Project Title: Quieted Voices: A Phenomenological analysis of the experiences of Black/African-American collegiate aviation students

Application for 2022 Graduate Research and Creative Activities (GRACA) Grant

Doctoral Student: Theodore W. Johnson, MPA
Faculty Mentor: Dr. Angela Eikenberry
School of Public Administration

I. Project Description

1. Project Background and Rationale

Roughly 300,000 people work in the transportation sector (Bureau of Labor Statistics [BLS], 2021), and despite increased diversification in the workforce over the past two decades, the diversity within this sector has not experienced a similar trend in terms of race/ethnicity or gender. This is evident since the aviation industry is white-male dominated with 94% identifying as white while only a mere 3.4% identify as Black/African American. When factoring in gender, less than 5% of airline pilots are female (Lutte, 2021). Despite outreach efforts, there is still an underlying issue that is stymieing the recruitment and retention of racial minorities, specifically Blacks/African Americans, who are reluctant to enter the aviation industry. It can be speculated this reluctance stems from the fear they may be unsuccessful due to financial and social barriers, possess very few individuals to discuss aviation-related opportunities with, and see few individuals they identify with in positions in which they are being recruited for and/or aspire. This speculation is based on the testimonies of, and interviews shared in a study conducted by Harl and Roberts (2011), in which Black/African-American corporate pilots alluded to said barriers being prevalent.

This project aims to understand why Blacks/African Americans are not pursuing lucrative careers in aviation. An optimal method to explore this question is by focusing on the experiences of Black/African American collegiate aviation students and understanding what factors influenced their decision to enter and remain within the program. The rationale behind this is that involvement in various activities or organizations may grant minority students access to pivotal services and programs that provide (peer) support or mentorship, financial support, and a sense of belonging (i.e., community) that may be difficult to find within their aviation programs, especially if located at a Predominantly White Institution (PWI). These factors may be salient for student integration, academically and socially, into the collegiate environment, which has been suggested to increase their retention within higher education (O'Keeffe, 2013; Jama et al., 2009).

Focalizing on collegiate aviation students is paramount because collegiate aviation programs are the medium in which new generations of students are educated, trained, and funneled into the aviation industry. As such, a large portion of those currently employed within the industry are products of said programs. Therefore, by understanding the (lived) experiences of these individuals at the collegiate level, university and industry leadership can ascertain latent or covert barriers that manifest fiscally, socially, and/or in the forms of policies that serve as career blockades. This exploration would provide the leadership with pointed recommendations predicated upon the unique insight from Blacks/African Americans to improve lackluster facets of collegiate aviation programs and the industry, respectively. An optimal method to explore this question is by focusing on the experiences of Black/African American collegiate aviation students.

2. Research Questions and Contributions

The purpose of this study is to ascertain the experiences of Black/African American collegiate aviation students[1]. Doing so allows for the exploration and understanding of what factors have impacted their experience(s) as collegiate aviation students, and more specifically, how these may have influenced their

---

[1] The term 'collegiate' refers to students who are currently enrolled in a four-year collegiate aviation program and/or are recent graduates of a four-year collegiate aviation program within the preceding 12-15 months. The elongated time frame was constructed to be considerate of students impacted by implications of the COVID-19 pandemic.

recruitment and retention within their aviation program and/or the aviation industry as a whole. As such, the central research question (CQ) is stated as:

CQ: What has been the experience(s) of Black/African American collegiate aviation students?

There are two sub-questions, which form the secondary research questions (RQ) of this study:
- RQ1: What has been the academic experience(s) of Black/African American collegiate aviation students?
- RQ2: What has been the social experience(s) of Black/African American collegiate aviation students?

This research contributes to practice, theory, and methodology. The practicality of this study stems from its findings to supply collegiate aviation programs and commercial aviation operators with insight derived from the experiences of Black/African American collegiate aviators. This insight may inform higher education and industry leadership of what actions should be taken to mitigate barriers and foster an inclusive climate to enhance the recruitment/retention of these individuals to assist the industry in meeting the increasing (workforce) demand. Though some literature explores the experiences of underrepresented minorities in terms of race and gender, there has been very little recent research with especial emphasis on phenomenological studies conducted to understand the experiences of racial/ethnic minorities in STEM fields, or studies conducted to explore the underpinnings of the lackluster racial diversity endemic to the aviation industry (Molloy, 2019; Kim & Albelo, 2020). The work that does exist is in the forms of theses and dissertations; peer-reviewed works addressing this phenomenon are scant as well (Molloy, 2019; Kim & Albelo, 2020). Thus, this research enriches the literature relevant to these experiences by exploring the lived experiences of a specific demographic of underrepresented students and is more encompassing by exploring the experiences of Black/African American students enrolled in collegiate aviation programs rather than underrepresented minorities as a whole and professional pilot programs solely. The methodological contribution is predicated upon its ability to bolster the realm of qualitative research through phenomenology, which may yield insight into the academic and social experiences of Black/African American collegiate aviation students, especially those located within PWIs.

The research will be shared at the UNO Research and Creative Activity Fair in 2023. The literature, findings, and implications discussed in the research will also serve as a foundation for my dissertation research. Moreover, the research is expected to produce a peer-reviewed paper that can be published in aviation-centric and/or public administration journals such as the *College Aviation Review International* or *Journal of Public Affairs Education*.

3. Research Methodology
This proposed research builds on previous exploratory research conducted in the PA9960 Qualitative Methods course taken during the Fall 2021 semester, which examined the academic and social experiences of Black/African American collegiate aviation students. This project will retain a similar approach to the original study and will use existential (or transcendental) phenomenology. Existential phenomenology is an approach leveraged by qualitative researchers to focus on the commonality of a lived experience within a particular demographic of people (Creswell, 2013; Tracy, 2019). Phenomenology allows the researcher to capture the essence of human experience(s) via deriving an adequate description of the phenomenon at-hand to comprehend the present living moment.

Experiences will be explored via semi-structured interviews (see interview questions in Appendix) to answer the research questions. The responses to the questions will constitute the data, from which themes will be generated and then explicated through a five-step process: 1. Bracketing and phenomenological reduction; 2. Statement isolation; 3. Clustering of isolated statements to formulate themes; 4. Theme validation and modification (if necessary) and; 5. General themes derivation and composite summary drafting. To maintain consistency and reliability with the original study, all interviews will be conducted via Zoom, recorded through the software's record functionality, and transcribed by the Zoom platform itself. A second interview with each participant will take place via

phone call to confirm/verify the generated themes as required by the selected approach. The first interview is estimated to take 45 minutes whereas the second should take five minutes or less. The sample size of this study is 10. A small sample is conducive to the phenomenological approach utilized for this study because it allows for in-depth interviews and necessary probing to delve into the lived experiences of interviewees, which would be difficult to acquire with a larger sample size (Smith & Osborn, 2003; Beiten, 2012; Creswell, 1998).

With this study, I primarily plan to seek Black/African American female participants to balance the gender diversity within the original sample. In the original sample there was only one female included so to balance the initial sample I would need at least five female participants. A sample size of 10 would provide the minimum female participants needed while also providing an opportunity to interview a balance of five additional male and female participants. The additional interviews are necessary to increase the totality of the sample size from 6 to 16 and would likely render integral insight not obtained in the initial study. Specifically, I expect to garner further insight about the academic and social experiences of Black/African-American female collegiate aviation students, which differed greatly than that of their male counterparts based on initial findings. Thus, these additional interviews would enable me to redress the gender diversity limitation detailed within the previous study while further enhancing the study's findings and generalizability.

Participants will be recruited for this study via social media channels such as LinkedIn and/or Facebook. This recruitment method constitutes convenience sampling as many of the participants existed within the primary researcher's professional (aviation) network and/or possess memberships within similar aviation-centric organizations (Tracy, 2019). This type of sampling is the best approach for this study because it allows for data collection from a readily accessible sample, which is important given the time frame of the study. It is also relatively low cost, which allows me to stay within the proposed budget and allocate funding to other pivotal aspects of the study.

4. Project Timeline

Year	Month	Main Research Activities
2022	May 1-31	Locate potential participants and send invitations to participate in the study; schedule interviews with participants; begin to collect data from first interviews
	June 1-30	Continue collecting data; complete all first interviews; complete follow-up interviews
	July 1-31	Analyze/explicate data; write up research paper
	August 1-20	Review and finalize draft research paper
	Fall	Prepare for the presentation at the UNO Research and Creative ActivityFair; submit the paper to a designated research journal

5. Project Roles

Doctoral Student: Theodore W. Johnson - School of Public Administration, will take a leading role with the following research activities: developing a research design, collecting data, analyzing data, and writing the research paper(s).

Faculty Mentor: Dr. Angela Eikenberry - School of Public Administration, my faculty mentor, will provide feedback and advice over the course of conducting and writing the research paper; this includes developing the research design, collecting and analyzing data, and reviewing the paper(s).

6. Funding

I have not received any other funding for this research or previous funding from FUSE, GRACA, or UCRCA.

II. Budget Justification

The request is for a $4,800 stipend, plus $200 for supplies and expenses. I expect to spend 40 hours per week on this project over the summer months. I have no other funding support during this time. This funding will allow me to devote all my time to the project. The specific budget items and amounts include:

Budget Item	Activities		Justification and Amount
Personnel	May 2022	Locate potential participants; send invitations to participate; schedule interviews and collect data	• Stipend for living expenses • Work 40 hours/week • The wage is $10 per hour • 40 hrs x $10 x 2 weeks = $800
	June 2022	Collect data; analyze data	• Stipend for living expenses • Work 40 hours/week • The wage is $10 per hour • 40 hrs x $10 x 4 weeks = $1,600
	July 2022	Analyze data; write up research paper	• Stipend for living expenses • Work 40 hours/week • The wage is $10 per hour • 40 hrs x $10 x 4 weeks = $1,600
	August 2021	Review and finalize draft research paper	• Stipend for living expenses • Work 40 hours/week • The wage is $10 per hour • 40 hrs x $10 x 2 weeks = $800
Supplies	• Qualitative data analysis (QDA) software • Printing and photocopying research articles, reports, and materials		• MAXQDA (software for qualitative analysis is essential for conducting the research project): $100 for 24-month student license • $100 for paper, printing, photocopying, or other supplies
Total Budget	Amount Requested: $5,000		

References

Beitin, B. (2012). Interview and sampling: How many and whom. In J. Gubrium, J. Holstein, A. Marvasti, & K. McKinney (Eds.), *The SAGE handbook of interview research: The Complexity of the craft.* (243-254). SAGE.

Bureau of Labor Statistics (BLS). (2021). Labor force statistics from the current population survey. *United States Bureau of Labor Statistics.* Retrieved from https://www.bls.gov/cps/cpsaat11.html.

Creswell, J., & Poth, C. (2013). Qualitative inquiry and research design: Choosing among five approaches (Fourth ed.). Los Angeles: SAGE Publications.

Creswell, J.W. (1998). Qualitative inquiry and research design: Choosing among five traditions. London: Sage.

Harl, T. L., & Roberts, P. (2011). The Black experience in Business aviation: An Exploratory case study. *Journal of Aviation Technology and Engineering (JATE),* 1(1): 11-18. DOI: 10.5703/1288284314631.

Jama, P. M., Beylefeld. A. A., & Monnapula-Mapesela, M. (2009). Theoretical perspectives on factors affecting the academic performance of students. *South African Journal of Higher Education,* 22(5). Retrieved from https://www.researchgate.net/publication/272579348_Theoretical_perspectives_on_factors_affecting_the_academic_performance_of_students/link/55646ab508ae9963a1201eb5/download.

Kim, E., & Albelo, J. L. D. (2020). Women in aviation: A Phenomenological study exploring the needs and wants necessary for graduation. *Embry-Riddle Aeronautical University.* Retrieved from https://commons.erau.edu/cgi/viewcontent.cgi?article=1164&context=student-works.

Lutte, R. K. (2021). Bridging the Gap: Improving diversity and inclusion in the U.S. aviation workforce. *United State House of Representatives Committee on Transportation and Infrastructure.* Retrieved from https://transportation.house.gov/committee-activity/hearings/bridging-the-gap-improving-diversity-and-inclusion-in-the-us-aviation-workforce.

Molloy, J. P. (2019). Launching dreams: A Transcendental phenomenological study describing what it means to be an underrepresented student in a collegiate aviation program. *Liberty University.* Retrieved from https://digitalcommons.liberty.edu/cgi/viewcontent.cgi?article=3099&context=doctoral.

Moustakas, C. E. (1994). Phenomenological research methods. Sage Publications, Inc.

O'Keeffe, P. (2013). A Sense of belonging: Improving student retention. *College Student Journal*, 47(4): 605-613. Retrieved from https://www.ingentaconnect.com/content/prin/csj/2013/00000047/00000004/art00005.

Smith, J. A., & Osborn, M. (2003). Interpretive phenomenological analysis. In J. A. Smith (ed.), *Qualitative psychology: A practical guide to research methods* (pp. 51–80). Sage Publications, Inc.

Tracy, S. J. (2019). Qualitative research methods: Collecting evidence, crafting analysis, communicating impact (2nd edition). Wiley-Blackwell.

Appendix - Interview Protocol

Question Overview/Structure:
- 1-3: Rapport establishment
- 4-8: Academic and social experiences
- 9-10: Sense of belonging/community
- 11-12: Barriers
- 13-15: Catch-All

1. **Tell me about yourself:**
   a. Where were you born and raised?
   b. What four-year institution did you attend?
   c. What is/was your major (Aviation Flight, Management, or other)?
2. How did you get involved in aviation?
3. **Why did you decide to pursue aviation as a major in higher education?**
4. **How would you describe your initial social experience (i.e., the first year) within your collegiate aviation program?**
5. **How does this experience compare or contrast with your contemporary experiences within the program?**
6. **How would you describe your initial academic experience (i.e., the first year) within your collegiate aviation program?**
7. **How does this experience compare or contrast with your contemporary experiences within the program?**
8. **How did you go about integrating socially and/or acclimating academically into the collegiate environment, specifically within your aviation program?**
9. How has being a student of this program impacted you personally, professionally, and/or academically?
10. How would you describe the collegiate aviation community (on-campus) in terms of students, leadership, and events/activities?
11. **What barriers, if any, have you experienced as a Black collegiate aviation student? Can you provide an example of one of these barriers?**
12. **What has assisted you in overcoming said barriers?**
13. **How do you think your program could improve based on your experience(s)?**
14. What recommendations do you have for newer/younger aviation students to be successful in your collegiate aviation program and the aviation industry, in general?
15. **Is there anything else you would like to share that you feel pertinent to this interview regarding your collegiate aviation experience(s)?**

*Note: Bolded questions are top priority

January 16, 2022

RE: GRACA Proposal for Theodore Johnson

Dear Colleagues,

I am pleased to write this letter of support for Theodore Johnson's proposal, "Quieted Voices: A Phenomenological Analysis of the Experiences of Black/African-American Collegiate Aviation Students." I served as Theodore's instructor for a PhD-level *Qualitative Research Methods* course last Fall and interact with him extensively in my role as the Doctoral Committee Chair.

The proposed work builds on research conducted this past fall in the Qualitative Research Methods course. For that course, Theodore had to submit a full research design proposal that had to be approved before data collection could begin. The class provided him with an opportunity to conduct exploratory primary research before embarking on this GRACA project. Thus, Theodore has the background, experience, and training necessary to complete the project, which is entirely his own work. This project is not related to my own research program.

I will be serving as mentor for the project. I have reviewed and provided feedback on drafts of this proposal, including reviewing the budget needs and costs. I will continue to work closely with Theodore in a similar capacity throughout the entire project. We plan to meet every few weeks while the project is in progress.

For this study, Theodore will use a qualitative phenomenological approach drawing on interviews, which is appropriate for this project examining a subject with little previous research. I anticipate his research will make an important contribution to the literature and to policy and practice.

Thank you for your consideration!

Sincerely,

Angela M. Eikenberry
D. B. and Paula Varner Professor