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The Mist Shrouding Community College

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A biomedical engineer by trade but I come from a family of both educators and engineers and found the engineering education marries my two passions. I believe that education truly is power and higher education is a right, therefore my research focuses on how to break down barriers to engineering and how to create pathways to engineering that begin at community colleges and continue through universities.

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Introduction

The decision to go to college is one of those decisions that is both life changing and critically important and yet somehow always finds people when they feel least prepared to make it. These "leap of faith" choices in life are never easy with so much of one's future riding on them and are made even less so when so many other factors are at play. These factors can come in many shapes and sizes but one of the most sizable is stigma. Stigma is defined by its ability to discredit and ostracize a person's identity (Pryor & Reeder., 2013). And yet Stigma does not always need to apply to a person or group of persons (Pryor & Reeder., 2013; Griffith., 2021). It can also attach itself to places and things as well (Griffith., 2021). An example of this is the stigma associated with attending community college (Griffith., 2021; Holland., 2015; Gauthier., 2020). This stigma that community colleges are schools of low academic standing (Gauthier., 2020; Holland., 2015) have even caused some community colleges to drop the "community" part from their name (Robinson., 2019). The stigma that clings to community college is like a blanket of fog shrouding the path making the decision to attend community college one filled with uncertainty and unease. Placing even more difficulty on a decision that is already so for many students. It is the goal of this paper to understand not only the effect that this stigma has on the decision to go to community college but also for those that do choose to venture into the mist what has been their experience. Leading to the research question of this study:

- 1. How has the stigma associated with community college impacted students' decisions to attend a community college?
- 2. What do the stories of students that attended community college reveal about braving the stigma?

Literature Review

The Importance of Community College

A growing problem for the United States (US) is the number of engineers and engineering careers needed to stay as one of the top innovators and world leaders (Hankey et al. 2019). With the US needing to drastically increase the number of engineers in the coming years many are looking to the changing demographics of the country to further diversify engineering in order to meet this demand (Fry et al., 2021; Hankey et al., 2019). Yet even with this great need in place many of those that are traditionally minoritized remain so in the proportion of STEM college graduates (Fry et al., 2021). Many minority students begin their higher education journey at community colleges where it was found that of the first time freshman enrolled in community college 57% were Hispanic and 52% were African American (Hankey et al., 2019). Pointing to the diverse populations that community colleges have. In tandem with this, community colleges are seen to be critical stepping stones for those pursuing a bachelors and masters degree in engineering (Mooney & Foley, 2011 & Bahr., 2017). From the years 2001 to 2007 it was recorded that 50% of Bachelor students and 45% of Masters students in engineering/STEM had at some point attended community college during their studies (Mooney & Foley, 2011). With this statistic holding steady through the year 2013 where nearly 50% of students enrolled in public universities had enrolled in credit bearing courses during their studies (Bahr., 2017). Demonstrating that community colleges not only play a crucial role in the current success of the engineering health of the US but could be the key to further diversifying engineering as well. With Hankey (2019) stating that the majority of growth in U.S. college enrollment is projected to come from minority students enrolling in community colleges

The Stigma

A stigma in today's terms speaks to the widespread social disapproval and discreditation of someone's social identity (Pryor & Reeder., 2013). Stigmas are usually identifiable by two main components, the recognition of difference and devaluation (Pryor & Reeder., 2013). Pryor and Reeder (2013) go on to further explain the purpose of stigmas with one of the key functions being exploitation and domination. Where they describe how stigmas are used by those in power to maintain the inequality between those with less so they will stigmatize them. Now in most cases when one thinks of a stigma they think of individuals or persons but these stigmas can still apply to inanimate objects as well (Griffith., 2021). Meaning that stigmas can be applied to things like community colleges. Long have community colleges been subject to criticism due to its remediation and adoptions of career and technical programs (CTE) (Gauthier., 2020; Holland., 2015). With this remediation and inclusion of CTE programs causing many to look at community colleges as "less then" or "second chance" school (Gauthier., 2020; Holland., 2015). With many finding that this stigma benefits only the universities and only hurting those that are already the most disadvantaged like first generation and minority students. (Gauthier., 2020; Holland., 2015; Griffith., 2021; Robinson., 2019). Showing that this stigma only benefits those in power that wish for the inequality to remain. With this stigma associated to community college growing Robinson (2019), a then president of a community college, posted a hashtag on social media that gained national attention "#EndCCStigma". With Robinson (2019) going on to say that the word stigma was explicitly chosen to give the campaign a "stick" factor and historical potency. Demonstrating that there is traction in attempting to push the populace away from this idea of a stigma in attending community college. Where much of the literature identifies that there is indeed a stigma associated with community college, many try to either scope it as to how it affects high school seniors' decisions. This paper will attempt to address the effects of interacting with the stigma and how that may affect one's decision making and if there are any lasting effects felt by interacting with said stigma.

Theoretical Framework

The theory of planned behavior (TPB) was originally proposed by Icek Ajzen in 1991 and is now regarded as one of the most influential theories for predicting and understanding human action (Ajzen., 2002). TPB breaks down human reasoning into three main constructs being behavioral beliefs, normative beliefs and perceived behavioral control (Azjen., 2002). Each of the constructs then interact with each other and lead to Intention and finally the executed behavior (Azjen., 2002). Figure 1 shows the basis of the theory and how these constructs interact with one another. Behavioral beliefs (attitude toward the behavior) are explained as the beliefs one has about the consequences surrounding the behavior or action (Azjen., 2002). Where normative beliefs (subjective norm) pertain to the expectations surrounding that behavior through external factors (i.e. societal or familial pressures/expectations) (Azien., 2002). Lastly perceived behavioral control speaks to how easy or difficult one may view a certain behavior will be to perform (Azjen., 2002). And as pointed out earlier it is the aggregation of these constructs that ultimately leads to behavioral intent and then on to the actual behavior being executed or not (Azjen., 2002). This is a vast theory being applied in many different fields. With Zhao (2020) using TPB to analyze the intention to drink among Australian adolescents by analyzing what contributes and affects those intentions. TPB is also used to understand Online privacy protection of users on Facebook and their actions taken to protect themselves (Saeri et al., 2014). Koropp (2014) uses TPB to understand how family firms make financial decisions and the nuance present there.

Much like many of these other researchers we hope to utilize TPB as a lens to uncover how the decision to go to college can be affected or influenced by the stigma associated with community college. Furthermore for those that did choose community college despite the stigma we hope to use TPB to understand how they came to that decision and gain insight to their decision making process. TPB would allow for us to frame the stigma in such a way that we would be able to see and theorize in what ways a stigma can affect human decision making. Knowing that a stigma directly plays to a person's fear of social identity, its direct application is the subjective norm section of decision making but due to the interconnectivity of the TPB we can theorize that this can influence not only the perceived difficulty of the decision but the perceived consequences as well. Demonstrating that a stigma can permeate and effect all aspects of decision making identified with this model and ultimately how that affects the resulting behavior or decision made.

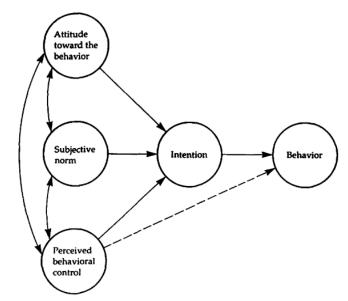


Figure 1: Model of Theory of Planned Behavior from (Azjen., 1991)

Methods

This study seeks to understand the experiences that students have when interacting with the stigma associated with community college. This section will explain in detail the process used to collect and analyze the data. The motivation for this study came from the stories that these participants told when recounting their engineering experiences. This study is part of a larger study that is investigating the experiences of Black engineering students and how they navigate the pathways to becoming an engineer.

Participants:

The members of this study were selected using purposeful sampling, selecting candidates from two separate community colleges, one located in the southeast and the other southwest United States (US). A total of 19 participants were recruited across the two institutions, all of which were undergraduates and enrolled in articulation agreement programs identified as STEM pathway programs. Of the 19, 4 were used due to them best capturing their experiences with the stigma surrounding community college in great detail. It should also be noted that the participants ranged from those entering community college directly after high school to those that have attended/graduated a four-year institution and have chosen to go back to school. Only those that consented to be recorded were then used as the sample.

Data Collection:

A Semi-Structured narrative interview protocol with 20 questions was used to construct the story of how they had decided to start at a community college and the experiences associated with that. Each interview lasted around 60 to 120 minutes and the questions consisted of their perceptions of community college, their experiences regarding the pathway program, relationships with instructors, access to mentorship, challenges in pursuit of their studies, transition to four-year institutions and any stories they may have with the stigma associated with community college. These interviews were conducted in person and were audio recorded and then transcribed through a third party and served as the primary source of data.

Data Analysis:

The analysis of this data followed a narrative analysis that was conducted over repeated readings and listening to the interviews to capture not only the explicit content of the participants' experience but also the way in which it was said. As Pawley (2019) discusses, a narrative analysis allows the researcher to analyze the content of these narratives directly but also to be able to look at the structure of the narrative and how the different rhetoric and storytelling strategies were used for the participant to convey their message. With this in-vivo coding was used. Using in-vivo coding a first run through of the data was done by listening to the interviews along with reading along. How and where the participants were making reference to the stigma of community college or their experience with it were then recorded. This was done to capture the particular structure used by each participant and identify the language and techniques used to convey their narrative along with the content. These inductive codes were then formed from the language and narrative story devices used by each participant in order to capture not only the content of what they shared but also the manner in which it was said. A thematic analysis was then conducted preceding the coding to identify any underlying themes or patterns shared among the participants.

Positionality:

Given the nature of narrative analysis and qualitative research I am aware that as the researcher I am the tool in which the data is being analyzed. With this in mind I am a Latinx male engineer that comes from a family of educators and engineers who preached to me the power of education. It is from these roots that my passion for education and engineering come from but also my strong belief that education is power and everyone is entitled to it. Though I attended a four university for engineering. I believe that community college is becoming a critical pathway to educating and diversifying engineering. With this in mind I realize I may have an outsider looking in perspective and that as a researcher it is difficult to separate my positionality from my work (Secules et al. 2021). Through peer review and self reflection I identify when these biases may be presenting themselves within my work and take the opportunity to have effective communication and critiques of the data and my interpretations of that data.

Findings

Our findings identified three major themes present for those that venture through the mist and found that not only do each of these themes influence these students' decision making but shows that even for those that do brave the mist feel the effects even long after they've made it through.

You're Crazy

For many of the participants in this study almost all had a story about how when they made the decision to go against the grain and attend community college in lieu of a four year institution they felt a sense of rejection from their peers or loved ones. As one of our participants Sara recounts a time with her friends.

"Then towards the end of the year my friends got their letters back. Oh, I got into SoSo University, I got into SoSo tech and I got into this and we will go around and like talk in the class about what we did. And then when it came to me I was like I got a full scholarship to the CC. And they're like, Oh, okay. And their reaction is what made me feel bad. I've never been a follower"

Showing that in Sara's case even though she was able to obtain a full ride scholarship to the community college in question her friends still could not believe that she would actually accept that as a primary choice. From what Sara describes the feeling of accomplishment was taken away from her in one fell swoop with just the words "oh okay". Making it so that this interaction not only managed to make her feel incompetent but also that her accomplishment was not up to par with those that got into a four year institution. Showing that she felt that she had justifying why she made the decision to herself, seen when she says "I am not a follower". It's here that we can see the power of the stigma surrounding community college. One interaction with her peers and she was taken from a place of accomplishment to hurt and rejection, not even able to share in the celebration of going on to college with her peers.

Another participant Samantha describes a similar experience but in an entirely different scenario. She describes how every year her community college would go to an air show where they inspire interest in engineering to elementary students and in the process tell them about the engineering opportunities at her respective community college. She goes on to describe the difficulty in getting students to consider community college where she says "I think one of the hurdles, one of the mountains to overcome ... there's a stigma about community college that it's less than or like, "Oh you're going to community college?" From people who are from four years and it's just like, it's not that it's a worse path than yours. It's just, it's a different path." In this account alone we do not only see how the stigma is affecting the future prospect for the next generation of students but also how even though Samantha is actively a part of the community college community she still has reservation from her interactions with the stigma. We see through this quote that even though she has made this decision a while ago, the feelings of being

ostracized and rejection that came from it still follow her and she fears that it will affect those that have yet to make the decision. And yet again we see these participants internally reflecting and feeling the need to justify the decision to go to community college when she states that community college is not the wrong path, just a different path.

Lastly one participant Jane reflects on how she was dissuaded from attending community college not by her peers but by her parents. She recounts how she originally wanted to go to community college right after college but ultimately ended up going to a four year institution because of her parents. "Actually originally I wanted to go to CC right after I graduated from High school...You know like save money like even then I knew But my parents were like you have to go a real college, They don't believe in community college.. And I felt bad cause they were paying for me". This is where the true power of the stigma is seen, this stigma runs so deep that her parents are able to confidently believe that community college is not a "real college" to a degree that they would actually be against their daughter attending one. Here we see how damaging the stigma can be where in this case it spans generations and pressures from family can be seen as even greater than those of peers. Where in this scenario Jane would have had to choose to be out of favor with her parents in order to pursue her want of going to community college.

These feelings of rejections usually associated with the stigma of attending community college can be directly addressed in TPB as well. These feelings of ostracization and rejection permeate through all major concepts of TPB. For example these feelings can cause someone to reassess the value of this decision playing into behavioral beliefs but also this fear easily is captured by the normative beliefs as well given that they may fear the social repercussions associated with making this decision. But both of these are also captured by the perceived behavioral control where now given this stigma the perceived difficulty will most likely sky rocket showing how these feelings can easily influence these students and their decision to go to community college.

Being Practical

A noticeable theme began to develop when looking through the participants recounts when having to brave the fog along the community college path being that many had a practical nature about them that allowed them to push through the uncertainty that clouded their path. As Sara recounts when she was informed that she was awarded a full ride scholarship to CC.

"It's like wow, full scholarship. That's awesome. That's a community college. And she was like, well it's actually, it's actually fine cause you're saving money and you could still go to any school you want to after you're done, if you decide to. I'm like yeah, that's good, that sounds good to me cause I need to get over that stigma of a name, a big name college cause you're getting pretty much a same education and you could still go to whatever college you want to go to. So it sounded like a win-win to me after thinking about it and not being influenced by my friends".

Here we can see that when the practical nature of community college was presented to her she was able to push through the haze and be practical herself instead of being turned away by the stigma. She also goes on further to process just how good of an opportunity this really is evident by her comparison to a four year institution and saying that it is basically the same education. Showing that when given the opportunity to see this path as something not shrouded in mystery or mist, she was easily able to tune into her own practical side and see for herself that this is a serious path to consider for higher education. Though it should be noted that even she addresses that this may not have been the case given a scenario where she would be surrounded by her peers again showing the influence this social stigma has on these students and the previous point. She then goes on further to address how she feels in comparison to her peers that have gone on to a four year institution and she again taps into this practical mindset saying "They do like let me see the good parts. It's like eating brunch that they can't afford or something like that, going out with friends and taking road trips and stuff". She goes on further to describe how despite seeing them do these things she can "see through that" and how while her friends are stretching themselves financially she is "racking up and saving money". This practical nature helps her justify that she is on the correct path and where most would find the peer pressure to great she is resolute in her decision here and stands firm. The quote that she can "see through that" demonstrates that this innate practical nature allows these students to not only make the decision to take the path less traveled but also how they can become resilient to the peer and societal pressure that they are crazy for walking through the mist.

Another participant Kate, when given the opportunity to attend either a four year institution or a community college ultimately went with the two year. "So I was completely signed up to go there (Four year institution). And then when I found out that I got the STEM promise scholarship here (CC) I decided to come here. Because I knew CC was a good school, I had gone there... during high school and my sister, she's going to CC for nursing. And so I knew that CC was a good option and so once I got the scholarship, that would save me so much money. I decided to go with the scholarship and come here and then transfer to University." Kate was able to call on not only on their own experiences but those of their sister as well and through that is able to make the decision to go to community college knowing that in the long run it will be the most financially rewarding. So again we see in this account that when able to put the stigma aside using the lens of practicality they made the decision to go to community college. We see here that the past knowledge and experiences were able to weaken the facade of mystery that the stigma tries so hard to cloud community college to the point where it seems almost as if they talk about going to community college as a "no brainer" type option given how practically sound it would be. Showing that once the veil surrounding community college is weakened it can be easily seen through with the lens of practicality.

This practical approach to decision making is captured the best within the concept of perceived behavioral control. As seen in Figure 1 can directly influence intent and therefore the executed behavior. Showing that this practicality can allow these students to see through the fog

and in doing so allow them to lower the perceived difficulty of the decision. Effectively allowing them to bypass the feelings of stigma that can be felt by these students.

You're Not Crazy

And yet one's practical nature is not enough. The final theme identified through our participants was that even though many were practical in nature, as mentioned before the fog had to be weakened first for them to tap into this practical nature. This weakening of the veil was usually done through reassurance. The reassurance that you are not crazy, you are not crazy for considering community college as a primary choice, you are not crazy for wanting to travel against the grain but most importantly you are not crazy for choosing a different path. For our participants, many had a moment or previous experience that they could leverage to start the journey through the mist and not feel like they are making a mistake. As on of our participants Samantha recounts

"to see that some people I've noticed that I go to high school with who were like, I would never go to CC. Then they went off to college and then they came back and I saw them in class and I'm like, "Hey, how's it going? How you been?" Yeah, that was a big I don't want to say a pat on the back for me, but I was just a kind of reassuring. It's okay that you're here. It's not a bad choice. I didn't want to go off to a four year and be like, I should have started at CC."

Before this quote Samantha speaks of how she knew that going to a four year university was out of the question for her so in this quote we see that even being thrust into the community college path she considered that maybe she should have tried for a four year university in spite of that. Yet seeing classmates that once looked down at community college now attending gives her the reprieve and the reassurance to say that I did make the right choice. For Samantha you can see through her words that though this reassurance was able to quell the fear inside that maybe she had made the wrong choice or gone down the wrong path. Demonstrating that this reassurance can cut through the fog and allow people to not only feel good about taking the leap but also finally let go of the fear as well.

Sara also has a similar experience with reassurance with a childhood friend. Where she says "I have one good best friend that's been my friend since birth. And I always talk to her if I'm feeling some type of way. And she reassured me that it's good." but goes on to further explain that her friend further elaborated by saying "this isn't the end. You know, this is the beginning. You sort of have a bunch of different routes that you could go to". She then explains how through this realization that community college is not the end but the beginning is what really helped her get through the stigma of community college and was one of the significant reasons why she chose to continue down the path. It's here we can see that just by having this one interaction with her friend Sara was able to put aside the fear and doubt caused by the stigma of community college and push forward. These seemingly simple acts of telling someone that they are not crazy for choosing a different path can have major effects on the course they take.

The reassurance felt by students that they are making the right choice helps weaken the strength the fog has on them. Directly translating to the perceived difficulty of the decision much like the practicality mindset discussed in the previous section. Although what makes this reassurance even more potent is that it plays into the social expectation side of decision making as well causing the fog to weaken to an even greater degree. Allowing these students to not have to bypass the other two concepts of decision making but use them in a positive way that supports the decision they are making.

Discussion and Implications

The TPB demonstrates just how hard it is for these students to shake the fear that comes from the stigma surrounding community college. This fog shrouding the path finds a way to permeate its way into every inch of the students mind and social circle causing severe doubt and uncertainty in the path they have chosen. Where many may believe this stigma to be par for the course, TPB shows just how deep this stigma can go, affecting every aspect of human decision making. With the fog able to affect each and every concept surrounding human behavior and at some points more than one. This stigma can cause students to believe that attending community college is one full of consequences, socially unacceptable and therefore incredibly difficult. Leading many to not even give the path a proper look before making the decision, given that this perceived difficulty tends to be the greatest factor in human decision making. The uncertainty and perceived difficulty can even cause those that have made the decision to question themselves. Making it so that we must ask ourselves who is the one that benefits from this stigma being in place? It is certainly not the students that are being forced to believe there exists only one true path to higher education. Therefore how can this stigma or fog can be overcome and exposed for the illusion that it is?

First the discourse and discussion surrounding community college needs to change. This would require that when discussing community college it should be done from an asset based approach and what it can offer the student rather than the way it is currently portrayed as if the student is less than for even considering it as an option. This is especially important as tuition prices only seem to be going up and student loan debt is becoming unbearable. And as engineering is pushing to diversify its population and usher in a new age we must discuss breaking down barriers to entry rather than build them up or have them stay the same. This can be done by discussing community college in such a way that it is a perfectly suitable and alternate path to engineering as a four year institution. As seen through this study many students just need the fog to weaken slightly for them to gain the resolve and believe they are making the right decision. This reassurance can be provided by anyone but would be particularly effective coming from educational professionals like advisors or teachers. Though as seen with the participants of this study a particularly strong influence comes from their primary social circles i.e. peers and family. This kind of discourse allows students to begin to feel less of the effects

surrounding the social expectations of decision making and in turn begin to perceive a lower difficulty in making the choice.

Another effective way to weaken the fog's hold surrounding community college is to try and present the community college path as a practical one. Community colleges should begin marketing their institutions based on what they can provide to the student but also be transparent in what the differences there may be. Allowing students to tap into the perceived difficulty side of decision making. As seen in Figure 1 this part of the decision making process supersedes the other two and has a direct impact on the intention of behavior. Meaning that by appealing to the practical nature of students we can give the students an effective way to bypass the strong influences the stigma has on the other realms of decision making. This can be done by showing what can and cannot be accomplished in engineering on the community college path. Lay all the facts on the table to grant the student a chance to make the decision based on facts and proceed with that in mind. An example of this would be to present the differences between the two institutions i.e. class size, tuition, extracurricular opportunities and more. This can pierce the fog and give the students a chance to see if that path is truly from them without the effects of the stigma. Though the responsibility does not lie squarely on community colleges but on the fouryear institutions as well. Long have these institutions benefited from this stigma by convincing students that the cost of education at their institution is worth it and there is no better path. Yet this is not the case these institutions need to begin looking at community colleges as partners not as competitors. If community colleges and four year institutions begin to truly support one another this would not only benefit the two institutions by lowering the barriers of entry and therefore increasing the number of students going through the engineering program but also benefit the populace as well.

Conclusion

As the need for diversity in engineering grows so does the number of pathways leading to it as well. Community colleges can be a potential partner in not only diversifying engineering but also reducing the barrier to entry as well. Although the path to community college is shrouded in a mist of uncertainty for many looking to begin their journey in higher education. The cause of this mist is the stigma associated with community colleges, and in this paper we looked to investigate how this stigma can affect someone's decision to ultimately attend community college. The three major findings to develop from this study were students tend to feel like they are going against the grain or "crazy" for making the choice to go to community college and this is only reinforced by peers and family. Second being that many that do make the decision to attend community college tend to view it through a practical lens in order to see past the mist shrouding community college. Lastly it was seen how reassurance that community college is an acceptable path was one of the most effective ways to lessen the power the stigma has over community college. Many students were able to more easily tap into their practical decision making skills when reassurance was given that they are not crazy for considering it.

Future Work

Much of the work done in this study is looking at the stigma as a whole and is investigating the phenomenon in a more universal sense. However in the future we hope to analyze how demographics may change the affect and power the stigma has on the decision making process. For example how one population may be more susceptible to the stigma or more resistant to it. With the hope of then being able to investigate the nuance there and see why or how the stigma may change among different demographics. We also would look to expand the sample size and sampling distribution for future research. Potentially opening up comparisons of how the stigma may be more prevalent in some states rather than others across the United States. Lastly, branch out to students that have transferred to four-year institutions from community colleges and investigate the residual effects of the stigma if there are any.

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