Derna Academy Journal for Applied Sciences

E-ISSN: 3006-3159

DAJAS

Students' Response to Biology Subject in Scientific and Medical Colleges

Salwa Muftah Eljamay [1*], MARYAM FAWZI ABAIS[2]

[1,] College of Medical Technology, Public Health Department, Derna, Libya
[2] College of Medical Technology, General Department, Derna Libya

*Corresponding author: E-mail addresses: salwaeljamay@cmtd.edu.ly

Volume : 2 **Issue: 1** **Page Number: 100 - 106**

Keywords:
Biology, Medical, Science, College, Assessment, Subject

Received: 18\05\2024
Accepted: 20\09\2024
Published: 15\10\2024
https://doi.org/...../.....vxix.xxxx

ABSTRACT

Academic success in first-year college science coursework can strongly influence future career paths and usually includes a solid performance in introductory biology. Aimed to: wanted to know whether factors affecting biology student performance might include learning style preferences and one's ability and confidence in self-assessing those learning preferences to engage in appropriate study strategies. Material and Methods: 222 students from the first year of the General Department on the extent to which they absorbed the biological material and the extent to which they could not be absorbed by the College of Medical Technology/Derna. From 2022 to 2024 by answering questions from Google Form e-questionnaire Where the questionnaire link was distributed to students and answered. Results: The highest answer of those who find that biology is important as a basic subject for the first year by 202(91.0%), with Mean(1.15), St.D(0.507), the percentage assessment of biology course, with the highest percentage for excellent by 43%, followed by very good by 31.1%, then good by 21.2%, then not bad by 4.1%, and which the assessment by weak of biology course 0.9%, and the Mean (2.26), ST. D (1.316), the females (141) are more trusted to succeed in biological subjects than males (43), and which not confident to pass in biology subjects by 10 for males, 24 for females. Conclusion: The study explained from students' answers that the topic of biology is nice, basic and easy to understand, especially if it is one of the basic early years in medicine or scientific medical schools, and that females were more confident in succeeding in biological material than males

1. INTRODUCTION

The response of students to the biology subject in scientific and medical colleges is crucial for the success of academic programs. (Wang et. al., 2020) emphasize that research integrity is the foundation of colleges and universities, highlighting the importance of regulating academic misconduct to maintain academic standards. Student response systems, as discussed by (Herrada et. al., 2020). are generally well-perceived by teachers and students across disciplines, indicating a positive attitude towards interactive learning methods. (Sridevi et. al., 2020) found that seminars are an effective educational tool for undergraduate medical students, improving communication skills and self-confidence. In the context of biology education, (Nashir et. al., 2020) developed a flipbook type E-book on environmental change material to enhance science literacy among high school students. (Espitia et. al., 2020).

stress the need for schools and colleges to validate scientific knowledge and skills aligned with core competencies, emphasizing active engagement in critical thinking and problem-solving. (Chen et. al., 2020) suggest using Google Analytics to analyze online behavioral patterns and enhance enrollment strategies for higher education programs. (Nguyen et. al., 2020) advocate for undergraduate research experiences to engage students in STEM fields, especially those from underrepresented groups, highlighting the importance of authentic research experiences. (Gushul, 2021) discusses the need for up-to-date tools to assess the effectiveness of scientific communication in the digital age. (Uhl et. al., 2021) demonstrate the use of automated writing assessments to measure student learning after completing a computer-based tutorial on cellular respiration. (Levkoff et. al., 2022), share Assignments learned from enforcing an geriatric exploration training program for underrepresented nonage scholars to increase diversity in scientific graduate studies. These studies inclusively emphasize the significance of engaging scholars in biology subjects through innovative tutoring styles, exploration gests, and academic integrity to foster a positive response in scientific and medical sodalities. The focus group interviews revealed that before tutoring interventions, the whim-whams cells content was abstract and daunting to scholars. The visualization exercises helped them understand while adding their interest and engagement. still, a significant effect of the treatment on gender was n't linked. (Byukusenge et al., 2024), introductory council wisdom courses by alternate language speakers may involve factors other than learning style, or the capability to tone- assess literacy style and biology course performance.(Breckler et al., 2011.). Numerous factors are identified with pupil stations, among them performance (Hansen & Birol, 2014), These difficulties could discourage scholars from moving ahead to more advanced situations in programmes that involve mobile device commerce with the course schoolteacher. therefore, inventions in learning technology should be done with caution, and with constant attention given to scholars' preferences and requirements (Hwang et al., 2015), No similar differences were set up between scholars in the clinical phase. Lack of interest concerning particular studies appeared to be more unfavourable than gests of prostration because the former was related to low academic tone- -conception. The PBL terrain appeared gruelling, but only during the first time of the study. (Litmanen et al., 2014), pressing both well-reported and new operations of these systems to transfigure lectures from unresistant information delivery surroundings to active literacy spaces for both scholars as well as speakers. (Liu & Taylor, 2013.), The present study revealed that the PBL terrain is generally perceived appreciatively by our medical scholars. womanish scholars displayed more advanced comprehension than manly scholars. nonetheless, areas similar to class load and shy pupil support still bear further fine-tuning and remedial measures. (Nosair et al., 2015), With global scientific and technological growth being fleet, declining pupil interest in wisdom courses and careers is a worldwide concern that has urged wisdom education reform sweats on a transnational scale. Since pupil stations toward wisdom affect course and career choices, measuring the impact of reform sweats on pupil stations is important and will bear dimension tools with robust psychometric parcels (R. Nasr & Soltani K., 2011).

2. METHOD

Data collected

form 222 students from the first year of the General Department on the extent to which they absorbed the biological material and the extent to which they could not be absorbed by the College of Medical Technology/Derna.

From 2022 to 2024 by answering questions from Google Form e-questionnaire Where the questionnaire link was distributed to students and answered (https://docs.google.com/forms/d/e/1FAIpQLSd3Yyjy8x0PivDvp3QpFd5b2F1PuBh0GI_dVB86Ehyk_y56Tw/viewform?usp=sf_link)

Data Analysis:

Data has been uploaded from Google Forms to an Excel file, including to the Microsoft statistical program Spss Issue 27 where the data has been filled and coded in Burnam and analyzed for proportions, repetitions and differences between males and females in their confidence in the success of the article

3. ETHIC APPROVAL

We received approval from a scientific research ethics committee located in the College of Medical Technology, Derna

4. RESULT

Table (1) Frequency and Percentage of age the highest percentage for 19 - 20 Years 176(79.3%)

Age	Frequency	Percentage %
17 - 18 Years	40	18.0
19 - 20 Years	176	79.3
20 - 21 Years	6	2.7
Total	222	100.0

Table (2) Frequency and Percentage of Gender the highest percentage for Female 166(74.8%)

Gender	Frequency	Percentage %
Male	56	25.2
Female	166	74.8
Total	222	100.0

In table 3 show that The high percentage for biology is important as a basic subject for the first year, 202(91.0%), followed by think you will succeed in Biology184(82.9), then the understanding of Biology while learning and enjoying the biology lecture182 (82.0%), then that Biology is easy to understand 177 (79.7%), For the highest percentage to answer not to use educational means used in interpretation to help you understand the subject54(24.3%), It was the highest percentage to answer for doing your job in biology easily. 76(34.2%).

Table (3) Frequency and Percentage of Question, Answers and Mean, S.TD

Questions / Answers	Yes N(%)	No N(%)	Maybe N(%)	Mean	S.TD
Do you find that Biology is easy to understand?	177 (79.7)	10 (4.5)	35 (15.8)	1.36	0.740
Can you understand Biology subject during learning?	182 (82.0)	7 (3.2)	33 (14.9)	1.33	0.721
Can you do your biology homework easily?	131 (59.0)	15(6.8)	**76(34.2)**	1.75	0.935
Do you find that biology is important as a basic subject for the first year?	**202(91.0)**	6(2.7)	14(6.3)	1.15	0.507
Do you find my biology work easy to understand?	159(71.6)	16(7.2)	47(21.2)	1.50	0.822
Are there educational aids that are used in the explanation to help you understand the material?	120(54.1)	**54(24.3)**	48(21.6)	1.68	0.809
Do you enjoy the biology lecture?	182(82.0)	17(7.7)	23(10.4)	1.28	0.642
Do you find the biology subject interesting?	171(77.0)	15(6.8)	36(16.2)	1.39	0.752
Do you think you will succeed in biology?	184(82.9)	4(1.8)	34(15.3)	1.32	0.727

Figure 1 the percentage expected to get good grade in biology course foe A (58.6%), for B(31.1%), for C(9.5%) and for F(0.9%), the Mean 1.53, ST.D 0.703

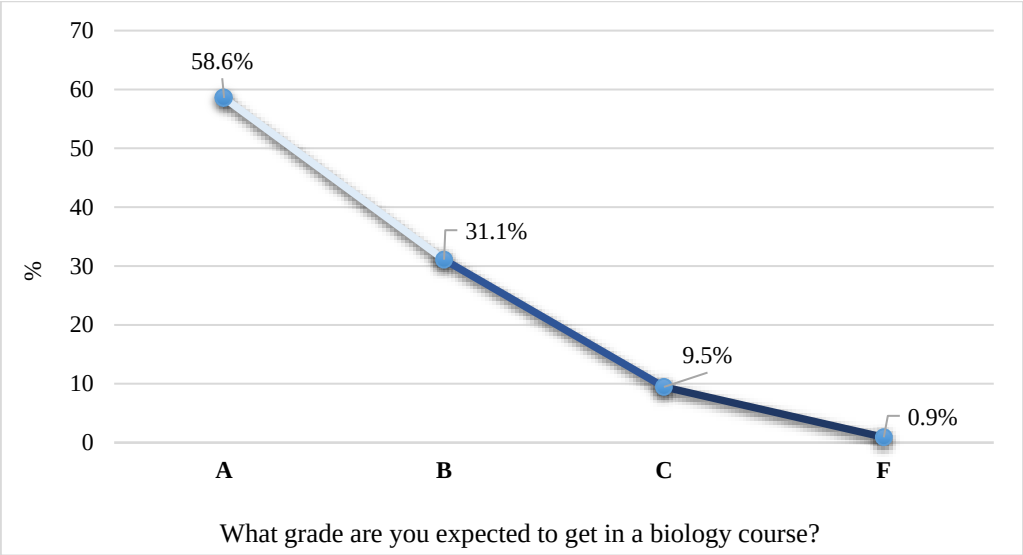

Figure 1 the percentage expected of grade to get in biology course

In Figure 1 illustrate the percentage assessment of biology course, which the highest percent for expellant by 43%, followed by very good by 31.1%, then good by 21.2%, then not bad by 4.1%, and which the assessment by weak of biology course 0.9%, and the Mean (2.26), ST. D (1.316)

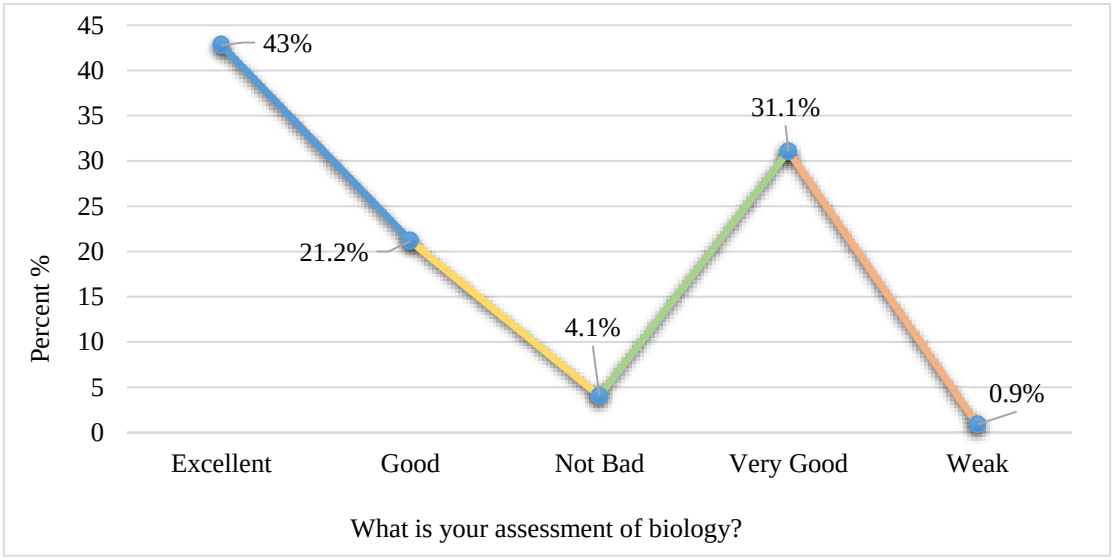

Figure 1 the percentage assessment of biology course

The figure 3 shows that females (141) are more trusted to succeed in biological subject than males (43), and which not confident to pass in biology subject by 10 for male, 24 for female

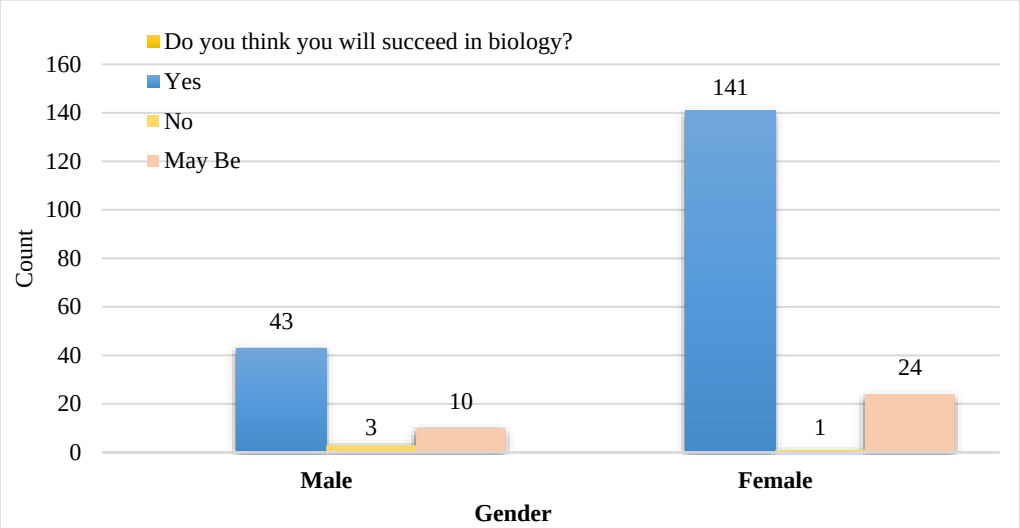

Figure 3 Difference between females and males in guessing to get success in biological subject

5. DISCUSSION

Significant findings from 222 students at college of medical technology, Derna in first year (General Département) Frequency and percentage of age the highest percentage for 19 - 20 Years 176(79.3%), Frequency and Percentage of Gender the highest percentage for Female166(74.8%), the highest answer of those who find that Biology is easy to understand was yes 177 (79.7), Mean (1.36), St. D(0.740), the highest answer of those who Can understand Biology subject during learning182 (82.0%), Mean(1.33), St.D(0.721), the highest answer of those who Can do their biology homework easily by 131 (59.0%), Mean, 1.75, St.D(0.935), the highest answer of those who find that biology is important as a basic subject for the first year by 202(91.0%), Mean(1.15), St.D(0.507), the highest answer of those who find my biology work easy to understand159(71.6%), Mean(1.50), St.D(0.822), the highest answer of those who find their educational aids that are used in the explanation to help you understand the material120(54.1%), Mean(1.68), St.D(0.809), the highest answer of those who enjoy the biology lecture182(82.0%), Mean(1.28), St.D(0.642), the highest answer of those who find the biology subject interesting by 171(77.0%), mean(1.39), St.D(0.752), the highest answer of those who think you will succeed in biology by 184(82.9%), mean(1.32), St.D(0.727), Figure 1 the percentage expected to get good grade in biology course foe A (58.6%), for B(31.1%), for C(9.5%) and for F(0.9%), the Mean 1.53, ST.D 0.703.

In Figure 1 illustrate the percentage assessment of biology course, which the highest percent for expellant by 43%, followed by very good by 31.1%, then good by 21.2%, then not bad by 4.1%, and which the assessment by weak of biology course 0.9%, and the Mean (2.26), ST. D (1.316), The figure 3 shows that females (141) are more trusted to succeed in biological subject than males (43), and which not confident to pass in biology subject by 10 for male, 24 for female

6. CONCLUSION

In this study, The study explained from students' answers that the topic of biology is nice, basic and easy to understand, especially if it is one of the basic early years in medicine or scientific medical schools, and that females were more confident in succeeding in biological material than males

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