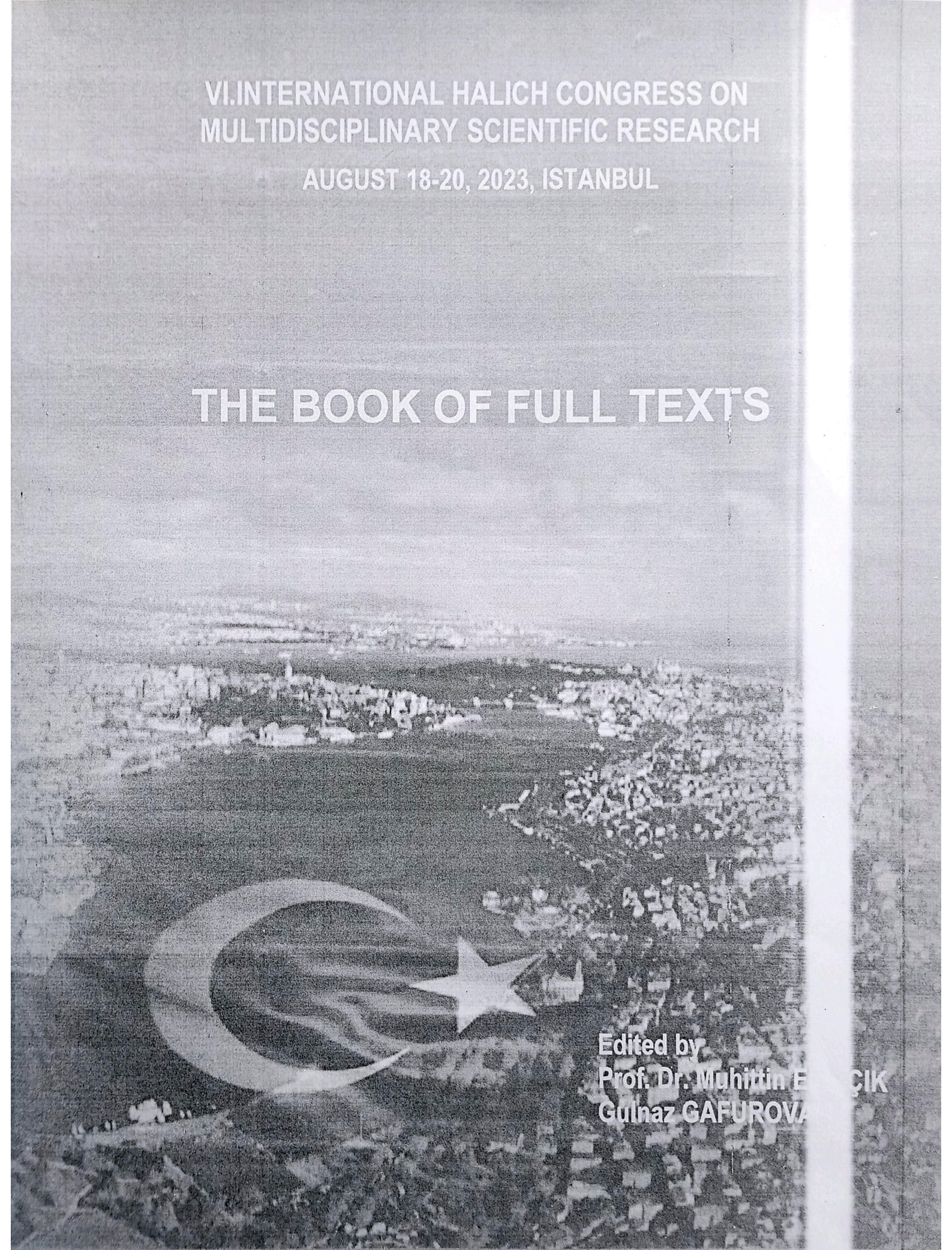
VI.INTERNATIONAL HALICH CONGRESS ON MULTIDISCIPLINARY SCIENTIFIC RESEARCH

AUGUST 18-20, 2023, ISTANBUL

THE BOOK OF FULL TEXTS



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VI. INTERNATIONAL HALICH CONGRESS ON MULTIDISCIPLINARY SCIENTIFIC RESEARCH

CONTENTS

PERCEPTION OF PEER-TUTORING PEDAGOGICAL APPROACH AMONG UNDERGRADUATE STUDENTS OF FEDERAL UNIVERSITY OF TECHNOLOG MINNA

[1]Bello, R. M. (PhD); [2]Shuaeeb, A. I.; [3]Ndatsu, A.; [4]Bala, A. U. & Koroka, M. U. S. (Ph
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Nigeria

ABSTRACT

This study investigated the Perception of a Peer-Tutoring Pedagogical Approach Am Undergraduate Students of the Federal University of Technology, Minna. Nine schools w used in selected from the Federal University of Technology, Minna was used as the populat of the study. Descriptive survey research was employed, and Undergraduate Students of Federal University of Technology, Minna, were used as the research samples. Four resea questions guided the study, and a 20-item questionnaire was used as an instrument for d collection. The questionnaire was validated by the project supervisors and test and measurem experts. The pilot study was carried out, and reliability coefficients of 0.89 were obtained the questionnaire. Data collected from the administration of the research instruments w analyzed using descriptive statistics of Mean (X) and Standard Deviation (SD). A decision r was set, in which a mean score of 4.0 and above was considered Agreed or Aware while a m score below 3.0 was considered Disagreed or unperceived. Findings revealed t Undergraduates Students Perception of the Peer-tutoring Pedagogical Approach (PTPA) unperceived by the respondents. Based on the results, it was recommended that Science stude keep improving in their pedagogical approach to help them take an interest in learning abstra topics and improve in their science subjects.

1.0 INTRODUCTION

Peer-tutoring is "a system of instruction in which learners help each other and learn fr themselves by teaching" (Goodlad & Hirst, 2016). Key to this definition is the word 'pe meaning someone with the same or nearly equal status as the person being tutored, who. such, is not a professional instructor. Peer-tutoring has played an essential part in education a has probably existed in some incarnation since the beginning of civilization. But the fi recorded use of an organized, systematic peer tutorial learning project in the Western Wo didn't come about until the late 1700s. Arising from school budget woes in the late 18th a early 19th centuries, Peer-tutoring became an effective way of giving underprivileged (at t time, sadly the only male) children a reasonable shot at an education. The first systema approach to Peer-tutoring is credited to Andrew Bell, the superintendent of the Military M Asylum at Egmore in England. Peer-tutoring in the United States has long been used in college setting, dating back to 1640, when the first paid student tutor was hired by Harv University "to counsel and befriend the younger lads" (Dwyer, 1989, in Mann, 2014). In t 1960s, with the resurgence of educational innovation in the United States, Peer-tutoring gai great popularity at all levels of schooling. More recently, educators have begun to experim with different types of Peer-tutoring, looking to fit the method to their student's specific ne and abilities.

Today, with increasing college and university enrollment, graduate and undergraduate stud paraprofessionals have become an integral feature of the educational structure, serving in ma different capacities: teaching assistants, subject-matter tutors, lab assistants, small-gr discussion leaders, counsellors, and in some cases, primary instructors for introductory-le courses. Hott (2017), defined Peer-tutoring as a flexible, peer-mediated strategy that invol

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students serving as academic tutors and tutees. Typically, a higher-performing student is pai with a lower performing student to review critical academic or behavioural concepts. Th Peer-tutoring refers to an instructional method that uses pairings of high-performing stude to tutor lower-performing students in a class-wide setting or a common venue outside of sch under the supervision of a teacher.

Peer-teaching or Peer-tutoring, is an instrumental strategy in which advanced students, or th in later years, take on a limited instructional role. It often requires some form of credit payment for the person acting as the teacher. Peer-teaching is a well-established practice many universities. Peer-tutoring is an instructional strategy that consists of student partnershi linking high achieving students with lower achieving students or those with compara achievement, for structured reading and math study sessions. Thus, Peer-tutoring is "systematic, peer-mediated teaching strategy". According to Scruggs *et al.,* (2017), Pe tutoring is the instructional strategy where students are trained to work in pairs with th partners to improve their overall knowledge. They learn to use tutoring materials, take turns the tutor and the tutee, ask the questions appropriately, and positively deliver feedback. In Pe tutoring, students practice content information in tutoring pairs rather than whole-class learni This significant structural difference allows for considerable flexibility in individual p instruction (Scruggs *et al.,* 2017). Peer-tutoring will enable students to proceed with the cont material at their own pace. It also provides separate time for the individual mastery of ea student in the tutoring pair. For example, suppose one student has mastered the topic faster th the other. In that case, that individual could stay in the role of tutor for a more extended peri until the tutee develops a better understanding of the material.

Peer learning is a broad learning strategy. It covers a wide range of activities through wh people learn through different approaches. These activities ranged from a traditional proc model in schools to the more innovative learning groups in colleges and universities. In proctor model, the senior students act as tutors and junior students as tutees. On the other ha in creative learning groups, students of the same age group or level help each other by formi partnerships. Other models include discussions, seminars, private study groups, counselli peer-assessment schemes, collaborative project or laboratory work, workplace mentoring, a community activities (Topping, 2015). Through this approach (model), the students le significantly by elaborating their views to others. They also participate in such kinds activities in which they can learn from their peers (Streitwieser & Light, 2018). Peer learni enables the students to develop their skills to organize and plan learning activities, collabor with others, give and receive feedback about their work, and evaluate their learning. Nowada the importance of peer learning is increasing, and it has become part of many courses in a wi range of contexts and disciplines in many countries of the world (Topping, 2015).

1.1 Statement of the Problem

The efficacy of Peer-tutoring as a platform for providing personal and academic support amo students is continuously being challenged by factors such as declining faculty-to-student rat and students' under-preparedness. This study intends to examine the various adopted Pe tutoring approaches as an instructional strategy among undergraduate students in the Fede University of Technology Minna. The findings from previous research highlighted the delic imbalance between the obvious benefits and the unintended consequences of vari approaches used during peer to Peer-tutoring. The apparent benefits of Peer-tutoring includ opportunities for synergistic peer learning, healthy competition among students, and se directed learning. However, the benefits of Peer-tutoring are negated by factors such as a l level of trust among peers, anxiety over year marks, time constraints, and discomfort due perceived incompetency compared to their peers. Finally, the finding from the present stu tends to provide opportunities for iterative model and design (approach) and continuo improvement.

1.2 Objective of the Study

This study aims to survey the influence of undergraduate students' peer-tutoring pedagog approach in the federal university of Technology Minna. Specifically, the study sought to:

1. Determine the type of perception undergraduate students have toward Peer-tuto Pedagogical Approach (PTPA).
2. Determine whether gender has an influence on Peer-tutoring Pedagogical Appro (PTPA) among undergraduate students.
3. Determine whether academic level influence the perception of Peer-tuto Pedagogical Approach (PTPA) among undergraduate students.
4. Determine whether the place of residence influence the perception of the Peer-tuto Pedagogical approach (PTPA) among undergraduate students.

1.3 Research Questions

1. What type of perception do undergraduate students have on Peer-tutoring Pedagog Approach (PTPA)?
2. Does gender influence the perception of Peer-tutoring Pedagogical Approach (PT among undergraduate students?
3. Does Academic level influence the perception of Peer-tutoring Pedagogical Appro (PTPA) among undergraduate students?
4. Does place of residence influence the perception of Peer-tutoring Pedagogical Appro (PTPA)?

1.4 Significance of the Study

The study would be significant in the following ways:

1. The Peer-tutoring findings will help the students interact with their fellow peer gro and clarify their doubts. They will be placed in a more comfortable zone. The stud can share their ideas, and creativity can also be induced through the Peer-tuto method.
2. Peer-tutoring research will help the teachers establish new teaching strategy, i.e. it add to teachers teaching skills.
3. Due to the complexity of factors affecting students learning in any given set-up, synergistic benefits of Peer-tutoring discover from this research will clear off so factors such as negative perceptions and preferences towards the Peer-tutoring meth low level of trust among peers, anxiety over year marks, time constraints and discom due to perceived incompetency when compared to their peers.

2.0 METHODOLOGY

This study employed a descriptive survey design and the target population of the study fo the undergraduate students of Federal University of Technology, Minna comprising 900 m and female. The sample is a smaller group of subjects obtained from the accessible popula which measures the sample size of 10% of the target population (Mugenda 2013). Using above formula to determine the sample size for the 900 respondents, random sampl technique was used to select 18 respondents from each school, making a total of 90 stud plus five staff in charge of guidance and counselling, making a total of 95 responde Questionnaire entitled to Students' Perception of Peer-tutoring Pedagogical Appro Questionnaires (SPOPTPAQ) was used to obtain two different types of information: the f part began with demographic information, all students completed the second part which con a student perception of the Peer-tutoring Approach which 20 items were contained in questionnaire, and the third part was completed by teachers in charge of guidance counselling only.

The instrument was validated by experts from the department of Science Education Educational Technology in Federal University of Technology Minna. The reliability efficient of 0.89 was obtained using Cronbach Alpha which indicates that the instrumen

reliable for the study. The data collected was analyzed using mean (X) and standard deviat (SD) and the decision rule regarding disagreeing and agreeing of an item was based on a m range of 0 - 3.99 as disagree and mean range of 4.0 - 7.0 as agree. Furthermore, a descrip chart (bar, histogram and scatter plots) was also used to describe the result. The data anal was done using a Statistical Package for Social Science (SPSS) version 23.0.

3.0 RESULTS AND DISCUSSION

3.1 Research Questions

RQ1: What type of perception do undergraduate students have on Peer Pedagogical Appro (PTPA)??

Table 3.1: Mean score difference in Undergraduates Students Perception of Peer-tutor Pedagogical Approach (PTPA).

S/N	STATEMENTS	VU	UT	SWU	N	PT	TR	VT	MEAN(X)	SD
1	Peer-tutoring or tutorials is also a suitable method of teaching	79	47	18	13	17	8	17	2.67	1.9
2	I understand more when learning with my peers	71	61	21	12	13	8	13	2.55	1.8
3	I ask questions and interact more with my peers during tutorials	85	44	16	13	17	10	14	2.59	1.9
4	Peer-tutoring has helped me improve a lot in the school	79	65	22	12	9	5	7	2.25	1.5
5	Peer-tutoring is suitable, but I hardly participate because it exposes me to bad influence amongst the students	28	29	26	28	12	31	45	4.21	2.1
	GRAND MEAN								2.85	

Decision Mean = 4.00

Table 3.1. Shows the Mean score difference in Undergraduates Students Perception of Pe tutoring Pedagogical Approach (PTPA). The Table reveals that the grand mean score responses to the five items was 2.85, which was greater more minor than the decision m score of 4.00. This implies that Undergraduates Students in Minna do not perceive Peer-tutor Pedagogical Approach (PTPA).

RQ2: Does gender influence the perception of Peer-tutoring Pedagogical Approach (PTI among undergraduate students?

Table 3.2: Mean response of gender on the perception of Peer-tutoring am undergraduate students

S/N	Gender	N	Mean ($\bar{X}$)	SD	Mean Difference
1	Male	84	20.75	5.805	0.235
2	Female	115	21.08	6.040	

Table 3.2: shows the mean response of gender on the perception of Peer-tutoring am undergraduate students. The result indicated a difference in the mean response of mean female with a mean score of 20.75 and standard deviation of 5.805 for males and mean sc of 21.08 with a standard deviation of 6.040 for females.

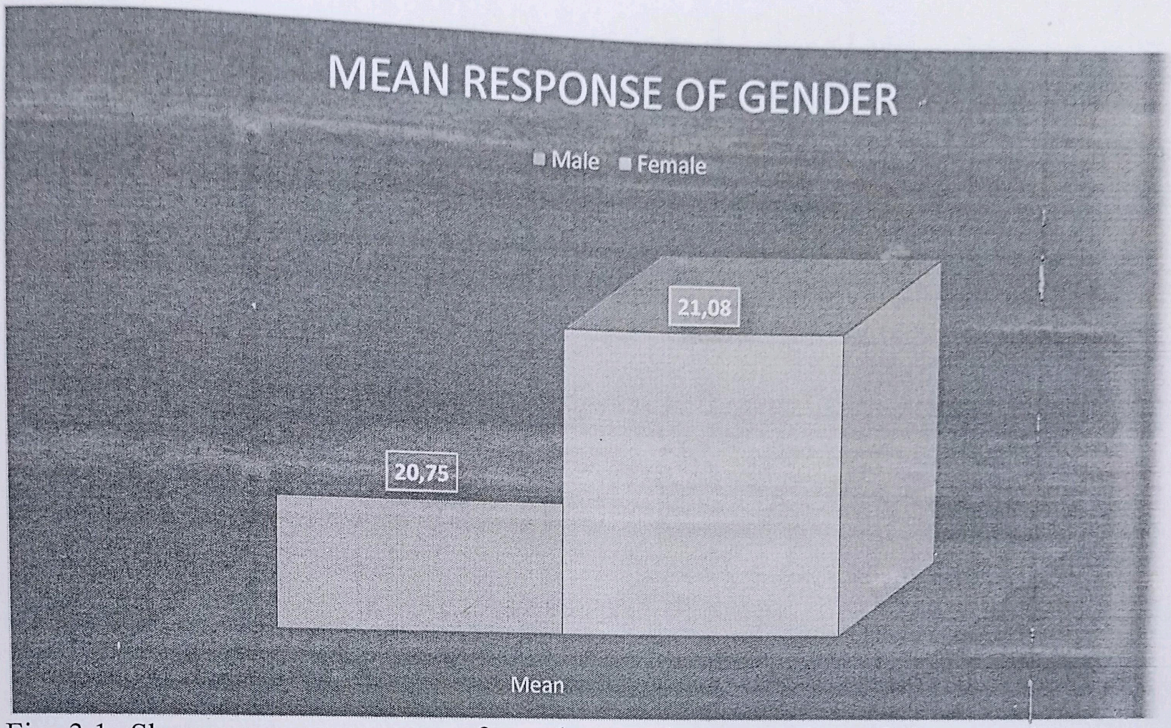

Fig 3.1 Shows mean response of gender on the perception of Peer-tutoring amon undergraduate students

RQ3: Does academic level influence Tutoring Pedagogical Approach (PTPA) percept among undergraduate students?

Table 3.3: Mean academic level influence the perception of Tutoring Pedagogi Approach (PTPA) among undergraduate students

S/N	Academic Level	N	Mean ($\bar{X}$)	SD
1	100	24	19.75	5.855
2	200	24	16.96	4.582
3	300	46	17.30	6.186
4	400	13	18.15	6.568
5	500	92	17.84	6.595

Table 3.3: shows the academic level that influences the Tutoring Pedagogical Approach (PTP perception among undergraduate students. The result shows mean of 100, 200, 300, 400 a 500 levels to be 19.75, 16.96, 17.30, 18.15 and 17.84 respectively, with 100 level having highest mean response and 200 level with the lowest mean answers.

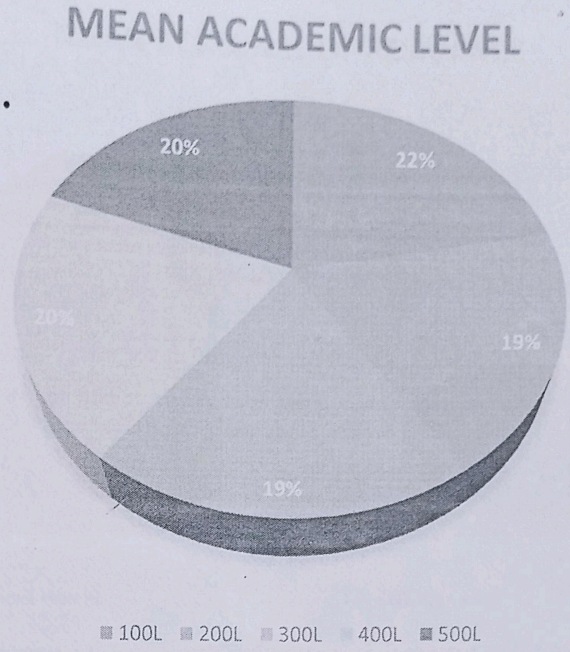

Fig 3.2: Shows mean response of academic level influence of Peer-tutoring amon undergraduate students

RQ4: Does place of residence influence the perception of Peer-tutoring Pedagogical Appro (PTPA)

Table 3.4: Mean response of residence influence the perception of Peer-tutor Pedagogical Approach (PTPA)

S/N	Residence	N	Mean ($\bar{X}$)	SD	Mean Difference
1	School Hostel	56	16.66	6.150	0.34
2	Off-Campus	143	16.32	7.107	

Table 3.4: shows the mean response of residence influence the perception of Peer-tutor Pedagogical Approach (PTPA). The result indicated a difference in the mean response students leaving in the School Hostel and students staying Off-Campus with a mean score 16.66 and standard deviation of 6.150 for School Hostel and mean score of 16.32 wit standard deviation of 7.107 for Off-Campus students.

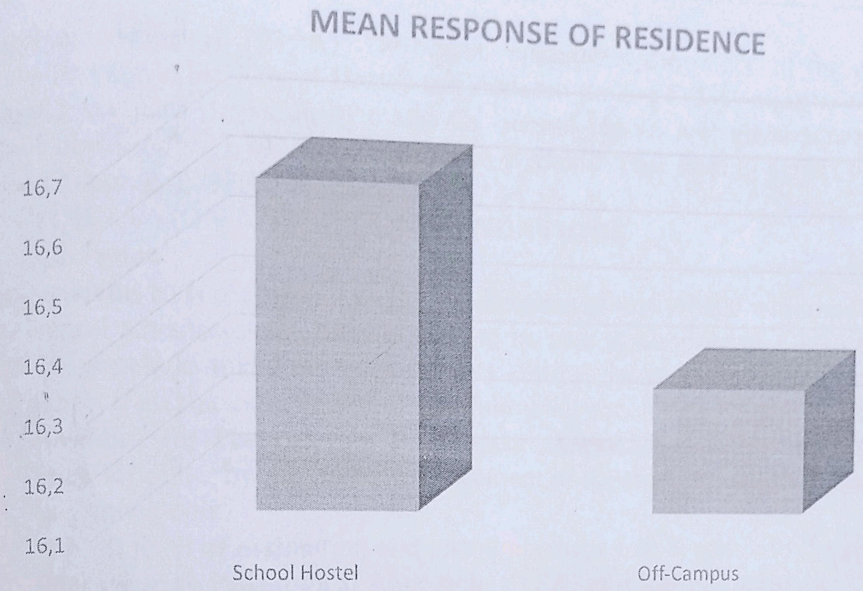

Fig 3.3: Shows mean response of residence influence of Peer-tutoring among undergradua students

3.3 Summary of Findings

Findings that originated from this study revealed that:

1. Undergraduates Students Perception of Peer-tutoring Pedagogical Approach (PTPA unperceived by the respondents.
2. Gender influence on perception of Peer-tutoring Pedagogical Approach (PTPA), fem students use Peer-tutoring Pedagogical Approach (PTPA) than their counterparts.
3. On the academic level, Tutoring Pedagogical Approach (PTPA) perception am undergraduate students 100 level having the highest mean response and 200 level w lowest mean responses.
4. On the place of residence influence the perception of Peer-tutoring Pedagog Approach (PTPA). Students in the school hostel use Peer-tutoring Pedagog Approach (PTPA) than students off-campus.

3.4 Discussion of Findings

Findings of this study revealed Mean score difference in Undergraduates Students Percep of the Peer-tutoring Pedagogical Approach (PTPA). The Table indicates that the grand m score of responses to the five items was 2.85, which was greater more minor than the decis mean score of 4.00. This implies that Undergraduates Students in Minna do not perceive Pe tutoring Pedagogical Approach (PTPA). This finding agrees with the following stud (Topping, 2015; & Lawson, 2016). The findings of this study revealed the mean response gender on the perception of Peer-tutoring among undergraduate students. The result indica a difference in the mean response of mean and female with a mean score of 20.75 and stand deviation of 5.805 for males and mean score of 21.08 with a standard deviation of 6.040 females. This finding agrees with the following studies (Topping, 2015; & Lawson, 2016). Findings of this study revealed the academic level influence the perception of the Tutor Pedagogical Approach (PTPA) among undergraduate students. The result shows mean of 1 200, 300, 400 and 500 levels to be 19.75, 16.96, 17.30, 18.15 and 17.84 respectively, with groups having the highest mean response and 200 level with the lowest mean answers. T finding agrees with the following studies (Topping, 2015; & Lawson, 2016). Findings of t study revealed the mean response of residence influence the perception of the Peer-tutor

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4.0 CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

For our students to compete in a world that is now a global village with rapid and continuo technological advancement, students need to be vast in knowledge. Given the finding, it logical to conclude that Peer-tutoring is a critical issue to be addressed for the bett performance of all students. Therefore, the following conclusion was drawn from the finding

1. Avenues for Peer-tutoring Pedagogical Approach (PTPA) to be provided to t students either by the school management or the students' unions rather than engagi in politics only.
2. A high level of orientation and encouragement will be given to the students on usi Peer-tutoring Pedagogical Approach (PTPA) as a learning strategy.

4.2 Recommendations

Based on the findings of the study, the following recommendations are made:

1. Science students should keep improving in their pedagogical approach to help scien students learn abstracts topics and improve in their science subjects.
2. Orientation, Workshops, seminars, symposia and conferences should be organiz periodically to familiarize science students with recent research findings that wou lead to effective and meaningful learning.

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