

In this area, the researcher undertakes a comparative analysis of the observed outcomes with prior research findings, aiming to tell the difference whether the previous results and findings support or reject the present study. The primary focus of the preceding research was to explore the influence of research attitude and anxiety on the academic achievement of students. The study encompassed both private and public sector universities in KP, Pakistan, with the sample comprising male and female students in the field of physical education who were actively participating in the research.

For data collection, an adapted version of the ATR (Attitude towards Research) instrument was employed. After the data analysis, the researcher determined that there were no significant differences in the overall attitude of health and physical education students toward research. Therefore, it is asserted that there are no mean differences concerning the overall attitude of these students toward research. A parallel investigation by Aziz et al. (2021) also reported a similar level of research attitude between female and male university students.

In contrast, the findings of Ramsay, Wicking, and Yates (2020) diverged from the empirical results, indicating that male students exhibited a more positive attitude towards research compared to their female counterparts. The collected data also revealed a negative correlation between research attitude and academic achievement, as well as anxiety levels and academic performance. This aligns with the study conducted by Ramsay, Wicking, and Yates (2020), who observed a negative impact of students' negative attitudes toward research and

research anxiety on their academic achievements.

Further supporting evidence is drawn from the research by Ary, Jacobs, Sorensen, and Walker (2013), which identified a negative correlation between research attitude, arousal, and academic performance. The study emphasized the adverse effects of research attitude and anxiety levels on the academic achievements of health and physical education students involved in research. This conclusion resonates with Baş's (2011) findings, indicating a detrimental impact of research anxiety and research attitude on academic performance. Additionally, Vitasari et al. (2010) reinforced these findings, highlighting the negative effects of high anxiety levels and research attitudes on both academic achievement and the social life of students.

Conclusion

The findings from the data analysis present a clear picture that the students in health and physical education male-female programs mostly feel the same about research, and there are not big differences in their views, students are not too excited about research, and their grades tend to go down. A lot of students do not like research, and this might be making it harder for them to do well in research-related tasks First, there were no significant differences in the overall attitude of health and physical education students towards research. This suggests uniformity in their perspectives across distinct levels.

Additionally, a negative correlation between research attitude and academic achievement was observed. It was evident that as student's attitudes toward research declined, their academic performance. Furthermore, a prevalent negative attitude towards research was noticed among health and physical education students, indicating a detrimental impact on their academic performance in research-related activities.

Recommendations

Based on the findings and conclusion of the students' negative attitude towards research, the researcher recommended that research teachers and research supervisors take steps to change students' perceptions. Encouraging participation in research seminars and conferences can help develop a positive attitude. Create interesting and fun activities to make research enjoyable for health and physical education students. Provide extra support programs for those struggling with research, like tutoring or study groups. Integrate research tasks more closely with regular class lessons to make them feel more relevant. Implement stress management programs to address anxiety

levels. Regularly Educational institutions should provide support throughout the research process, offering opportunities for students to engage in research activities during their courses to become familiar with the research process.

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