Time off: the correlation between gap years and mental well-being in first-year medical school students

INTRODUCTION

Many prospective students in professional fields consider taking an additional year off before continuing their education, known as a "gap year," for various reasons such mental health/stress concerns, work experience, or inability to afford more schooling. With the growing emphasis on the mental health of students in higher education, much attention has been placed on the value of taking some amount of time between graduating from one level of education and entering the next level. Most evidence on this topic has been anecdotal and focused primarily on high-school students going onto college; there have been few studies in the U.S. that directly examine the effects of a gap year on American students, and even fewer focusing specifically on undergradto-graduate education gap years. There have been some studies, however, that do provide some evidence of positive benefits of taking a gap year, including a noticeable increase in GPA over non-gap students (Birch, E. R., & Miller, P. W. (2007)), the mental health of students (Birch, E. R., & Miller, P. W. (2007), Haigler & Nelson), and attainment of educational and career goals later in life (Birch & Miller, 2007; King, 2011; Knight, 2014; Martin, 2010; O'Shea, 2011b; Stehlik, 2010).

Given the ever-increasing awareness of mental health struggles among medical students, further investigation of the effects of a gap year on the self-reported mental well-being of first-year medical students seems prudent. This project seeks to further examine that very question – the perceived effects of a gap year on the mental well-being of first-year medical students. This study will make use of an anonymous online survey, sent out to the Class of 2026 of LECOM Erie, via the use of the online survey website Survey Monkey. The survey first asks the surveyed student to indicate whether they took a gap year between the end of their undergraduate education and the beginning of their graduate education, then presents a series of 10 questions, scaled from 1 to 5, asking the surveyed student to report on various mental health metrics, including assessment of personal stress level, self-assessed preparation level for their education, assessment of support they feel in their position, etc. The working hypothesis for this subject prior to data collection was that students who took a gap year would score higher on self-reported mental health metrics than students who did not.

METHOD

Subject Recruitment. Recruitment and data collection for this project was performed through an online survey via SurveyMonkey, which was sent via LECOM Erie to all members of LECOM Erie's Class of 2026, across all learning pathways.

Data Collection. The first question of the online survey given to participating subjects will require the subject to answer whether they took at least one year between graduating from undergraduate education and entering LECOM's medical school program. For the subsequent survey questions, subjects will report their self-assessment of various metrics on their mental well-being at this point in their education, on a scale from "strongly disagree" to "strongly agree." Examples: "I know who I can talk to if I am feeling overwhelmed," "I feel that I am handling my stress well," "I am receiving the right amount of support from the institution in my education," "I feel safe in asking for help or guidance without judgment," etc.

Risks. The primary risk in this project was breach of confidentiality of the subjects. To minimize this, the survey was designed to require no identifying information. SurveyMonkey users have the option to stop the site from tracking the IP addresses of survey participants; these IP addresses will be the only potential personal identifiers in this study design, so the option to track IP addresses were disabled, providing participants with full anonymity.

Benefits. No direct benefit to the subjects is anticipated. The benefit to society is the contribution to the growing knowledge base on gap years in higher education generally and to graduate education specifically, by either supporting or contradicting the idea that taking a gap year is associated with better mental health than entering directly into higher education.

Analysis. The mental well-being "scores" reported by participating subjects on the survey will be summed for two groups – one group that reports taking a gap year (the "gap year" group) and a second group that reports not taking a gap year (the "non-gap year" group). The cumulative scores of the self-reported "gap year" and "non-gap year" groups would be compared using a standard t-test.

Consent Process. The first page of the survey is dedicated exclusively to providing information about the purpose of the survey, how the data from the survey answers will be used, and that the data collected will be anonymous. At the end, the subject is given an option to continue with the survey, if they are interested in participating.

The data collection for this project is via an anonymous online survey. According to 45 CFR 46 Section 46.117 (c) from the HHS, the requirement for informed consent may be waived if the only record linking the subject and the research would be the informed consent form and the principal risk would be potential harm resulting from a breach of confidentiality. The survey will be sent to LECOM Erie's Class of 2026 via LECOM Erie, but will not require entry of any personally-identifying information from the subjects, such as name, pathway, class rank, etc. Therefore, a signed informed consent form from each subject of the survey is not required for completion of this project.

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RESULTS & DISCUSSION

Only one subject that participated in the survey out of the targeted subject population. This subject reported that they were part of the "gap year" group and indicated an increased level of stress from undergrad and a noticeable effect on quality of life as a result, as well as effective stress reduction and mild confidence in confiding in peers, but neutral confidence in confiding in faculty. However, as there are no subjects in the "non-gap year" group, no significant data analysis could be performed via a t-test.

		Q3
		If you took at least one year off between under did you do during that interim time? Provide Answered: 1 Skipped: 0
Q2	☆ Customize Save as▼	Worked in the
Did you take any time off between completing your and entering into medical school? Answered: 1 Skipped: 0	undergraduate education	Morked outside of the medic Independent study
Yes, I took at least one ye		Relaxation and recuperation Something other than t
No, I went directly fro		Prefer not to answer
ANSWER CHOICES	▼ RESPONSES ▼	ANSWER CHOICES
 Yes, I took at least one year off 	100.00% 1	Worked in the medical field in some capacity
 No, I went directly from undergrad to med school 	0.00% 0	✓ Worked outside of the medical field
TOTAL	1	✓ Independent study
		 Relaxation and recuperation
		 Something other than the above
		 Prefer not to answer
		Total Respondents: 1
eel that my current stress level is not significantly af y work or my quality of life. wered: 1 Skipped: 0		Q6 Engaging in interests, hobbies, etc. outside of effective at decreasing my stress level.
Strongly agree		Answered: 1 Skipped: 0
Agree		Strongly agree
Somewhat agree		Agree
Neither agree nor disagree		Neither agree
Somewhat disagree		Somewhat
Disagree		Disagree
Strongly disagree		Strongly disagree
0% 10% 20% 30% 40% 50% 60% 70% 80%	6 90% 100%	0% 10% 20% 30% 40% 50% 60%
ANSWER CHOICES	SPONSES 🔻	ANSWER CHOICES
 ✓ Strongly agree 0.0 	00% 0	Strongly agree
▼ Agree 0.0	00% 0	
✓ Somewhat agree 0.0	00% 0	- Agree
 ▼ Neither agree nor disagree 0.0 	00% 0	Sumewhat agree
✓ Somewhat disagree 100	0.00% 1	Somewhat disagree
▼ Disagree 0.0	00% 0	
 ▼ Strongly disagree 0.0 	00% 0	Disagree Disagree Disagree
TOTAL	1	✓ Strongty disagree

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If I am feeling overwhelmed, I am aware of resources available to me and who to reach out to, and am confident that they will/would be able to help me.



I feel safe in asking for help or guidance from my peers/fellow medical students without fear of judgment. Strongly agree

TOTAL



- Strongly agree Agree Somewhat agree Neither agree nor disagree
- Somewhat disagree Disagree Strongly disagree TOTAL



ANSWER CHOICES	 RESPONSES 	•
 Strongly agree 	0.00%	0
✓ Agree	0.00%	0
✓ Somewhat agree	0.00%	0
 Neither agree nor disagree 	0.00%	0
✓ Somewhat disagree	100.00%	1
✓ Disagree	0.00%	0
 Strongly disagree 	0.00%	0
TOTAL		1

My stress level does not get to the point where I believe I cannot handle the work or where I want to withdraw from medical school, even at its highest.



•	Strongly agree	0.00%	0
-	Agree	100.00%	1
-	Somewhat agree	0.00%	0
•	Neither agree nor disagree	0.00%	0
•	Somewhat disagree	0.00%	0
•	Disagree	0.00%	0
•	Strongly disagree	0.00%	0
то	TAL		1

I feel that my current stress level i

Somewhat agree Neither agree nor disagree Disagree Strongly disagree 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 1009	Agree											
Neither agree nor disagree Disagree Strongly disagree 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 1009	Somewhat agree											
Somewhat disagree Image: Constraint of the second sec	Neither agree nor disagree											
Disagree Strongly disagree 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 1009	Somewhat disagree											
Strongly disagree 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100	Disagree											
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 10%	Strongly disagree											
		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

SWER CHOICES	RESPONSES	•
Strongly agree	0.00%	0
Agree	0.00%	0
Somewhat agree	0.00%	0
Neither agree nor disagree	0.00%	0
Somewhat disagree	100.00%	1
Disagree	0.00%	0
Strongly disagree	0.00%	0

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✓ Strongly disagree

TOTAL

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The level of stress I am now experiencing is within my expectations from before entering medical school



ANSWER CHOICES	•	RESPONSES	•
✓ Strongly agree		0.00%	0
✓ Agree		0.00%	0
✓ Somewhat agree		0.00%	0
✓ Neither agree nor disagree		0.00%	0
✓ Somewhat disagree		100.00%	1
▼ Disagree		0.00%	0
✓ Strongly disagree		0.00%	0
TOTAL			1

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believe that my level of stress is not unique among my peers/fellow medical students Answered: 1 Skipped: 0



☆ Customize Save as▼ I feel safe in asking for help or guidance from faculty at my institution without fear of judgment Answered: 1 Skipped: 0



Low participation on the survey among the subject population makes any analysis of the data insignificant. The single participant of the survey, who placed themselves in the gap year group, indicated an increased level of stress from undergrad and a noticeable effect on quality of life as a result, as well as effective stress reduction and mild confidence in confiding in peers, but neutral confidence in confiding in faculty. Greater subject participation would be required in any repeat of this study in subsequent medical school class-years

Lack of participation was the primary limitation of this study. The survey sent to the subject population was anonymized and specifically stated to be optional, with no incentive for participation outside of contributing to the research itself. A repeat study of this nature would benefit from reaching out to a broader subject population, such as first-year classes across multiple medical schools, or multiple class-years within a single school. Offering some form of incentive, monetary or otherwise, would also likely increase participation and thus the power of the study, although this kind of incentive risks compromising the anonymity of the survey results, and thus would likely require informed consent for participation.

Mental health concerns among the student population in the U.S. has become an increasingly prominent point of discussion among professional and political circles within the last several years. As such, analysis of these concerns, their impacts on performance and outcomes, and resources available to manage them among the professional student population, including medical students, is an increasingly important field of study. Further research into this topic, such as further widespread surveys, meta-analysis of GPAs, and analysis of availability and usage of mental health and therapy supports systems on school campuses would benefit greatly to this field of research.

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CONCLUSION

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