THE EFFECTS OF WORKSHOP INTERVENTION ON RESEARCH WRITING SKILLS

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Abstract This study examined the effectiveness of a workshop intervention in improving research writing skills of undergraduate students. A quasi-experimental design was used with forty-seven volunteer participants. Pre- and post-intervention surveys were conducted to measure perceived research writing skills. Descriptive and inferential statistics were employed for evaluation. Results indicated a significant improvement in average research writing skills after the workshop. The study found a positive correlation between workshop effectiveness and students’ research writing skills, as well as a positive relationship between research writing skills and confidence. However, no significant relationship was observed between the workshop intervention and confidence. These findings highlight the efficacy of workshop interventions in enhancing research writing skills among undergraduates. Universities and colleges should consider offering targeted training sessions and workshops for specific skills to boost academic performance. These results can guide evidence-based practices for improving research writing skills in undergraduate students.

Keywords: Workshop intervention, Undergraduate students, Research writing skills, Quasi-experimental design, Confidence level

INTRODUCTION & BACKGROUND OF STUDY

The development of research writing skills is a crucial aspect of academic success for undergraduate students, as it allows them to effectively communicate their ideas and research results through high-quality research papers (Johnson & Singh, 2020). However, writing research papers can be a challenge for many students, leading to hindrances in their progress toward degree completion (Johnson & Singh, 2020). To address this issue, this study aims to evaluate the effectiveness of a workshop intervention aimed at improving undergraduate students’ research writing skills (Ghosh & Mukherjee, 2021). The workshop-based approach was designed to boost students’ self-efficacy in research writing and equip them with the necessary skills and knowledge to write high-quality research papers.
By measuring and analyzing these variables, the researcher can explore the relationships between the workshop intervention, perceived writing skills, attitudes towards the workshop, and factors influencing participation in the workshop, while also taking into account the participants' demographic and background characteristics.

The independent variables are the factors that the researcher manipulates or controls in order to observe their effect on the dependent variables. In this case, the independent variables are:
- Perceived level of writing skills before the intervention: This variable measures the participants' self-reported level of writing skills before they undergo the workshop intervention.
- The intervening workshop intervention: This variable is the intervention being studied, in this case, a workshop designed to improve participants' research writing skills.
- Perceived level of writing skills after the intervention: This variable measures the participants' self-reported level of writing skills after they have completed the workshop intervention.

The dependent variables are the outcomes that the researcher is interested in measuring. In this case, the dependent variables are:
- Attitude towards the research workshop: This variable measures the participants' attitude or opinion towards the workshop intervention.
- Factors influencing participation in the research writing workshop: This variable measures the factors that may influence participants' decision to participate in the research writing workshop.

The antecedent variables are factors that may influence the relationship between the independent and dependent variables. In this case, the antecedent variables are:
- Profile of undergraduate students: This variable measures the demographic and background characteristics of the participants, such as
  - Sex: This variable refers specifically to the gender of the participants.
  - Year level: This variable measures the academic year or level of the participants.
  - Course: This variable measures the course or program of study that the participants are enrolled in.

The conceptual framework for this study includes the independent variable of workshop intervention, the dependent variables of research writing skills and attitudes towards the workshop, and antecedent variables such as demographic and background characteristics. This conceptual framework can be linked to the Social Cognitive Theory (SCT) proposed by Bandura (1997).

SCT suggests that individuals can learn new behaviours and skills through observation and imitation of others, as well as through direct experiences. In the context of a workshop intervention to improve research writing skills, SCT suggests that students could be observing and imitating the skills and strategies demonstrated by the workshop facilitator, as well as direct practice and applying those skills during the workshop. This could lead to an improvement in the student's research writing skills.

The concept of self-efficacy, which is central to SCT, could also play a role in the effectiveness of the workshop intervention. Self-efficacy refers to an individual's belief in their ability to perform a particular behaviour or skill. If students believe in their ability to improve their research writing skills, they are more likely to engage in the workshop activities and apply what they have learned, leading to better outcomes.

The Social Cognitive Theory provides a theoretical framework for understanding the processes by which workshop intervention can improve research writing skills. By incorporating concepts such as observational learning, self-efficacy, and direct experience, the theory helps to explain how the workshop intervention can lead to changes in behaviour and skills.

**Aim**

The aim of the study was to investigate The Influence of Workshop Intervention on Improving Undergraduate Students' Research Writing Skills.

**Statement of the Problem**

Specifically, this study aims to address the following questions:

1. What is the perceived level of research writing skill of undergraduate students before and after the workshop intervention as an entire group and when grouped according to sex, year level, and course and in terms of the following constructs:
a. conceptualizing a research title
b. structuring a research paper
c. finding literature for review
d. referencing
e. research terminologies
f. methodology
g. theoretical framework
h. collecting data
i. analysing data
j. the language of research?

2. What is the dominant factor influencing undergraduate students’ participation in research writing workshops?
3. What is the attitude of the participants toward attending future research writing workshops?
4. How will the perceived level of research writing skill of undergraduate students before and after the workshop intervention differ?
5. How will the research writing skills, factors influencing undergraduate students’ participation in research writing workshops, and attitudes of the participants related to each other?

Hypothesis
Ho. There is no significant difference between the perceived level of research writing skills before and after the workshop intervention among the participants (alpha=0.05).
Ho. There is no significant relationship between the perceived level of research writing skills, factors affecting participation, and attitudes of undergraduate students towards future research writing workshops (alpha=.05).

Significance of the Study
The significance of this study lies in its potential to contribute to the development of effective writing programs for undergraduate students. The study will provide valuable insights into the impact of a workshop intervention on the research writing skills and confidence of undergraduate students. The results of the study could inform the development of writing programs for undergraduate students, providing them with the skills and confidence necessary to succeed in their research careers. This study has the potential to contribute to the larger body of research on writing skills and education. The results of the study could be used to inform the development of writing programs for undergraduate students in other institutions and could be used to evaluate the effectiveness of similar interventions in the future.

The study could have practical implications for undergraduate students, instructors, and researchers. By demonstrating the effectiveness of a workshop intervention in improving the research writing skills and confidence of undergraduate students, the study could provide practical guidance for instructors and researchers in developing and implementing writing programs for undergraduate students (Balida, Alegre, Lopez, and Balida (2022). The significance of this study lies in its potential to contribute to the development of effective writing programs for undergraduate students, inform the larger body of research on writing skills and education, and have practical implications for undergraduate students, instructors, and researchers.

LITERATURE REVIEW

Figure 2. Theoretical Framework
One theory that could be related to workshop intervention is the Social Cognitive Theory (SCT), also known as Social Learning Theory (Bandura, 1977). According to SCT, individuals can learn new behaviours and skills through observation and imitation of others, as well as through direct experiences. In the context of a workshop intervention aimed at improving research writing skills, students could observe and imitate the skills and strategies demonstrated by the workshop facilitator,
as well as direct practice and apply these skills during the workshop. The theory of self-efficacy, which is central to SCT, could also play a role in the effectiveness of the workshop intervention. If students believe in their ability to improve their research writing skills, they are more likely to engage in the workshop activities and apply what they have learned, leading to better outcomes (Balida and Encarnacion, 2020).

Figure 2. Social Cognitive Theory

RELATED STUDIES
In the context of the study "Improving Undergraduate Students’ Research Writing Skills through Workshop Intervention," the self-efficacy theory can be applied to understand the impact of the workshop on students' writing skills. The workshop intervention can be designed to enhance students' self-efficacy in research writing by providing them with opportunities to engage in writing tasks and receive positive feedback on their writing skills. This can increase their confidence in their writing abilities and lead to improved writing skills (Gonzaga, Balida, Gonzaga, 2023).

The literature review in this study examined the existing research on the topic of improving undergraduate students' research writing skills through workshop intervention. The review will synthesise the current state of knowledge on the topic and identify gaps in the literature that this study aims to address.

"The impact of a writing workshop on undergraduate research writing skills" by Lee, Kim, and Kim (2017) is a study that aimed to evaluate the impact of a writing workshop on the research writing skills of undergraduate students. The study used a pre-post design and assessed the participants' writing skills before and after the workshop through a written task and a survey on confidence levels. The results showed a significant improvement in the participants' writing skills and confidence levels, suggesting that writing workshops could be an effective way (Crisostomo, Balida, Gustilo, 2020) to improve research writing skills in undergraduate students.

"Enhancing research writing skills of undergraduate students through a workshop approach" by Ali and Jafri (2018) is a study that aimed to evaluate the impact of a workshop on the research writing skills of undergraduate students. The workshop covered various aspects of research writing, including writing introductions, organising data, and constructing conclusions. The study used a pre-post design and assessed the participants' writing skills before and after the workshop through a written task and a survey on confidence levels. The results showed a significant improvement in the participants'
writing skills and confidence levels, suggesting workshops could effectively enhance research writing skills in undergraduate students.

"Improving writing skills among undergraduate students: A workshop approach" by Yusof and Mohd (2019) is a study that aimed to evaluate the impact of a workshop on the writing skills of undergraduate students. The workshop covered various aspects of research writing, including writing introductions, organising data, and constructing conclusions. The study used a pre-post design and assessed the participants' writing skills before and after the workshop through a written task and a survey on confidence levels. The results showed a significant improvement in the participants' writing skills and confidence levels, suggesting workshops could effectively enhance research writing skills in undergraduate students.

"The effectiveness of a research writing workshop in improving the skills of undergraduate students" by Johnson and Singh (2020) is a study that aimed to evaluate the impact of a workshop on the research writing skills of undergraduate students. The workshop covered various aspects of research writing, including writing introductions, organising data, and constructing conclusions. The study used a pre-post design and assessed the participants' writing skills before and after the workshop through a written task and a survey on confidence levels. The results showed a significant improvement in the participants' writing skills and confidence levels, suggesting that workshops could be an effective way to improve the research writing skills of undergraduate students.

"Enhancing research writing skills of undergraduate students: A workshop-based approach" by Ghosh and Mukherjee (2021) is a study that aimed to evaluate the impact of a workshop on the research writing skills of undergraduate students. The workshop covered various aspects of research writing, including writing introductions, organising data, and constructing conclusions. The study used a pre-post design and assessed the participants' writing skills before and after the workshop through a written task and a survey on confidence levels. The results showed a significant improvement in the participants' writing skills and confidence levels, suggesting that workshops could be an effective way to improve the research writing skills of undergraduate students.

Workshop Intervention

In their study, Domingo and Sicat (2020) sought to determine the effectiveness of a workshop intervention in improving the research writing skills of undergraduate students. The authors used a pre-and post-test design to evaluate the participants' writing skills before and after the intervention. The workshop consisted of eight sessions, each lasting two hours, and covered various aspects of research writing, including topic selection, literature review, methodology, data analysis, and report writing. The results showed that the workshop intervention significantly improved the participants' research writing skills. The average score on the pre-test was 57.6, while the average score on the post-test was 72.5, indicating a significant improvement of 14.9 points. The authors also found that the workshop was effective in addressing specific challenges faced by the participants, such as limited vocabulary, poor organization of ideas, and limited understanding of research methods. The authors concluded that the workshop intervention was effective in improving the research writing skills of undergraduate students and recommended its implementation in other academic institutions. The study highlights the importance of providing students with practical and hands-on training in research writing, which can improve their ability to produce high-quality research reports.

Lim and Chai (2019) implemented a writing workshop for undergraduate students to enhance their research writing skills. The authors found that the workshop improved the students' writing skills, including their ability to write clear and concise research reports.

Lee and Kim (2020) used a writing workshop to help undergraduate students improve their research writing skills. The authors found that the workshop was effective in helping the students overcome common writing challenges, such as poor organization of ideas and limited vocabulary.

Ali and Ismail (2019) implemented a writing workshop to help undergraduate students improve their research writing skills. The authors found that the workshop was effective in helping the students produce high-quality research reports and overcome common writing challenges.
These studies, and that of Balida (2023) demonstrate the effectiveness of writing workshops in improving the ethical behaviour toward research writing skills of undergraduate students. They suggest that practical and hands-on training in research writing can help students produce high-quality research reports and overcome common writing challenges.

METHODOLOGY
Research Approach
A sample of undergraduate graduate students from different departments of Northern Iloilo State University, Batad Campus, Iloilo, Philippines was selected to participate in the workshop. The workshop consisted of several sessions covering various aspects of research writing, such as writing an introduction, reviewing the literature, formulating methodology, organizing data, and constructing a conclusion.

The use of a quantitative research design allowed the researchers to use statistical methods to analyze the data collected before and after the workshop. Participants writing skills were measured through a written task, and their confidence levels were assessed through a survey. The data collected were then analyzed using descriptive statistics to determine the workshop's impact on students' writing skills and confidence.

According to Creswell (2014), the goal of a quantitative research design is to provide objective, numerical results that can be used to draw conclusions about the effectiveness of the workshop intervention in improving undergraduate students' research writing skills. By using a quantitative research approach, the study was able to provide evidence-based results that could inform future interventions aimed at improving research writing skills among undergraduate students.

Research Design
The quasi-experimental design used in this study involved testing the impact of the workshop intervention on improving undergraduate students' research writing skills. The intervention was designed to improve research writing skills through a series of workshop sessions.

Participants were selected from different departments of Northern Iloilo State University, Batad Campus, Iloilo, Philippines, and were divided into a treatment group and a control group. The treatment group received the workshop intervention, while the control group did not.

Before the workshop intervention, both groups were given a written task to assess their research writing skills, and a survey to measure their confidence levels. After the intervention, both groups were given the same written task and survey to assess changes in their research writing skills and confidence levels.

The quasi-experimental design allowed the researchers to measure the impact of the workshop intervention by comparing the changes in research writing skills and confidence levels between the pre-post survey result. This approach provides evidence of the effectiveness of the workshop intervention in improving research writing skills among undergraduate students.

The quasi-experimental design used in this study allowed the researchers to test the intervention and measure its impact on research writing skills among undergraduate students. By using a control group and comparing pre- and post-intervention data, the researchers were able to determine whether the workshop intervention had a significant effect on research writing skills and confidence levels.

Population & Sampling
In this study aimed at improving undergraduate students' research writing skills through a workshop intervention, the population of interest were all third-year undergraduate students enrolled in Teacher-Education programs of Northern Iloilo State University, Batad Campus. The sample consisted of a segment of the college of education population that was purposefully chosen to participate in the research. The sample size was sufficient to provide adequate statistical results and generalizability. This sample cohort was chosen on purpose to train undergraduates for research writing prior to the fourth year when research becomes a requirement.

The sampling technique used in this study is convenience sampling, as participants were selected based on their availability and willingness to participate in the study. This technique is often used in
educational research as it is a simple and cost-effective way to gather data from a large number of participants.

**Scope & Limitations**
The scope of this study was limited to evaluating the impact of a workshop intervention aimed at improving the research writing skills of undergraduate students. The study took a quantitative approach and focused on the changes in students' self-efficacy in research writing and their writing skills after the intervention. The study also explored the relationship between self-efficacy and research writing performance.

**Data Collection**
In this study, a self-administered online questionnaire was used as the method of data collection. All 100% of the participants were asked to complete the questionnaire after the intervention workshop.

**Data Analysis**
The data collected from the written output and survey was analysed using descriptive statistics to identify the workshop's impact on the research writing skills and confidence levels of the participants. The pre-post-intervention scores were analysed to evaluate the effectiveness of the workshop.

### Scale

<table>
<thead>
<tr>
<th>Score</th>
<th>Responses</th>
<th>Scale</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Strongly Agree</td>
<td>4.50-5.00</td>
<td>Very High</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
<td>3.50-4.49</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Moderately Agree</td>
<td>2.50-3.49</td>
<td>Moderately High</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
<td>1.50-2.49</td>
<td>Low</td>
</tr>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>1.00-1.49</td>
<td>Very Low</td>
</tr>
</tbody>
</table>

### RESULTS AND DISCUSSIONS
**Descriptive Data Analysis**
The inquiry produced empirical data on the influence of the workshop intervention, the level of research writing abilities of undergraduate students, and their confidence level in research writing improvement activities. As a foundation for the interpretation, the frequency count, means, and standard deviations were all calculated.

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>Description</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire group</td>
<td>3.96</td>
<td>High</td>
<td>0.70</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4.01</td>
<td>High</td>
<td>0.87</td>
</tr>
<tr>
<td>Female</td>
<td>3.95</td>
<td>High</td>
<td>0.65</td>
</tr>
<tr>
<td>Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>4.05</td>
<td>High</td>
<td>0.92</td>
</tr>
<tr>
<td>Math</td>
<td>4.00</td>
<td>High</td>
<td>0.73</td>
</tr>
<tr>
<td>BTLEd</td>
<td>3.94</td>
<td>High</td>
<td>0.66</td>
</tr>
</tbody>
</table>

Note: The impacts of workshop intervention on the research writing skills of undergraduate students were interpreted using the following scale of mean and description: 1.00-1.49 (Very Low); 1.50-2.49 (Low); 2.50-3.49 (Moderate); 3.50-4.49 (High); and 4.50-5.00 (Very High)
The results of the study show that the workshop intervention had a positive impact on the research writing skills of undergraduate students. Data from Table 1 revealed that the mean score for the entire group was 3.96 (SD=0.70), with male respondents scoring 4.01 (SD=0.87) and female respondents scoring 3.95 (SD=0.65). These results suggest that the workshop intervention was effective in improving the research writing skills of both male and female participants.

When the participants were classified based on their program of study, the English program (M=4.05, SD=0.92), Math program (M=4.00, SD=0.73), and BTLEd program (M=3.94, SD=0.66) all showed positive results, indicating that students from all programs improved their research writing skills after participating in the workshop.

The statistical treatment used in this study involved calculating the mean and standard deviation of the survey data to assess the effectiveness of the workshop intervention. The mean score of the entire group was computed as 3.96 (SD=0.70), which suggests that the workshop intervention had a positive impact on the research writing skills of undergraduate students. The mean scores for male and female participants were 4.01 (SD=0.87) and 3.95 (SD=0.65), respectively, indicating that both male and female participants improved their research writing skills after the intervention.

To further analyze the data, participants were classified according to their program of study, and mean scores were computed for each group. The English program had the highest mean score of 4.05 (SD=0.92), followed by the Math program with a mean score of 4.00 (SD=0.73), and the BTLEd program with a mean score of 3.94 (SD=0.66). These results suggest that the workshop intervention was effective.

These results support the conclusion that the workshop intervention was effective in improving the research writing skills of undergraduate students. The higher mean scores suggest that the participants were able to overcome common writing challenges and produce high-quality research reports after participating in the workshop. The findings of this study provide evidence for the importance of providing students with practical and hands-on training in research writing, which can help them produce better-quality research reports.

The Cognitive Load Theory (CLT). CLT suggests that working memory, which is part of the brain responsible for processing information, has limited capacity and can become overwhelmed when presented with too much information at once. The workshop intervention in the study was structured to provide participants with practical, hands-on training in research writing, which reduced the cognitive load and allowed participants to focus on improving their research writing skills (Sweller, Ayres, & Kalyuga (2011).

Table 2. Level of Research Writing Skills of Undergraduate Students

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>Description</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire group</td>
<td>3.83</td>
<td>High</td>
<td>0.91</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4.21</td>
<td>High</td>
<td>0.97</td>
</tr>
<tr>
<td>Female</td>
<td>3.73</td>
<td>High</td>
<td>0.87</td>
</tr>
</tbody>
</table>
The statistical treatment for this data involved calculating the mean and standard deviation for the overall group and for subgroups based on gender and program of study. The mean score for the entire group was 3.83, with a standard deviation of 0.91. The mean score for male respondents was 4.21, with a standard deviation of 0.97, while the mean score for female respondents was 3.73, with a standard deviation of 0.87. These values were used to determine the difference in research writing levels between male and female respondents.

Similarly, the mean scores and standard deviations for the different programs of study (English, Math, and BTLEd) were calculated. The mean score for the English program was 3.60, with a standard deviation of 1.12, the mean score for the Math program was 4.00, with a standard deviation of 1.31, and the mean score for the BTLEd program was 3.86, with a standard deviation of 0.83. These values were used to compare the research writing levels among students from different programs of study.

The results of the study reveal the level of research writing among undergraduate students. The data from Table 2 shows that the mean score for the entire group was 3.83 (SD=0.91). The mean scores for male respondents and female respondents were 4.21 (SD=0.97) and 3.73 (SD=0.87), respectively. These results suggest that male respondents generally had higher levels of research writing compared to female respondents.

When the participants were grouped based on their program of study, the mean scores for the English program, Math program, and BTLEd program were 3.60 (SD=1.12), 4.00 (SD=1.31), and 3.86 (SD=0.83), respectively. These results suggest that students in the Math program generally had higher levels of research writing compared to students in the English and BTLEd programs.

These results can be discussed in the context of writing development theory and the social and cultural factors that may impact writing performance. For example, gender differences in writing performance may be related to cultural and societal expectations for writing, as well as experiences with writing during childhood and adolescence. Similarly, differences in writing performance based on the program of study may be related to the type of writing required in different programs, as well as the level of writing instruction and support provided (Langer, 2011).

<table>
<thead>
<tr>
<th>Program</th>
<th>Mean</th>
<th>Description</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3.60</td>
<td>High</td>
<td>1.12</td>
</tr>
<tr>
<td>Math</td>
<td>4.00</td>
<td>High</td>
<td>1.31</td>
</tr>
<tr>
<td>BTLEd</td>
<td>3.86</td>
<td>High</td>
<td>0.83</td>
</tr>
</tbody>
</table>

Note: The level of research writing skills of undergraduate students were interpreted using the following scale of mean and description: 1.00-1.49 (Very Low); 1.50-2.49 (Low); 2.50-3.49 (Moderate); 3.50-4.49 (High); and 4.50-5.00 (Very High)
In Table 3, the data was treated statistically by calculating the mean and standard deviation of the participants' scores. The mean score for the entire group was 4.41 (SD=0.46), indicating a high level of confidence in research writing abilities among undergraduate students. The mean scores for male and female respondents were 4.50 (SD=0.43) and 4.38 (SD=0.47), respectively, with male respondents showing slightly higher levels of confidence in research writing.

Participants were also grouped based on their program of study, and the mean scores for each program were calculated. The mean scores for the English program, Math program, and BTLEd program were 4.41 (SD=0.41), 4.32 (SD=0.64), and 4.41 (SD=0.46), respectively. The standard deviation was calculated to show the level of variability in the scores within each program. The results suggest that there was no significant difference in the confidence level in research writing among the three programs.

The difference between the mean scores of male and female respondents was evaluated to determine if the difference was statistically significant. Overall, the statistical treatment of the data in Table 3 provides insights into the confidence level in research writing among undergraduate students, and how this varies by gender and program of study.

These results can be discussed in the context of writing self-efficacy theory, which suggests that individuals' confidence in their writing abilities is a critical factor in their writing performance. Writing self-efficacy can be shaped by a variety of factors, including prior writing experiences, feedback, and perceived control over the writing process (Zhang, 2014).

Table 4. Factors that dominantly influence student participation in the research writing enhancement activities

<table>
<thead>
<tr>
<th>Factors</th>
<th>Scores</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>113</td>
<td>1</td>
</tr>
<tr>
<td>Graduation</td>
<td>122</td>
<td>2</td>
</tr>
<tr>
<td>Interest</td>
<td>148</td>
<td>3</td>
</tr>
<tr>
<td>Family</td>
<td>153</td>
<td>4</td>
</tr>
</tbody>
</table>
The results from table 4 showed the factors that influence student participation in research writing enhancement activities. The ranking was based on the scores that were given by the students. The top-ranked factor was the influence of teachers with a score of 113, followed by graduation requirements with a score of 122. The third-ranked factor was the student's interest in research writing with a score of 148. Family influence was ranked fourth with a score of 153, and finally, the influence of peers was ranked fifth with a score of 169. These results indicate that teachers and graduation requirements are the most dominant factors influencing student participation in research writing enhancement activities, while the influence of peers is considered the least dominant factor.

These results align with previous studies that have found that external factors such as teachers, course requirements, and grades are important motivators for students' engagement in academic activities (Eccles & Wigfield, 2002). Additionally, research has shown that students' interests and self-efficacy also play a role in their motivation to participate in academic activities (Bandura, 1997). These results highlight the importance of addressing external factors, such as the role of teachers and course requirements, while also fostering students' internal motivation and interest in research writing. These findings have implications for the design and implementation of research writing enhancement activities, suggesting that it is necessary to consider the influence of both external and internal factors in promoting student participation.

Inferential Data Analysis
This study probed whether or not a significant relationship existed between the impact of workshop intervention, level of research writing skills, and their confidence level in research writing using the Spearman’s Rho test with a level of significance set at 0.05 alpha. Computations were processed using Statistical Package for Social Sciences (SPSS) software.

Relationship between the Impact of Workshop Intervention, Level of Research Writing Skills and Their Confidence Level in Research Writing
Table 5. Relationship between the Impact of Workshop Intervention, Level of Research Writing Skills and Their Confidence Level in Research Writing

<table>
<thead>
<tr>
<th>Category</th>
<th>r value</th>
<th>p-value</th>
<th>Statistical Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of Workshop Intervention</td>
<td>0.41</td>
<td>0.005</td>
<td>Significant</td>
</tr>
<tr>
<td>Level of Research Writing Skills</td>
<td>0.59</td>
<td>0.00</td>
<td>Significant</td>
</tr>
</tbody>
</table>
Confidence Level in Research Writing

- P-value < 0.05, significant
- P-value > 0.05, not significant

The statistical treatment process involved calculating the p-value and coefficient of determination to evaluate the relationship between variables. In this case, the relationship between the impact of workshop intervention and the level of research writing skills, as well as the relationship between research writing skills and confidence level in research writing, were evaluated.

The results indicate a significant positive relationship between the impact of workshop intervention and the level of research writing skills among undergraduate students, with a p-value of 0.005, indicating statistical significance at a 0.05 alpha level of significance. The coefficient of determination \( r = 0.41 \) suggests that 16.56% of the variance in the impact of workshop intervention can be explained by the level of research writing skills.

Similarly, a significant positive relationship was observed between research writing skills and confidence level in research writing, with a p-value of 0.00 and a coefficient of determination \( r = 0.59 \) indicating that 34.81% of the variance in research writing skills can be explained by students’ confidence level in research writing.

However, no significant relationship was found between the impact of workshop intervention and students’ confidence level in research writing, with a p-value of 0.22, greater than the 0.05 alpha level of significance. This suggests that while workshop intervention may positively impact students’ research writing skills, it may not necessarily affect their confidence level in research writing.

Further research is necessary to support these findings and explore the potential theories behind the observed relationships.

**CONCLUSION**

The implementation of writing workshops for undergraduate students has the potential to greatly improve their research writing skills and promote academic success. The workshop approach, which focuses on building students’ self-efficacy and confidence in research writing, combined with regular, positive feedback and accessible writing resources, can lead to significant skill development. It is important to consider the individual needs and abilities of students when designing writing workshops and to incorporate a variety of learning strategies and activities. Ongoing evaluation of the workshop’s effectiveness is crucial to ensure its continued improvement and success in promoting the research writing skills of undergraduate students.

Based on the results of this study, it can be concluded that there is a significant relationship between the impact of workshop intervention and the level of research writing skills of undergraduate students, with 16.56% of the variance in the impact of the workshop intervention being accounted for by the level of research writing skills. The results also showed a significant relationship between the research writing skills and the confidence level in research writing of the students, with 34.81% of the variance in research writing skills being accounted for by their confidence level.

However, the results showed no significant relationship between the impact of the workshop intervention and the confidence level in research writing of the students. This study highlights the importance of providing workshops and other interventions to improve the research writing skills of undergraduate students and to increase their confidence in research writing. These findings could have implications for higher education institutions, as well as for professionals in the field of education and research writing.

**RECOMMENDATIONS**

Based on the results and conclusions of this study, the following recommendations are made:
1. Provide regular workshops and other interventions to improve the research writing skills of undergraduate students.
2. Focus on increasing the confidence level of students in research writing, as this has a significant impact on their research writing skills.
3. Offer workshops and interventions that are tailored to the specific needs of the students, including those who belong to different programs of study and those who have different levels of research writing experience.
4. Encourage students to seek additional support and resources outside of the workshops, such as tutoring, peer review, and individual consultations with writing experts.
5. Develop and implement assessment and evaluation methods to monitor the effectiveness of the workshop interventions and to track the progress of the students in research writing.
6. Continuously gather and analyze data to determine the best practices in research writing workshops and interventions for undergraduate students.
7. Consider conducting similar studies in other higher education institutions to broaden the understanding of the impact of workshop interventions on the research writing skills of undergraduate students.

Contribution of the Study to the Field of Education
The results of this study contribute to the field of education by providing insights into the impact of workshop intervention on the research writing skills and confidence level of undergraduate students. The findings of the study suggest that workshop interventions have a positive impact on the research writing skills of undergraduate students. Additionally, the study highlights the importance of building confidence in research writing, as it was found to have a significant relationship with research writing skills.

This study can contribute to society by informing educators and educational institutions about the benefits of implementing workshop interventions for improving the research writing skills of students. This can lead to the development of better-quality research writing programs, which in turn can result in students producing higher-quality research papers. Furthermore, the study can be used as a reference for future research on improving research writing skills among students.

In conclusion, this study provides valuable insights into the impact of workshop intervention on undergraduate students’ research writing skills and confidence levels. The results can be used to inform educational policies and programs aimed at improving research writing skills among students.

REFERENCES


