How Do You Decide Your Major(s)?: A Study of Asian American Female College Students' Major Choice(s)

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Abstract

"The "model minority myth" is an overgeneralized symbol for Asian Americans, defining the characteristics and pursuits of Asian Americans based on their racial identity. They are portrayed as smart yet humble and, according to the stereotype, they enjoy a higher income in STEM-related fields, which stands for "science, technology, engineering, and mathematics". Meanwhile, the myth perpetuates an image of Asian women as feminine, caring, and gentle. Thus, the intersectionality of the racial and gender stereotypes creates overlapping pressure and discrimination against Asian female college students. Given the stereotypes of the Asian and Asian female community, this study seeks to answer the following research questions by adding a gender component: How do Asian American female college students choose their major(s)? & How do they react to racial and gender stereotypes when deciding their major(s)? This research aims to navigate the variety of reactions of Asian American female students themselves when they choose a major in college. Using data from eight in-depth interviews with Asian American female college students aged 18 to 21, this study explores personal motivation, family expectations, and institutional influences as Asian American female students negotiate and balance multiple factors that influence their major choice(s). While the existing literature mostly talks about conformity to the model minority myth, this study explains how students develop their unique strategies to take their agency when deciding on their college major(s). Thus, this research extends the scope of the existing literature to explore students' agency.

Introduction

As a racial stereotype that dominates Western understandings of Asian Americans, the model minority myth portrays Asian American students as a submissive and hard-working group concentrated in the STEM field. The stereotype overgeneralizes individual experiences of choosing a college major and the diversity of experience among Asian Americans.[1] Even though existing literature on this topic suggests two theories of deciding on a major for Asian American students: the individualistic student choice theory and parental influence theory, the literature overlooks the interplay between these factors. In addition, this literature reinforces the idea that Asians are submissive and lacking in agency, and ignores the impact of gender in their analysis.

Amidst the wave of anti-Asian hate that has risen during the COVID-19 pandemic, education has been identified as a starting point to improve representation and agency for Asian females. It is important to consider why Asian students disproportionately participate in the STEM field when they are regarded as "model minorities." This study emphasizes the gender aspect by drawing out participants' understandings of their lives and the meanings of their major choice(s) into future career consideration. Given the stereotypes about the Asian and female Asian community, this study seeks to answer the following research questions: How do female Asian American college students choose their majors? How do they respond to racial and gender stereotypes when making these choices? This research aims to explore the variety of experiences of female Asian American students when they choose a major in college.

Using data from eight in-depth interviews with female Asian American college students aged 18 to 21, this study explores the personal motivations, family expectations, and institutional influences that these students negotiate and balance when making their major choices. Female

[1] Rosalind S. Chou and Joe R. Feagin, *Myth of the Model Minority: Asian Americans Facing Racism* (Abingdon, Oxon: Routledge, 2016), 15.

Asian American college students do not just choose the major from an individual interests lens or a family influence lens. They balance and navigate the conflict between the two, and also respond to racialized and gendered stereotypes in society about Asian Americans versus women in STEM professions. While existing literature mostly speaks to conformity to the model minority myth, this study extends the scope of this research area to examine how students develop unique strategies to assert their agency when deciding on their college major(s).

Literature Review

The existing sociological literature explores top-down influences from family or society on students but ignores their agency and the role of their gender. To address the hitherto neglected gender aspect, this section explores three interconnected factors at the individual, family, and institutional levels to review the circumstances and challenges that Asian American females face when choosing their major(s).

2.1 Individualistic Student Choice Theory

Robert Lowinger and Hyun-A Song examine two perspectives involving students' major choice by using the Education Longitudinal Study of 2002: the "parental influence theory" and the "individualistic student choice theory."[2] The authors argue that the personal motivations and interests of Asian American students are the primary driving forces behind their major selection. The individualistic student choice theory suggests an emphasis on "the individual perceptions of interest, perceived knowledge, and the belief that they can be successful in the major."[3] The

[2] Robert Lowinger and Hyun-a Song, "Factors Associated with Asian American Students' Choice of STEM Major," *Journal of Student Affairs Research and Practice* 54, no. 4 (2017): 415-428, https://doi.org/10.1080/19496591.2017.1345754.
[3] Lowinger and Song, "Asian American Students' Choice of STEM Major," 416.

authors also found that high school students with a higher sense of self-efficacy in math and science expressed aspirations to pursue a STEM degree in college.

2.2 Parental Influence Theory

Lowinger and Song further state that Asian American students who are highly dependent on their parents tend to be more submissive and therefore are more likely to choose a major that meets the expectations of their parents. As such, the choice of major is more a family decision than an individual choice. They argue that in deciding on a major, instead of prioritizing the interests of their children, Asian American parents place more value upon professional degrees and prestigious careers of higher socioeconomic status, such as medicine and engineering, rather than arts or humanities degrees with a perceived lower social currency.[4] When facing family expectations, these students are more likely to choose a STEM major than a social science or humanities major which, in turn, reinforces the stereotypes perpetuated by the model minority myth. Thus, students who want to pursue liberal arts degrees (e.g., Literature, History, Philosophy, English, etc.) face conflicting expectations and pressure from their parents.

2.3 Institutional Influences: Model Minority Myth

As a stereotype that has long dominated the racial framing and perceptions of Asian Americans, the model minority myth portrays the Asian American community as a high-achieving, hard-working, and homogenous group, rendering their individuality and diversity of experience invisible. In *The Myth of the Model Minority: Asian Americans Facing Racism*, Chou and Feagin explore this racial stigma. Drawing upon interview data, the authors

[4] Lowinger and Song, "Asian American Students' Choice of STEM Major," 416.

summarize two different approaches Asian Americans take in response to the model minority myth: **conformity** and **acts of resistance**. To conform to the expectation of the model minority myth, some Asian Americans adopt strategies of assimilation, including rejecting their Asian identity to gain acceptance from white people.[5] These people adopt and internalize white culture into their everyday thinking and behavior, accepting stereotypes as supposedly "correct" while viewing Asian traditions and heritage as wrong. For example, Asian Americans are seen as "tolerable" as long as they conform to white-dominated culture and speak only English, instead of being "Chinese-speaking strangers."[6] This perspective may limit Asian American college students to majors that are socially acceptable by white culture, those majors being STEM fields.

A contrasting approach is to resist such white-dominated racial frames through methods such as confrontation, construction of a counter-frame, self-definition, or self-valuation. Direct confrontational actions refer to overt resistance, either verbally or physically, to challenge discrimination, whereas students could also employ internal methods to construct positive self-valuation to maintain their dignity.[7] These strategies may help Asian Americans bring about tangible social and political changes for oneself and others. However, the authors point out that such resistance has not yet created a powerful and collective counterframing to the white racial frame of the model minority myth in most Asian American communities.

The authors further reveal that the model minority myth is fundamentally linked to oppressive and damaging racialized viewpoints for not only Asian Americans, but also other racial minorities. Beyond the fact that the model minority myth—even with the privilege it supposedly entails—imposes unrealistic expectations on Asian Americans, it is also employed to

[5] Chou and Feagin, *Myth of the Model Minority: Asian Americans Facing Racism*, 155.
[6] Chou and Feagin, *Myth of the Model Minority: Asian Americans Facing Racism*, 49.
[7] Chou and Feagin, *Myth of the Model Minority: Asian Americans Facing Racism*, 214.

criticize other people of color who do not reach the same "model" standard,[8] creating a boundary between Asian and non-Asian people of color.

2.4 Science as a Social Construct

Social, political, and cultural forces socially construct the concept of science. These forces have shaped the paradigm that people perceive and understand science with, Western development resulting from the European Scientific Revolution, and transmitted via colonialism and imperialism.[9] As a result, the dominant paradigm of science is embedded with Western, Eurocentric, white, and male frameworks which, in turn, create disparities between races and genders within science to shape the public understanding of the STEM fields.[10]

The social limitation of STEM-related fields to white males confines the agency of female students of color. To manipulate and redefine the image of the female STEM student of color, female Asian American students have to constantly negotiate their racial and gender identities under the Western-dominated framing of science.[11]

Guofang Li and Gulbahar H. Beckett write that many American higher education institutions perpetuate the existing gender gap in academia. Not only do female Asian American students have to bear the societal expectation of being a "high-achieving" Asian American in school and the workforce, but they must also endure discrimination in male-dominated STEM fields. Though the evidence shows that female high school students achieve higher scores in math and science, cultural and societal expectations convey to young girls that they are less competitive in the hard sciences and are only capable in fields related to nurturing and

[8] Chou and Feagin, *Myth of the Model Minority: Asian Americans Facing Racism*, 142.
[9] Peter Godfrey‐Smith, *Theory and reality: An introduction to the philosophy of science* (University of Chicago Press, 2009), 13.
[10] Athena R. Castro and Christopher S. Collins, "Asian American Women in STEM in the Lab with 'White Men Named John,'" *Science Education* 105, no. 1 (2020): 35, https://doi.org/10.1002/sce.21598.
[11] Castro and Collins, "Asian American Women in STEM in the Lab", 36.

caregiving.[12] Hard science subjects, such as physics, math, and engineering, are seen as male endeavors. The stronger the belief that inherent aptitude is the key factor to determine the capacity of learning in STEM fields, the less likely women are to pursue those fields. In this sense, the construction of science as a white, male, and Western domain discourages female participation and success in STEM fields.

2.5 Intersectionality as a Theoretical Framework

Kimberlé Crenshaw proposes the concept of "intersectionality"[13], the idea that race, gender, and socioeconomic class are interconnected rather than separated, thus creating multiple levels of social injustice for women of color. Under this framework of intersectionality, women experience overlapping underrepresentation and discrimination in different ways based on their identities. Intersectionality paves the way to deconstruct power inequalities because it is a way of "understanding and analyzing the complexity in the world, in people, and in human experiences."[14] Given these interplaying factors, Li further proposes a double-edged stereotype for female Asian American students struggling to manage negative stereotypes about females in STEM in relation to stereotypes of Asians being more naturally inclined to STEM.[15]

Methodology

3.1 Recruitment

Interviewee recruitment took place from February 25, 2022 to April 10, 2022, at the University of California, Berkeley. I employed purposive sampling to target Asian American

[12] Castro and Collins, "Asian American Women in STEM in the Lab", 37.
[13] Kimberle Crenshaw. *On Intersectionality: Selected Writings*. The New Press, 2014.
[14] Hill Patricia Collins, "Introduction," in *Intersectionality as Critical Social Theory* (Durham: Duke University Press, 2019), 2.
[15] Li and Beckett, *"Strangers" of the Academy: Asian Women Scholars in Higher Education*, 53.

female college students and then posted a recruitment poster both online and on campus. For online recruitment, I asked an ASUC[16] student senator who represents the Asian American community to share the poster on Instagram. For in-person recruitment, I put posters inside building halls at UC Berkeley, including Wheeler Hall, Evans Hall, Dwinelle Hall, and the Valley Life Science Building. I also put a QR code on the poster that contained a questionnaire about the prospective interviewees' basic information—name, age, class, gender, and major(s)—for preliminary screening purposes.

3.2 Sample

As each university has different major requirements, I decided to choose the sampling frame only based on UC Berkeley to control for variables that might affect students' major choice(s). The result of the recruitment process was a sample size of eight participants,[17] including one junior, three sophomores, and four freshmen students. Participants included eight Asian American female undergraduate students ranging from 18 to 21 years old. Among these interviewees, four were STEM majors, three were double-majors in humanities/social sciences and STEM, and one chose to major in humanities/social sciences. Six of the participants had changed their major plan(s) during their time at UC Berkeley, whether it be completely changing majors or adding a double major or minor. All interviewees identified as coming from middle or upper-middle class families.

[16] Associated Students of the University of California (title for identification purposes only)
[17] See Table 1 and Table 2 (in Appendix) for demographic information of the sample

Table 1. Overview of Interviewees (N=10)

	Pseudonym	Gender	Age	Major(s)	Year	Stated Identity	Change in major
1	Jessica	Female	18	Psychology	Freshman	Vietnamese American	No
2	Crystal	Female	18	Applied Math	Freshman	Chinese American	No
3	Alina	Female	18	Computer Science & Cognitive Science	Freshman	Chinese American	Yes
4	Melinda	Female	20	Public Health & Global Studies	Sophomore	Korean American	Yes
5	Ivory	Female	18	Sociology & Ethnic Studies	Freshman	Taiwanese American	Yes
6	Olivia	Female	21	Pure Math & Civil Engineering	Junior	Chinese American	Yes
7	Elizabeth	Female	20	History & Environmental Science	Sophomore	Indian American	Yes
8	Clara	Female	19	Data Science & Spanish Linguistics	Sophomore	Filipino-American (Eurasian)	Yes

3.3 Interviews

To understand human behavior, it is crucial to incorporate social context and interactions. Since the model minority myth reflects racial relations between Asians and others, this racial structure is socially constructed rather than defined by biological differences in skin color. From this epistemological standpoint, I chose a qualitative methodology of in-depth interviews to explore people's individual experiences and subjective perceptions of reality.

I conducted eight interviews over Zoom, for around one hour each. The open-ended and semi-structured format allowed me to observe patterns and variations within all of the interviews, through which I not only identified common themes but also grasped the unique stories of each interviewee. Meanwhile, the semi-structured nature of the interviews ensured a sense of

normalcy and provided enough space for participants to discuss their experiences and reflections.[18] During these face-to-face interviews, I gathered social cues such as their facial expressions and body language as a basis for analyzing the data. I also tried to emulate the feeling of a conversation in these interviews to ensure that all participants felt comfortable volunteering information. As a female Asian college student myself, my own identity and ethnicity made it more comfortable for interviewees to share their experiences.

3.4 Post-Interview Analysis: Transcribing and Coding

To transcribe the eight interviews, I drew upon Mergenthaler and Stinson's principles for developing transcription rules: preserving the "morphologic naturalness of transcription," or the exact reproduction of the interview.[19] I used Zoom transcripts and then reviewed the original audio recordings for accuracy. To handle confidential and sensitive information, I anonymized the transcripts of the interviews to protect interviewees' identities.

A code in qualitative research is a word or short phrase that symbolically assigns a "summative, salient, and evocative attribute" for a part of language-based data.[20] In the coding phase, I first used initial coding to analyze the interview with the most abundant data (Alina). Initial coding refers to an open-ended process that allows me to use the "first impression" phrases to describe primary content of data.[21] Then I adopted issue-based coding to find the repetitive patterns of action and consistencies in remaining interviews. Finally, I created a code book to compile and reconcile the codes and important quotes for reference.[22] Based on the codes

[18] Kristin Esterberg, *Qualitative Methods in Social Research* (Boston, MA: McGraw-Hill, 2002).
[19] Erhard Mergenthaler and Charles Stinson, "Psychotherapy Transcription Standards," *Psychotherapy Research* 2, no. 2 (1992): 129-130, https://doi.org/10.1080/10503309212331332904.
[20] Johnny M. Salaana, "An Introduction to Codes and Coding," in *The Coding Manual for Qualitative Researchers* (Sage, 2012), 1-5.
[21] Salaana, "An Introduction to Codes and Coding", 4.
[22] Salaana, "An Introduction to Codes and Coding", 21.

and sub-codes of those eight interviews, I categorized the original data and identified different themes. This standardized process allows comparative analyses among interviews with slight changes in the interviewing stage such as the question order.

3.5 Ethical Considerations in Human Research

I am aware of my ethical and professional obligations as a social science researcher to protect the information privacy of my participants. This research is approved by the Office for Protection of Human Subjects (OPHS) at UC Berkeley and I completed the online Collaborative Institutional Training Initiative (CITI) training. Before each interview, the interviewees reviewed the form that gave their consent to be audio-recorded over Zoom. I reminded them that I would keep their personal and private experiences confidential and not use their name or any identifying information throughout the research process. The interviewees were given the option to skip any question they did not feel comfortable or qualified to answer.

3.6 Reflection and Limitations

This study is socially significant to understand the factors that shape female Asian American college students' experiences. However, there are still several limitations to this study. First, due to time constraints, my research sample size was small and I only focused on UC Berkeley students. Thus, the sample excludes the experiences of Asian American female college students from other universities or institutions, and cannot offer representativeness across the country or on a larger scale.

In addition, this research relies mainly on the accuracy of interviewees' self-reports, which may include social desirability bias. The interviewees might have presented themselves

and their social context as more socially acceptable, even if it did not accurately reflect their reality.[23] To limit social desirability bias, I included interview techniques for introducing the study, establishing rapport, and asking questions. I informed the participants of the purpose and details about the study, including the data collection process, confidentiality, and anonymity procedures. In this way, interviewees would feel more comfortable to share their experiences rather than perceiving this interview as an evaluation of their academic performance.

Findings

This section presents my findings based on the analysis of eight in-depth interview transcripts. I highlight five main themes accounting for students' experiences with reasons for deciding on a major(s): personal motivation, family influences, conflicts between personal and family expectations, institutional influences, and gendered expectations. The first two themes mostly confirm existing literature on both individualistic student choice theory and parental influence theory, while the third theme extends the scope of the literature to explain the specific strategies adopted by these students facing conflicts between the first two themes. The final two themes analyze institutional influences, including the model minority myth and intersectionality between race and gender.

4.1 Personal Motivation: Strategies of Self-exploring Interests

Personal motivation, the first theme, played a salient role in several participants' major choice(s). Among the eight interviewees, two students showed a strong inclination toward their

[23] Bergen N, Labonté R. "Everything Is Perfect, and We Have No Problems": Detecting and Limiting Social Desirability Bias in Qualitative Research. *Qualitative Health Research*. 2020;30(5):783-792. doi:10.1177/1049732319889354

own motivations and prioritized their personal interests when deciding on a major (Ivory and Olivia).

Participants discussed their internal processes of exploring various academic interests before they decided on a major. Ivory, for example, noted that her high school extracurricular activities and courses served as a foundation to consider a college major: "I was already interested in social justice and politics in high school. I joined the Mock Trial and it was very important because it introduced me to law and policy that I probably wouldn't have been familiar with if I didn't take that." Furthermore, after entering college, Olivia used her experience in introductory math courses at Berkeley to gradually build her confidence in math, eventually adding a Math major.

Here, participants demonstrated how introductory courses helped them build the confidence to take upper-division major courses in a major, which confirms the "individualistic student choice theory" arguing that students' self-efficacy and interests in an academic field guide their major choice. Academic interest was the primary step for students to express interest in a field, while the sense of self-efficacy that came from personal achievements in courses reinforced those interests.

Similarly, shifts in personal interests were also significant push and pull factors for a major, which usually resulted in a change in major. Conflicts between expectations and experiences of courses were one of the primary push factors for students to change their major. For example, Alina, recalled her major change from English to Cognitive Science: "Academic English is not what I think about as an English major. I just love creative writing rather than a

formal essay." Another student, Elizabeth, expressed a similar thought: "After taking CS 61A[24] and Data C8,[25] I found that I really hate CS due to the intensive coding assignments."

All of the participants who pursued a STEM major mentioned disliking the memorization component of non-STEM courses such as anthropology or psychology. "I'm also taking an intro course, Anthropology 1, which I didn't really like because there was a lot of memorization and not really problem-solving" (Alina). For pull factors, after taking courses in different departments, most participants found a new passion in their intended new major(s). Elizabeth experienced this with environmental science: "I really enjoyed an introductory course in environmental science, so that made me want to explore more environmental problems and management."

4.2 Family Influences and Expectations

Three interviewees were primarily influenced by their family when choosing their majors (Jessica, Crystal, and Clara). Their parents all expected them to pursue a STEM major.

The most significant driver for parental influence was job security. As parents worried about their child's prospects on the job market, they expected their children to pursue a field with higher salaries to help them succeed. For example, Clara described how her mom expected her to pursue a high-paying data science job:

> "So [data science] internships [are] like $50,000 per year, you don't even need to have a graduate degree. Next summer I'm going to intern and earn a lot of money. That's exactly what my mom says: 'That's something that'll get me money.'"

[24] CS 61A: The Structure and Interpretation of Computer Programs
[25] Data C8: Foundations of Data Science

Similarly, Jessica also mentioned her mom's expectation for her to secure a high-paying job after graduation: "I don't think there's been any pushback [to major in psychology] other than my mom being concerned about me not making enough money."

Clara and Jessica chose majors with higher projected wages to meet parental or family expectations; these tended to be STEM majors as STEM-related jobs are seen as highly skilled and associated with higher socioeconomic status. To prepare those students to find a "proper" job, parents also used their social capital and connections to influence the interests and major choice(s) of their child. Crystal, a first-year student studying Applied Math, explained how her parents drew upon their prior experiences in a related field to provide advice:

> "My mom is a cognitive science professor and my dad is a math professor. And then I was talking to my mom about this and ... she suggests that if you want to do cryptography, it's actually better to get an Applied Math degree first."

With their parents' knowledge and suggestions, it was much easier for these participants to align their major with their personal interests. These findings contradict the literature that parents do not pay attention to children's interests and only focus on higher paying jobs. Instead, Asian American parents who hope for their children to enter the STEM field adopt subtle ways to cultivate their children's interests in the subject. These students ultimately found similar interests as those that their parents wanted them to pursue.

To extend the range of the parental influence theory, the following findings showed that students' experiences and interactions with their families also unconsciously contributed to the development of their interests.

> "My younger brother has autism and my parents divorced. [My mom] couldn't come home because [we] lived in different cities and she was working really hard

> after the divorce. So my brother and I didn't really have a mother figure at home, and so I had to raise my brother as a mediator. So I discovered psychology because it provides more efficient communication and it was helpful in raising my brother." (Jessica)

Here, even though it seemed as though personal motivation solely determined the decision to major in psychology, the root cause of her interest was her experience as a "mediator" when raising her brother.

4.3 Conflicts Between Personal and Family Motivations

Existing literature on this topic offers two distinct potential theories about Asian American students' major choice(s), but the literature lacks a discussion of the interplay of those two factors and how students deal with conflicts between personal motivations and family expectations. In this study, three female interviewees described their experiences when encountering such conflicts and how they balanced them (Alina, Melinda, and Elizabeth).

A recurrent theme throughout the interviews was that students wanted to major in humanities or social sciences while their parents expected them to major in STEM, as discussed in section 4.3.1. These participants adopted various strategies to deal with this problem. For example, Melinda and Elizabeth tried to choose a double-major.

> "My parents were a bit worried because I wasn't like my older sister with a Computer Science (CS) major and a lot of people that we know have Engineering degrees or CS degrees. So maybe double [majoring in] Public Health and Global Studies to meet both the interests in science and humanities." (Melinda)

> "I solidif[ied] my change from astrophysics and CS to History and then Environmental Sciences. It was both because I enjoy Environmental Sciences [as a] subject, but also because a little bit of [it] is to appease my parents … [to] ease their worries that I won't have a job after college." (Elizabeth)

When encountering these conflicts, participants also tried to combine their personal interests and family expectations to find a new interdisciplinary major or concentration:

> "Something I kind of glossed over was between English and Psych to CS: Cognitive Science is a good way to connect interdisciplinary interests." (Alina)

Study participants employed these strategies as compromises between personal interests and family expectations. One common characteristic within this group was that they all wanted to major in the humanities or social sciences first. Although their parents placed pressure on them to study STEM, these students seldom completely conformed to their parents and seldom gave up their original academic interests.

These findings demonstrate that Asian American female college students consider both personal motivations and their parents' expectations when deciding on a major or double major, rather than dutifully obeying their parents as the Asian stereotype suggests. For students whose primary academic interests were related to STEM, it was less likely that their parents strongly disagreed with their major decision(s).

4.4 Institutional Influences of the Model Minority Myth

4.4.1 Internalization

Aware of the structural challenges Asian Americans face in U.S. society, the participants were concerned about academic achievement and job security. Several participants explained the pressure that being an Asian American put on them to achieve better academic results:

> "I was the only Asian at my school and it felt really tough. But I think there also was a bit of an internalized model minority [myth] in that everyone was feeling like I should be super smart. My parents are hardworking immigrants; I should be able to live up to their expectations." (Alina)
>
> "I was taught by majority white teachers, so I could subconsciously understand that a lot of my work was perceived as good because I was Asian. And [there was] that model minority issue of like, 'I need to be the best minority compared to other minorities,' which is rooted in so much internalized racism." (Ivory)

These findings aligned with Chou and Feagin's argument that people take the success of Asian American students for granted, unconsciously pushing those students to work even harder to meet expectations.

To extend the existing literature, family influences on students are also shaped by internalization of model minority myth. Similar to the glass ceiling theory that limits Asian Americans' promotions to leadership roles in the workforce,[26] Asian immigrant parents often face systematic challenges in the workplace and society, resulting in concerns that their children will face similar difficulties.

> "As a whole, including my parents' generations and before, we are so tarnished by [the] model minority [myth] and white supremacy that we continue to see ourselves as people who are just good at math and will never become successful.

[26] Chou and Feagin, *Myth of the Model Minority: Asian Americans Facing Racism*, 93.

> We will continue to compare ourselves to whiteness 'cause that's the highest level of success we've ever seen." (Ivory)
>
> "[After the divorce] my mom came to California, with only $100 in her pocket and boxes of clothing [for] my brother and I. She worked really hard and found a stable job in the U.S. Due to her hardship as an immigrant, she hoped that I could work hard and succeed in society, so I don't want to let my mom down." (Jessica)

Based on these findings, Asian immigrant parents faced structural challenges when they arrived in the U.S., but because of the model minority myth, they internalized that the path to success in society was to simply work harder than other groups. This internalization was passed down to their children, influencing the next generation of Asian American students to pursue interests in accordance with the model minority myth.

4.4.2 Students' Agency & Resistance to the Model Minority Myth

All of the participants mentioned their awareness of the model minority myth defining Asian Americans as submissive, quiet, and hard-working, aligning their lived experience with the existing literature. Those students also shared their individual understandings of the myth, arguing that this stereotype is not only an overgeneralization but is also employed to attack other racial minority groups, including African Americans. In response to the stereotype, most of them clarified that they are creative and frequently take leadership positions in team settings.

> "I want to reject how the model minority myth defines Asian Americans as so quiet and submissive. It's definitely wrong. I actively take leadership roles and guide group work. I often tutor my fellow students [in] English writing, which gave me much confidence that I could succeed in a leadership role." (Jessica)

> "I want our assignments to be done on time with high quality, so I've kind of always taken on a leadership role, whether that is official or unofficial." (Ivory)

These findings suggest that Asian American female students were less likely to accept the stereotypes in a white-dominated cultural context, contrary to Chou and Feagin's argument. They neither accepted the racialized stereotype nor internalized those stereotypes into their ways of thinking or behaviors. Participants showed a sense of agency in determining their disposition and role in team settings, demonstrating confidence in their identities as Asian Americans and resisting the discourse of a submissive and quiet group of people.

4.5 Experiences as an Asian American Woman

As all participants are Asian American female college students, they also shared their understanding of the intersection between race and gender.

> "I subvert a lot of expectations for Asian American women. I am more outspoken and stubborn than we are typically perceived as being. The value of outspokenness gives me a sense of exceptionalism. I am able to speak out with my peers to subvert expectations of my race and gender to be traditionally quiet. But it also kind of feels weird because my outspokenness might be perceived as in defiance of those stereotypes." (Ivory)

While confronting these stereotypes can help Asian American female students construct positive self-images and self-confidence, being an "exception" can also put pressure on them, and they might encounter self-doubt. As such, having a supportive environment is crucial for the development of Asian American female students.

> "The macro-environment of college sometimes might not be friendly for Asian American female students, such as experiencing isolation in a STEM lab. In this

> case, I joined an Asian American health peer mentoring group for undergrads. We shared our concerns and experiences in finding research opportunities and internships. There's a strong sense of belongingness because now I feel like I am also part of the STEM research community." (Melinda)

These findings provide examples of the intersection between STEM, race, and gender. While the existing structure of STEM limits opportunities based on intersecting racial and gender identities, Asian American female college students still empower themselves and assert their agency. In doing so, they tend to reject the stereotypes and construct their own identities in either STEM. Rather than accepting racial and gendered stereotypes, they try to create belonging via individual and community efforts. From this perspective, it is critical to promote a more inclusive academic environment for Asian American female students and other female students of color who historically are excluded from the mainstream discourse of science. This can contribute to a more progressive STEM culture and promote cultural diversity in academia.

Conclusion

Although existing stereotypes and framework surrounding Asian American students' major choices tend to reduce their decisions to one-dimensional factors such as personal interest, family influence, and the impact of the model minority myth, this research has found that Asian American female students are able to balance different expectations and assert their agency in the process of deciding on a major.

This study offers a critical race and gender analysis of Asian American female college students. Especially given the rise of stereotypes and hate crimes against the Asian American community, this study underscores that people should recognize the diverse experiences of Asian

American women rather than overgeneralizing them. Meanwhile, it reveals that social or institutional expectations imposed upon a group can influence individuals' behavior.

Going forward, further research should be conducted on racial minority groups to explore the connections between a person, their family, and race relations in society. The patterns of exclusion that Asian Americans face also apply to many other communities of color, immigrant communities, and low-income communities. To improve the educational outcomes of Asian American female college students and other students of color, it is critical to understand the factors that influence their experience and implement more inclusive public policies in higher education. This includes promoting more institutional mentoring programs to allow college students to explore their racial, gender, and other potential identities such as sexual orientation. This discussion will enable us to incorporate more inclusion and racial justice into the public sphere.

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APPENDIX A. TABLES

Table 2: Sample Characteristics (N=10)

Demographic Characteristic	N	%
1. Gender		
Female	8	100
2. Age at Interview		
18	4	50
19	1	12.5
20	2	25
21	1	12.5
3. Class Standing		
Freshman	4	50
Sophomore	3	37.5
Junior	1	12.5
4. Students' Majors		
STEM	4	50
Humanities/Social Science	1	12.5
Double Major in STEM +Social science/ humanities	3	37.5
5. Whether they changed major(s) at Berkeley		
Yes	6	75
No	2	25