

MOLDING MELANIN MAGIC MENTORSHIP PROGRAM

By

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Abstract

Historically women and minorities have been underrepresented in the STEM field. What about individuals who identify as minority women? Their representation in the STEM field is even less than that of White women or minority men. How do we change this phenomenon and increase diversity in the STEM field? This is the question many leaders face every day when trying to increase diversity in their STEM-oriented companies, college programs, and departments. Previous research has shown enrichment programs that help “bridge the gap” between the majority and minority in the STEM field can be beneficial to minority individuals pursuing a career in this area (Brown et al., 2020). One aspect that contributes to the pursuance and retention of minority individuals in the STEM field is mentorship. The goal of this study is to evaluate the impact of mentorship on female minority high school students that wish to pursue a career in the STEM field. This topic is important to examine because it can help contribute to data on how to diversify the STEM field by targeting students in high school who wish to pursue STEM degrees in college. The mentorship program in this study helps prepare students to pursue STEM degrees in college by pairing them with a mentor who is currently a minority female in college pursuing a STEM degree and addressing topics such as college applications, resume building, mental health, time management, and navigating STEM classes in college. A series of pre-, during-, and post- surveys were administered via Qualtrics during the mentor program in the 2021/2022 academic school year. The surveys assessed participants' attitudes and feelings toward college, their knowledge and understanding of essential things needed to complete a college application, and the quality of relationship with their mentor.

Background

Although representation of women in STEM has increased overtime, women remain outnumbered by men in the field. The STEM field is a male-dominated field consisting of about 84.1% men and 26.7% women (Bureau, 2020). Women face numerous barriers that can influence their success in the STEM field including less confidence in STEM subjects in K-12 education, fear of working in a biased environment, and feeling underpaid or underrepresented (Jefferson, 2019). The National Science Board found that women make up 47% of the current workforce, but only about 28% of the STEM workforce and 5% of that percentage include women of color (Hill et al., 2010). Underrepresented minority women who pursue careers in the STEM field may face additional barriers on top of the ones they face being women in the field. Some barriers that minority women may face include limited access to the field, isolation and alienation, and college accessibility (McPherson et al., 2013).

Increasing diversity is linked to increased performance and improved creativity and innovation among individuals (Roberge & Dick, 2010). The STEM field, however, is not historically diverse and is still currently lacking increased representations from minority individuals within the field. Underrepresented minorities in STEM include Blacks, Hispanics, and America Indian or Alaska Natives (National Science Foundation, 2017). Although minority women in STEM may face many challenges, there are numerous things that have contributed to the success of minority women in the STEM field. One thing that can contribute to success is mentoring (Salto et al., 2014). Mentors can have a significant impact on the professional development of a student. Mentoring programs are useful ways to support students as they prepare to transition into the university setting. Research shows that high school students who

receive quality mentoring have a higher level of academic success because mentoring relationships provide academic, social, and career guidance that is invaluable during their adolescent years (Mentoring.org, 2020).

Being a female minority student who is currently pursuing two STEM degrees has made me realize numerous things. One of the most important things I have realized is how important mentorship is to succeed and excel to my full potential in this field. When I was in high school, I did not have a mentor to help me navigate the college application process and prepare for my major. I longed for a connection to a current college student who had recently gone through the college application process to help me through it.

Introduction

My vision for Molding Melanin Magic is to give back to girls graduating from my alma mater with something that I did not have. The program addresses this need by providing mentorship to minority high school students pursuing STEM degrees by pairing them with current minority college students actively pursuing STEM degrees at Texas Christian University or TCU. The targeted high school has a total minority enrollment of 89% (U.S. News). Economically disadvantaged students make up 62.2% of the high school population (TABS campus profile, 2021). Texas Academy of Biomedical Sciences or TABS is an early college high school designed to provide students who may not have the economic means to attend college, to graduate high school with an associate degree and career technical certification. The mission of Molding Melanin Magic is to empower, mentor, and support minority females as they embark on careers in the STEM field. The goal of Molding Melanin Magic is to achieve both personal and professional development while also building lifelong friendships.

Molding Melanin Magic is a mentorship program that serves minority females in their sophomore or junior year of high school who wish to pursue a career in the STEM field. The program was founded by Kayla Thomas; a member of the inaugural class of TCU STEM Scholars, who wanted to give younger girls what she did not have in high school while also preparing them for the rigors of pursuing a STEM career in college. The program consists of 12 mentees and 6 mentors; each mentor being assigned two mentees. The mentors are all current students at TCU that are minority females pursuing a STEM degree. Currently, the program consists of a series of 8 meetings in the 2021/2022 academic school year. Each meeting has a main topic and small group session at the end. The topics of the meetings range from college applications, resume building, and financial literacy to physical and mental health. Surveys are administered throughout the program to track the effectiveness and impact it has on the mentees' lives so far. For my research, I am analyzing the surveys to see the impact this mentoring program has had on the students and their attitudes and feelings toward college preparedness.

The mentor program has had a positive impact in the past. In the 2019/2020 school year the program consisted of 10 mentees and 12 mentors. At the very start of the program 50% of the students had never had a mentor before and did not know how to construct a resume, and 20% didn't know what Free Application for Federal Student Aid, or FAFSA was. Only 10% felt very prepared for college while 90% felt somewhat prepared or not prepared for college at all. By the end of the mentor program, 90% of mentees were able to foster a relationship with their mentors. All mentees learned about FAFSA and how to construct a resume. Mentees expressed that they learned about college applications, had a better idea of college, and felt more confident about applying and going to college. One mentee from the 2019/2020 cohort has officially committed

to TCU on a full tuition scholarship and another mentee from that same cohort was invited to TCU for full tuition scholarship interview in 2022.

Methods

Recruitment

Recruitment occurred at TABS high school in homeroom classes that have sophomore and/or junior students (6 classes). Kayla (Research Investigator) visited the school, explained the program to current sophomore and junior students and provided students with a form to complete if they were interested. The interest form was also sent out via email from the school counselor to sophomore and junior female students.

Interest Form

The interest form was used to collect email addresses of interested students in order to follow-up by sending them an application for the program.

Application

The application was used to confirm whether students identify as underrepresented minorities in STEM, their current grade level, career interests, why they wanted to participate in the program, how they became interested in the STEM field, if they planned on committing to the program and coming to all eight after school meetings as outlined in the application, and whether they had transportation home after each meeting.

Mentor Program Meetings, Meeting Topics, Incentives, Journaling, Bi-weekly Check-ins

There were a series of eight meetings throughout the 2021/2022 academic school year. Meetings took place once a month at TABS high school after school and were an hour and a half long. Meeting topics included resume building, vision boards, headshots, a STEM field overview, a college student panel, how to complete college applications and financial aid forms,

financial literacy, physical and mental health, and a STEM Day trip to TCU campus. Mentees were encouraged to journal throughout the program and share their entries at each meeting. Goals were set at the beginning of the school year and mentors checked in bi-weekly with mentees to make sure they were on track to meet their goals and to see if they needed anything.

Surveys

Surveys were distributed via Qualtrics at the beginning, middle, and end of the program and assessed the mentees' attitudes and feelings toward college, college applications, mental health, and the mentoring program overall.

Results

The results of both the qualitative data (Table 1) and the quantitative data (Table 2) were consistent with previous research about the benefits of mentoring programs. Of the students who participated, 100% reported that they felt more confident about attending college compared to their feelings at the beginning of the program. Results revealed 66% of students learned how to construct a resume, 83% know what is needed for the completion of a college application, and 92% know what a FASFA is and how to complete it. Additionally, 100% of students said they learned and implemented mental health strategies that they intend to continue using following the conclusion of the program. Regarding the mentor-mentee relationships, 100% of students reported that their mentor was beneficial to them and stated that they plan to stay in contact with their mentor after the program concludes.

Questions	Survey 1	Survey 2	Survey 3
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<ul style="list-style-type: none"> •"Giving advice" •"Having someone to guide you" •"Helping hand" •"Mentoring to me means that I will be guided by others in the way everyone including myself thinks is right, I also think that mentoring is when people help you out when you are in need of guiding and getting snapped right into reality" •"That I have someone to help me or lead me" •"Being able to guide someone (teach them what to do or not to do)" •"Mentoring to me means you have someone there to help you, mentor you, give you advice, and just a helping hand" •"Mentoring to me is someone who helps guide and lead others" •"It means I can further my knowledge with the help of someone about many different things like the career field I am going into, resumes, and the college application process" •"It's a nippy to be exposed and learn knew things" 	<ul style="list-style-type: none"> •"Helping guide someone" •"Mentoring to me means giving advice or just being there to give a helping hand" •"Mentoring to me means that you are being held by the hand as you make your own life decisions and no matter what you will have an outside voice that will bring you back to reality if you need it" •"Mentoring to me means I get the help and advice I need and have somebody to be there with me and just help me through" •"Mentoring is about aiding someone and telling your experience to others. By telling your experience others can learn what to do or what not to do in order to be able to succeed" •"Mentoring to me means someone who guides another in the right direction" •"It's truly a blessing to have people to look up to" •"Someone that helps and guides" •"Mentoring means to me to help someone out that is going through the same you went through" •"Being basically a student" •"Mentoring means to help someone who is going through the same experiences you went through. Giving them tips and advice on how to manage the work" •"It means being able to talk to or have someone that has gone through what you plan on going through and guiding you. Teaching you the do's 	<ul style="list-style-type: none"> •"Mentoring means alot to me, I think it really helped mold me and allow me to have people to lean on and vice versa" •"It means a guidance" •"sharing good information with someone who is looking to you for help" •"A mentor to me is someone who guided another in the right direction. The mentor continues to check in with their person and help with anything they need" •"Having someone to help you or lead you on what to do" •"mentoring is being able to relate and establish a relationship with someone who can help you in a journey" •"mentoring to me means having someone to guide you and listen to your days and give you advice." •"A person I can get advice for about college and going from high school to college" •"Mentoring means having someone who is going through the process you also plan on going through and being able to guide and aid you." •"Mentoring to means someone who is trustworthy and experienced to go to when needing something." •"Mentoring means to have someone to help you and give you advice whenever you're trying to
<p>Question 1: What does mentoring mean to you?</p>	<ul style="list-style-type: none"> •"Helping someone out" •"Mentoring means to 	<ul style="list-style-type: none"> •"Mentoring means to

guide someone
through something
you can provide
insight on"

and don't that they had to
learn, so you don't have to
learn them the same way
they did"

complete a goal."
•"Having someone who
can orient you and checks
up on you"

- "Its great "
- "I really found it very interesting to like get to know college students and hear their stories and listen to the advice they give. I am really enjoying the experience so far and I look forward to the future"
- "I really like this program and the knowledge/insights into the college application process"
- "I think it's a really good program to be in to help you and get advice from. They all are so helpful and welcoming"
- "I love it ! The people in this mentoring group are amazing. I don't have an older sibling but they feel like my big sisters advising me on my path in the STEM field"
- "Molding Melanin Magic has been a great program, I have learned many things from actual college students and it has given me a perspective I was looking for"
- "It's amazing!"
- "It's an amazing program"
- "I love it! I've learned so much about getting ready for college"
- "I love it so far , I feel really comfortable with everyone and feels good knowing you have people to help you"
- "I enjoy the program so far. It's interesting to see people doing what we want to and learning about their experiences as well as learning more about college"
- "I think Melanin Magic has done a great job about teaching us about the college"

Question2: What are your thoughts toward Molding Melanin Magic Thus far



application process so we
have the somewhat the same
advantages as other
students"

<p>Question 3: How has having a mentor made you feel?</p>	<p>* <ul style="list-style-type: none"> •"good" •"My mentor has made me feel very good, like someone cares to keep up with me and making sure I stick to my goals." •"Having a mentor has made me feel really good because I know if I need something that I will have someone there to help me out" •"They made me feel more comfortable with myself and just opened my eyes more." •"My mentor has made me feel safe. I feel like I can go to her and ask her if I have any question either academically or outside of school." •"Having a mentor has been a kind of a relief for me because I know I have someone who I can ask anything at anytime and has gone through the college process." •"Good" •"Very happy and we're I can tell her how I'm feeling" •"I feel better prepare for the next step (college)" •"Good actually, I really appreciate when my mentor check up on me" •"It feels relieving since we both like a couple of similar things and I want to major in the thing she is studying. It makes my aspirations seem more plausible and that I could actually achieve my career goals." •"My mentor has made me feel like I have someone in my corner, that does clearly understand and can help me." </p>	<ul style="list-style-type: none"> •"Great!" •"Happy" •"it made me feel pretty good it was very nice to have someone to talk to" •"Having a mentor makes me feel more secure because I know I have someone who has gone through a process that I am barely approaching" •"It was good , made me feel like I had someone to help me" •"It made me feel like I could freely ask questions and be able get an answer" •"It has made me feel good" •"Ready for what's coming" •"It has made me feel better informed and having someone else supporting me" •"Having a mentor has made me feel able to open up and get help or advise instead of holding it" •"It made me feel relaxed. Knowing that I'm not the only one who's going through what I'm going through and there's others who were able to complete the goals I want to complete. It gave me hope for the future" •"Great"
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- "I would like one because I have someone I can learn from and get advice from"
- "I always thought that mentors looked like fun and they always had nice conversations and relationships with eachother"
- "What made me want one is that I wanted to have somebody I could go to if I needed anything"
- "I wanted a mentor because I want to hear from someone else who can relate to me who has become successful, so I can learn the right way"
- "I wanted a mentor because of the desire to inform myself about all of these different things of going to college and all the mentors have already done them"
- "Asia Nicole"

Question 4: If you've ever had a mentor, who was your mentor? What was their title? If not what made you want one?



	<ul style="list-style-type: none"> •"I would like to go to Tarleton State University and major in biology" •"I would like to go to TCU, but if it doesnt work out I would like to either go to Providence College or NYU" •"Tcu" •"My dream university would be Columbia University because it had a good medical program. But other colleges I would like to attend would be Baylor or TCU both of them are really good schools and have a good medical program. I plan on majoring in biology " •"UNT Biology or Chemistry major" •"Grambling, and I plan to major in medical field" •"I plan on attending the University of Houston and Majoring in Nursing" •"I plan to go to Rice University for further education after I finish high school at TABS. I want to major in Physics or 	<ul style="list-style-type: none"> •"TCU or Army" •"I want to go to Tarleton State University for the pre-vet program and after I hope to continue on to vet school at Texas A&M" •"I would like to attend TCU and I plan in going into either aerospace engineering or into nursing" •"I want to attend Grambling and want to major in medical field to become a Physician" •"Biology or Biomedical Science" •"I plan on attending Texas Tech University and Major in Nursing" •"Twu & I plan on majoring in Nursing" •"Tarlenton and UNT and still not sure" •"UNT or TCU. I plan on majoring in something to do with STEM" •"I want to go to Baylor Or TCU , i want to major in neuroscience or biology" •"I want to attend the University of Texas at Austin or reach for a bigger school like Northwestern" •"I plan on attending Rice University, and I don't have a plan yet on what to major in" 	<ul style="list-style-type: none"> •"I plan on attending TWU and I want to major in Nursing" •"Tarleton or TCU.. currently it's pediatrician" •"I want to go to Tarleton State University" •"I plan to attend University of Texas Arlington, and major in Nursing" •"I want to go to Baylor , or tcu" •"I have no clue where I want to attend but I would like to major in either biochemistry or biology" •"I would like to go to TCU or NYU, and I plan on majoring in engineering or law" •"Some where close to home" •"I plan on attending Rice University. I plan on majoring in Astrophysics" •"Texas Southern or Grambling, and to become an Physician assistant" •"There's a couple of universities I have in mind. My top choice is the University of Texas at Austin. I plan to major in neuroscience" •"Physiology"
<p>Question 5: If you plan on attending college/University, where do you plan on attending and what do you plan on majoring in? If not, what are your plans after TABS?</p>	<ul style="list-style-type: none"> Astrophysics when I go to Rice University" •"TWU and majoring in nursing" •"UNT and not sure" •"I plan on attending UNT or UT Austin and majoring in 		

neuroscience or
biochemistry."

- "Anything and everything possible"
- "I would like to be prepared for anything and so I would like to learn everything I can about it"
- "I would love to learn almost everything I can"
- "What careers I can do"
- "To help me learn better , or prepare me for college"
- "I would like to learn the different career paths that are available in the STEM field"
- "I would like to learn about the different critiques"
- "I would like to learn how it is used with students my age"
- "I would like to learn current discoveries and studies involving STEM"
- "Everything!"
- "Many things like more engineering"
- "I would like to learn more about the majors available to me and how difficult the general course work is"

Question 6: What would you like to learn about STEM?



- "managing time and organizing"
- "I've learned that there's different ways to apply and a lot more scholarships than I had initially thought"
- "I have learned that it takes a lot of work and studying to go into one of these career fields"
- "I learned that there is a lot that you can do when it comes to the STEM world"
- "It is a hard working field but with the right resources being in STEM is do-able. STEM has many career options within it"
- "I have learned that STEM is an important role in our daily lives. It is a very interesting topic that opens many doors"
- "I've learned the importance of it!"
- "It's very different and many things come out of it."
- "That there are many careers"
- "About college and scholarships"
- "I've learned that being in this field takes a lot of work and dedication. You have to know what your motives are and establish that they have enough impact on you for you to do well"
- "I have learned about the numerous programs and scholarships available to us and about how to prepare for giving transcripts"

Question7: What have you learned about STEM thus far?



•"Take time for myself"
 •"I try and take time for myself and also relax and try and forget about things as much as possible when I am alone"
 •"Sleep or go out on walks"
 •"When I'm stressed I do stuff that makes me less stressed"
 •"I hang out with friends to take my mind off of things or read or go outside and sit down"
 •"I do activities I enjoy (ex; listening to music and taking walks)"
 •"Listen to music"
 •"I exercise and taking self care routine days."
 •"I run occasionally to relax myself, I have a notebook to put down my thoughts in, and I also read to relax myself."
 •"I clean my space and write"
 •"Take days off, if I can or sleep"
 •"I haven't really done anything to focus on my mental health. More or so taking breaks during a stressful time is all I do"
 •"meditate "
 •"I just take time to myself and make sure I always put myself first"
 •"For my mental health I like to spend time with just myself and my pets. I also like to listen to music while I feel stressed or tired"
 •"Listen to music"
 •"I usually take walks , I also like listening to music , and I like doing puzzles as a way to destress"
 •"I take self care days, meditate, and take time to reflect"
 •"Journal and spend time with God"
 •"Sleep and play soccer"
 •"Nothing (I don't know how to take care of my mental health) "
 •"I take breaks like hang out with friends , or just sit outside and take my mind off things"
 •"I started to crochet and I play the guitar occasionally"
 •"I like to read book and see exercise to distract me from stress or to just get a break from stressors"
 •"I journal and I spend time with God"
 •"I do breathing exercises and go for a walk*"
 •"I listen to music and make sure I have alone time"
 •"I make sure to treat myself but also hold myself accountable."
 •"Go out for walks , hang out with friends or go get Starbucks"
 •"walking or playing with my dogs!"
 •"I listen to music, hang out with my friends, and spend time alone with myself"
 •"Nothing much"
 •"I read and exercise to keep my mental health in check"
 •"Listen to music and relax"
 •"I now have self care days where I de stress and focus on making myself relaxed"
 •"Take a day off to treat myself"

Question 7: What do you do for your mental health

- "She was very nice and i felt comfortable around her:
- "It was great.. she was a great listener"
- "My mentor checked up on us occasionally to see how we were"
- "My mentor made sure to stay caught up with my goals and understand what goals I had. I was also able to reach my mentor any time I needed which was very helpful"
- "She would check up on me and ask how everything was going"
- "Christa was an amazing mentor, she was very relatable and a great person overall"
- "It was fun and very comforting knowing I could talk to someone if I needed to"
- "And mento mentey relationship"
- "My mentor has asked about the future and what I want to do after high school and has made me give it more thought. Along with keeping me informed about scholarships and programs"
- "Me and my mentor's relationship was calm and chill, she would check up on me and give me advice to keep going. She would encourage me to make it to the finish line and stick to my goals. She was very understanding with me"
- "My relationship with my mentor was fun. We had

Question 8: Please elaborate on your relationship with your mentor.



similar tastes in music as well as other things. She's majoring in what I want to major in and that makes me look up to her a lot more"

- "Checked up on constantly and make sure I was doing good in every way I needed"

Question 9: What could've made the relationship with your mentor better?

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- "Me being involved more"
- "more time"
- "More communication"
- "N/A"
- "I think it's good so far"
- "maybe more time to converse"
- "I think more communication and reaching out on both parts"
- "Umm maybe if we had more things in common"
- "I think more meeting or one on one meetings could have made the relationship with my mentor better"
- "Honestly, the relationship was good to begin with, and I don't really think nothing could've made it better"
- "If I didn't have events and could attend every merging would have probably made our relationship a lot stronger"
- "I don't think anything"

Question 10: What worked well in the program?

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- "Everything!"
- "everything"
- "the mentors are very open"
- "All of the presentations were amazing , I feel like I learned what to really look for in my future"
- "Everything , I feel like everything went good , I had no problems or complaints about it"
- "the information given for college was amazing ! The relationships were also amazing"
- "the meeting information was really fun"
- "The information that was given"
- "The presentations worked well in the program"
- "The meeting up once a month and the power points and the activities"
- "I liked that I could still see what we did even though I could not attend the meetings"
- "The communication"

Question 11:What didn't work well in the program?	*	*	<ul style="list-style-type: none"> •"N/A" •"Talking to other peers " •"everything was good" •"N/A" •"That I'm not able to stay for the full meetings I would have to leave early" •"n/a" •"Sometimes timing, also keeping up with a physical binder" •"Nothing" •"In my opinion everything worked well" •"Thought the whole program was good" •"My work schedule getting in the way of meetings" •"Everything worked well"
Question 12:Have you gained more insight into the specific STEM field you would like to go into?	*	*	<ul style="list-style-type: none"> •"Yes!" •"yes " •"I want to stick with science in biology" •"Yes , I am very determined to be a STEM major" •"Science " •"Yes !" •"Yes I did." •"YES" •"Yes I have gained more insight" •"Yes" •"My mentor is majoring in the same major I want to major in. I gained more insight on what is possible and that I need to work hard to get where I want to" •"Yes !"

Question 13: Reflecting back, what do you feel like you've gotten out of the program?

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- "A lot of key information for my personal life as well as throughout my education"
- "I've gotten more experience"
- "I have definitely gotten more information about the college life and what to expect"
- "I have been able to learn about how college life is and what the steps are to be successful"
- "Leadership and friendship"
- "I have gotten really good information on what college looks like both socially and educationally"
- "I feel like I've gained a lot of knowledge"
- "At lot of beneficial information"
- "I have been able to learn more about scholarships, programs, the importance of my wellbeing, and FAFSA"
- "Out of this program I have gain for info into the college life and how to maintain college life and regular life. I have more information about what you should do when leaving high school and preparing yourself"
- "I've gotten closer to my peers who are also in the program. I have also set long term goals I plan to follow for the near future"
- "More orientation on scholarships"

Question 14: If you answered yes to the previous question, will you continue to implement mental health tips into your life after this program has ended?

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- "Of course!"
- "Yes I will !"
- "Yes"
- "I will continue to use certain strategies to help calm myself"
- "Yes"
- "YES !"
- "Yes"
- "Making time for myself"
- "Yes I will continue to implement mental health tips into my life after the program ends."
- "Yes"
- "Yes. I will find time to de stress and implement the tips that were given to us to have better mental health"
- "Have a day off to myself"

Question 15: Did you meet any personal goals throughout this program? If so, what were they?

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- "Yes, I started journaling and doing things for me so that I don't drive myself crazy from school"
- "Being healthier and playing my sports"
- "Yes I did which if I remember correctly was maintaining my grades ad becoming a better person"
- "I was able to keep up with my grades more and learn more about self care"
- "Getting good grades"
- "I was able to find resources about college and programs that can benefit in the field I want to go to"
- "Only one, I relearned how to play the keyboard"
- "No I didn't look at my goals"
- "I met the personal goal"

of getting all A's so far in my classes"

- "Focus on myself more"
- "I was not sure what I wanted to major in before this program started. I was debating between biochemistry and neuroscience. Seeing my mentor pursue her major without any regret made me realize that I want to major in something that actually interests me"
- "Learned how to stress a little less about school"

Table 1: Qualitative Results of Surveys

Questions	Survey 1	Survey 2	Survey 3
Question 1: Have you ever had a mentor?	Yes: 8% No: 92%	*	*
Question 2: Do you wish to develop a meaningful mentorship with your Molding Melanin Magic mentor?	Yes: 100%	*	*
Question 3: Do you plan on attending a college/university?	Yes: 92% Maybe: 8%	Yes: 100%	Yes: 92% No: 8%

Question 4: I feel prepared for college.	Strongly Agree: 8.33% Agree: 41.67% Neither Agree or Disagree: 33.33% Disagree: 16.67%	Strongly Agree: 16.67% Agree: 50% Neither: 16.7% Disagree: 8.33% Strongly Disagree: 8.33%	Strongly Agree: 25% Agree: 66.67% Disagree: 8.33%
Question 5: I feel confident about attending college after high school.	Strongly Agree: 33.33% Agree: 41.67% Neither Agree or Disagree: 8.33% Disagree: 16.67%	Strongly Agree: 58.33% Agree: 16.67% Neither: 16.67% Strongly Disagree: 8.33%	Strongly Agree: 66.67% Agree: 33.33%
Question 6: If you decide to attend college will you be a first-generation college student?	Yes: 75% No: 25%	*	*
Question 7: Do you know how to construct a resume?	Yes: 16.67% Kind of: 8.33% No: 75%	Yes: 75% Kind of but would like to learn more: 25%	Yes: 66.67% Kind of but would like to learn more: 33.33%
Question 8: Are you aware of what is needed to complete a college application?	Yes: 33.33% Kind of: 50% No: 16.67%	Yes: 58.33% Kind of but would like to learn more: 33.34% No: 8.33%	Yes: 83.33% Kind of but would like to learn more: 16.67%
Question 9: Do you know what FAFSA is?	Yes: 16.67% Kind of: 58.33% No: 25%	Yes: 58.33% Kind of but would like to learn more: 33.34% No: 8.33%	Yes: 92% No: 8%
Question 10: How important is mental health to you?	Extremely Important: 50% Very Important: 41.67% Moderately Important: 8.33%	Extremely Important: 50% Very Important: 50%	Extremely Important: 92% Moderately Important: 8%
Question 11: Do you feel like your mentor has benefitted you thus far?	*	Yes: 75% No: 25%	Yes: 100%

Question 12: Do you plan on staying in contact with your mentor after the program has concluded?	*	Yes: 100%	Yes: 92% No: 8%
Question 13: Were you able to foster a relationship with your mentor?	*	*	Yes: 100%
Question 14: Have you learned any tips for mental health in this program?	*	*	Yes: 100%

Table 2: Quantitative Results of Surveys

Discussion

The survey results showed that having a mentor was beneficial to the members of the 2021/2022 cohort of Molding Melanin Magic. From the start of the program in September to the conclusion of college preparation activities in March, 100% of mentees felt like their mentor benefited them and that they were able to foster a relationship with their mentor. These findings indicate that Molding Melanin Magic can be replicated and implemented at different high schools. This is currently being done by Robert Molina through the Junior STEM Scholar Mentoring Program or JSSMP which uses the MMM model while servicing male and female students at Chisolm Trail High School and Northside High School. Throughout the 2020/2021 academic school year all participants of JSSMP reported that they felt they had a strong support system from their mentors and that they would feel comfortable reaching out to their mentors following the conclusion of the program.

Prior to the start of the program only 49% of students agreed that they felt prepared for college, 16% knew how to construct a resume, 33% knew what was needed to complete a college application, 16% knew about FAFSA, and 50% felt that mental health was extremely important. Following conclusion of the program these numbers tremendously increased resulting in 92% of students agreeing that they felt prepared for college, 66% knowing how to construct a resume, 83% knowing what is needed to complete a college application, 92% knowing about FAFSA, and 92% feeling that mental health is extremely important. The difference in knowledge that has accumulated following the start of the program shows that it has had a positive impact on the students that participated within it. Students reported having more knowledge about scholarships, college life, mental health, STEM careers, leadership, and friendship. 100% of students felt like their mentor benefitted them and that they were able to foster a relationship with their mentor.

Molding Melanin Magic is a program that was a benefit of the Experiential Projects to Impact the Community, or the EPIC, grant for community projects through TCU's pre-health office. The EPIC grant program offers pre-health seniors an opportunity to sustain their program by passing it off to younger students who are willing to continue it. Two students have expressed interest in continuing Molding Melanin Magic during their college years and will apply to the EPIC grant approval committee for continuation. The founder and director of the program has compiled all lesson plans and meeting activities into folders that can be accessed on a hard drive for the next leaders of the program. The two students that have expressed interest in the program have attended an MMM meeting and are excited about taking over the program this upcoming fall.

The Molding Melanin Magic mentorship program can be replicated at other high schools throughout Fort Worth ISD and has been replicated to some capacity already through the Junior

STEM mentoring program that started last year on the EPIC grant. The founder and director of Molding Melanin Magic plans to continue the program on a college level as she matriculates into graduate school. The target university will be TCU and the target population will be minority females actively pursuing STEM undergraduate degrees.

Conclusion

The Molding Melanin Magic mentoring program has been successful thus far with a majority of students being present for every meeting. Those that were not present were provided with the presentation for that day and checked in with their mentors if they had any questions regarding the material. Molding Melanin Magic proved successful and beneficial to the students that participated in it. Molding Melanin Magic was feasible and could easily be implemented at other high schools within Fort Worth ISD using the same program model. Results of this study reveal Molding Melanin Magic could help bridge the gap between wanting to go to college and being prepared to go to college for underrepresented minority students pursuing a STEM degree.

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