Conspiracy Theories



McNair Scholars Research Journal
Summer 2021



TABLE OF CONTENTS

The Ronald E. McNair Post Baccalaureate Achievement Program	5
McNair Faculty and Staff	5
McNair Advisory Board Members	6
McNair Core Faculty	8
From the Director	9
NEW SCHOLARS	
Samuel Baiden	11
The Conspiracy Theory of the Genesis of COVID and its Political and Social Root	
Isha Bajaha	13
The Nature of Conspiracy Theories about Artificial Disease	
Myazia N. Daye	14
Social Media Influences Surrounding Conspiracies About the COVID-19 Vaccine	
Jailen Q. Ferguson	17
Who Is More Likely to Believe Conspiracy Theories?	
Tamaris Hollar	19
How Humans Are Vulnerable to Conspiracy Theories	
Sarah J. Laguerre	20
Social and Psychological Influences on Belief in Conspiracy Theories	
Melissa Matamoros	22
The Psychology Behind Conspiracy Theories	
Cynthia M. Meijas	24
Conspiracy Theories in the Medical Field and Big Pharma	
Rashida J. Bradley-Ortiz	26
Acknowledging the Past Misconduct of the US Government to Understand and Combat Conspiracy Theories in Different Racial and Socioeconomic Communities	
Theores in Different Racial and Socioconomic Communities	
Bisma Rafiq (C-STEP) Congrisory Theories about Covid 10 and the Covid Vessins and Why Vessinstian is Important	28
Conspiracy Theories about Covid-19 and the Covid Vaccine and Why Vaccination is Important	
Arysbel Rosa Santana	30
Social Media Platforms Spread False Covid-19 Information	
Nataly E. Vigil	32
Social Media's Influence in the COVID-19 Pandemic: How Fake News Is Leading Mistrust of the Vaccine	
Jessica J. Williams The Intertwined: Conspiracy, Paranoia, and Emotions	34

CONTINUING SCHOLARS

Estefania Garcia	36
How Telehealth Can Benefit the Future of Medicine and Society's Use of Modern Medicine	
Mariytaou Gumaneh COVID-19 Impacts on Academic Performance, Sleep, and Mental Health Indicators Among College Students	38
Junise LaRose The Impact of Physical and Social Development of Early Age Specialization in Sports	39
Akbar Narendran COVID-19 Related Stressors and the Coping Behaviors of Providers Working in the Disability Field	41
Viviana L. Ortiz The Impact of Parental Mental Illness on Child Development	43
Kevin G. Pantin Hesitancy for the COVID-19 Vaccine among Ethnic Minority Groups	45
Rebecca M. Williams Bird Brain: Comparing the African White Necked Raven with the African Grey Parrot on the Ability to Master Critical Thinking and Problem Solving	48

McNAIR SCHOLARS RESEARCH JOURNAL/ SUMMER 2021

The Ronald E. McNair Post-Baccalaureate Achievement Program

College students who are considering study beyond the baccalaureate level can realize their dreams through the McNair Scholars Program at Mercy College.

The program was established by the United States Department of Education in 1989 and named for astronaut and Challenger crew member physicist, Dr. Ronald E. McNair.

The Mercy College McNair Scholars Program began in 1995 and targets low-income, first-generation students, and those who are from groups under-represented in graduate education.

The purpose of the program is to provide enriching experiences that prepare eligible students for doctoral study.

Faculty and Staff

Dr. Kimberly Rapoza *Program Director*

Dr. Cynthia Walley *Core faculty*

Prof. Terrence Calistro *Core faculty*

Prof. Halley Collazo Research Librarian

Prof. Susan Gaskin-Noel Research Librarian

Dr. Mary Oleksowicz *Program Coordinator*

Omotola Emmanuel Sha-Toria McCoy-Gregg Areli Prado *Graduate Assistants*

McNair Advisory Board Members

Julie Arias, M.Ed
Associate Director, CSTEP/STEP

Orlando Barreiro, MBA, Ph.D. *School of Business*

Juan Bruses, Ph.D. School of Health and Natural Sciences

Anthony Canger, Ph.D. *School of Health and Natural Sciences*

Renee Haskew-Layton, Ph.D. School of Health and Natural Sciences

Barabra Jones, M.S. *Director, HEOP/STEP/CSTEP programs*

Diana Juettner, J.D. School of Social and Behavioral Sciences

Mary Knopp-Kelly, Ph.D. *School of Social and Behavioral Sciences*

Judith Liebman, M.L.S. *Library*

Alberto Manzi, Ph.D. School of Social and Behavioral Sciences

Elaine Paris, Ed.D. *School of Liberal Arts*

Sudha Ramaswamy, Ed.D. *School of Education*

Nagaraj Rao, Ph.D. School of Liberal Arts

Celia Reissig-Vasile, Ph.D. *School of Liberal Arts*

Rebecca Trenz, Ph.D. School of Social and Behavioral Sciences

Geetha Surendran, Ph.D. School of Health and Natural Sciences

James Towey, Ph.D. School of Social and Behavioral Sciences

Sanju Vaidya, Ph.D. *School of Liberal Arts*

McNAIR SCHOLARS RESEARCH JOURNAL/ SUMMER 2021



DR. CYNTHIA WALLEY - CORE FACULTY

Dr. Cynthia Theresa Walley is an educator, scholar, and counselor. As an educator, she believes that all students are capable of exceptional things when there are high expectations, support, and humor guiding them along the way. A student recently wrote to her stating "...Thank you for pushing us the way that you do and caring for our success." As a scholar, she is dedicated to the profession and is a recent recipient of the AAUW Community Action Grant for the project titled Counselors Advocating for STEM (CAS). This professional development workshop is for K-12 Westchester/Bronx school counselors to increase their knowledge, skills, and practice to expose, inform, and motivate underrepresented students and female students regarding STEM opportunities and participation. As a counselor, she is committed to professional service and is currently President-Elect for the New York State School Counselor Association (NYSSCA). She is committed to uniting, representing, and supporting school counselors in New York State as they provide academic, socioemotional, and college/career services for all K-12 students.



PROFESSOR TERRENCE CALISTRO - CORE FACULTY

Since 2018, Terrence Antonio Calistro Jr. has been teaching faculty for the McNair Scholar Program at Mercy College. Currently, Terrence works as both an adjunct professor and learning support facilitator for Mercy College. Courses Terrence teaches include Statistics of the Social and Behavior Sciences, Computer Science of the Social and Behavior Sciences, Introduction to Psychology, and the McNair Research Design and Statistics. Aside from teaching, Terrence also works as a freelance data analyst.



DR. KIMBERLY RAPOZA - PROGRAM DIRECTOR

Kimberly A. Rapoza, PhD is an Associate Professor of Psychology in the School of Social and Behavioral Sciences at Mercy College. She has a steady stream of authoring or co-authoring peer-reviewed articles, edited chapters, and presentations on family violence and health. As PI on institutional grants, she has led the Ronald E. McNair program at the college for nine years, supported by a renewed grant from the U.S. Department of Education, and pursued her research on childhood maltreatment and health, under an NIH-RIMI subproject, and multiple NIH-EARDA awards. Her most current research is funded by NIDILRR and she seeks to understand, with her two co-PIs, how patient-provider discordance alters the heath and healthcare experience of teens with Lupus. She has been active in professional associations, including the American Psychological Association and Association of Psychological Sciences.



DR. MARY OLEKSOWICZ - COORDINATOR

In addition to her acupuncture practice, Mary Oleksowicz teaches Health Science courses and traditional Chinses Medical theory as an adjunct faculty member at Pacific College of Oriental Medicine and Kaplan University. A Mercy College and McNair Scholar alumnae, Mary fully understands the commitment necessary to juggle family, work, and school. It is this "can-do" message that Mary tries to convey to current and prospective students.

Scholars Program MERCY COLLEGE, DOBBS FERRY, NY



Two-thousand and twenty-one marks the twenty-sixth year of the Ronald E. McNair Post-Baccalaureate Achievement Program at Mercy College. Named after Ronald Ervin McNair, the second African American to fly in space, this federal grant serves as a living legacy to Dr. McNair. Dr. McNair was born and raised in rural South Carolina, graduated magna cum laude with a BS degree in physics from North Carolina A&T State University in Greensboro, and in 1976, earned his Ph.D. degree in physics from MIT. He was one of 35 applicants selected from among thousands for NASA's space shuttle program. His first space flight was in 1984 as the mission specialist aboard the space shuttle Challenger. Dr. McNair's second mission in 1986 ended tragically when the Challenger exploded seconds after takeoff.

Dr. McNair was also a loving husband, son, and brother, devoted father, accomplished jazz musician, and karate expert. In 1989, the United States Congress, honoring his memory, his achievements, and promoting his inspiration, established the Post-Baccalaureate Achievement Program to encourage undergraduates who are lowincome, first-generation or members of under-represented groups in higher education to pursue the path leading to the doctoral degree.

Since 1995, the McNair Scholars Program at Mercy College has provided research experiences and other scholarly activities to undergraduates who meet the program criteria and aspire to continue their education in graduate school. Each Mercy McNair Scholars makes an individual pledge of time and effort to develop the skills necessary for success in graduate school while working toward his or her bachelor's degree, and for some, holding outside employment and supporting families. The depth of their determination can be measured by the number who have presented their research papers at conferences and universities across the country and continued their education toward the goal of earning Masters and doctoral degrees.

The McNair faculty chose conspiracy theories as the topic for the 2021 cohort of new McNair Scholars. The New Scholars closely examined issues identified by the McNair faculty as central to this current and ongoing theme in American life. Each New Scholar selected a topic from the list to work on during the summer. They joined the Continuing Scholars, a group of more experienced students, who continued working on independent research projects, with their faculty mentors.

This year again saw some significant changes to the McNair program. Due to the COVID-19 crisis, we hosted our 2nd virtual McNair summer program. However, the format did not change the dedication of students, faculty, and staff to once again produce stellar scholarship and to master the path to graduate education. The summer program invited nationally renowned scholars working in the area of conspiracy theories to present their current work and research. Mercy College's own Dr. Benjamin Abelson presented on the epistemology of conspiracy theories and Dr. Renee Hobbs from the University of RI discussed methods of teaching and countering conspiracy theories. Finally, Dr. Joseph Uscinski from the University of Miami discussed the nature of American conspiracy theories.

Scholars Program MERCY COLLEGE, DOBBS FERRY, NY



In addition, we had two book clubs with Clever Girl Finance and the TRIO/COE sponsored book Across that Bridge by Congressman John Lewis. We also did a deep dive into personal statements, financial literacy, resume creation and interview techniques with Dr. Melissa Walker, RefWorks, and optimizing learning styles. Although we could not travel there in person, CUNY hosted us in a virtual tour of the Graduate Center and program offerings. There were also many meetings with Prof. Haley Collazo and Prof. Susan Gaskin-Noel, our program librarians, who enable the Scholars to write and present their best work.

Congratulations to our Scholars and Mentors on a successful year. Many thanks to our Advisory Board, the Mercy College Administration and faculty, and Associate Provost Dr. Saul Fisher. In recognition of their time and devotion to the Scholars, a huge thanks goes out to summer program faculty Prof. Terrence Calistro and Dr. Cynthia Walley. Special thanks to Dr. Mary Oleksowicz, program coordinator, who keeps the program running smoothly and provides tireless support to the Scholars and faculty. Last but not least, a heartfelt thank you to graduate assistants Sha-Toria McCoy-Gregg (joining us from SSBS) and Omotola Emmanuel and Areli Prado-- McNair (alumni that came back to the summer program to "pay it forward").



Abstract by: Samuel Baiden

McNair Faculty Mentor: Dr. Cynthia Walley

The Conspiracy Theory of the Genesis of COVID and its Political and Social Root

Abstract

Misinformation and conspiracy theories have raised concern worldwide since COVID-19 began. There is speculation that the COVID-19 virus originated in China. Many conspiracy theories have caused millions of people around the world to believe otherwise. Other conspiracy theories have stated that COVID-19 originated from the United Stated and vice versa. Other conspiracy theories spread the belief that it was used as a bioweapon between both the United States and China. This paper will explore the conspiracy theories surrounding the genesis of COVID-19. Furthermore, it will present the different beliefs among different demographics on the conspiracies on the genesis of COVID-19, and some of these demographics include race/ethnicity (i.e., African American and Asian or Asian American). There will be a focus in this paper on the political and social issues caused by the different conspiracy theories surrounding the genesis of COVID-19 and a possible way to combat this.

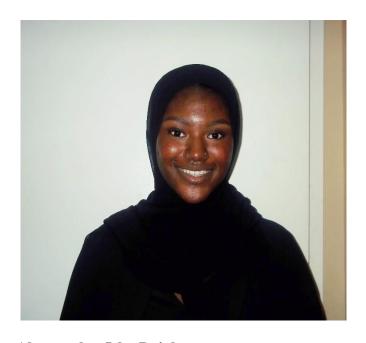
Keywords: COVID-19, Conspiracy Theory, Demographics, Biological Weapon.

Samuel Baiden is a Ghanaian American born and raised in West Africa (Ghana). Samuel has spent most of his life in Ghana, where he attended kindergarten, elementary, and middle school. In December of 2015, Samuel arrived in America, where he began his high school education at Brentwood High School on Long Island, New York. There he developed great attributes, capabilities, such as creativity, critical thinking, problem-solving skills, self-confidence, and great communication skills. Samuel received many accomplishments such as The Resiliency Award from former New York Senator Monica Martinez, the academic award, the student of the month, and a community service award.

After his successful three years of high school, Samuel developed a passion for computers and how they perform a specific type of task. Samuel also joined the police Explorers' Program in Suffolk County, where he developed the love and passion for assisting the community in policing. It was these experiences that led him to a professional path in the field of Cybersecurity.

Samuel is now an incoming senior at Mercy College, double majoring in Cybersecurity and Criminal Justice. As he furthers his education, and with the support of faculty, staff, and the resources provided by Mercy College, Samuel has been exposed to many opportunities where he was able to attain his first internship as a freshman at the Police Reform Organization Project. In this internship, Samuel assisted in court hearings of defendants from one court district to another. In addition, Samuel has been a Resident Assistant, Orientation Leader, Student Ambassador, and Programming Assistant for the Department of Student Life.

Samuel's future goal is to obtain a Ph.D. in Computer Information Systems to further his career with the National Security Agency (NSA) or Corporate Homeland Security. Samuel hopes to address the issues of hacking and data theft in the world by creating the most powerful and advanced firewall software. As a McNair Scholar, he is exploring the role conspiracy theory had on the genesis of COVID-19. Samuel will graduate in May of 2023 with both a bachelor's degree and a master's degree in Cybersecurity and Criminal Justice, and once finished he will pursue a Ph.D. at George Washington University.



Abstract by: Isha BajahaMcNair Faculty Mentor: Dr. Kimberly Rapoza

The Nature of Conspiracy Theories about Artificial Disease

Abstract

Conspiracy theories seem to have a negative connotation due to the fact that there is insufficient evidence to prove many conspiracy theories. There are numerous medical conspiracy theories, artificial diseases being a common one. For example, some people believe certain diseases are not real such as HIV, AIDs, and other sexually transmitted infections. For a while now, African Americans have not had a positive relationship with healthcare systems. In addition to this, African Americans also have doubts about the healthcare system and are prone to believe in medical conspiracy theories. It is also more common for adults to believe in these medical conspiracy theories rather than young adults and teenagers. The purpose of this paper is to explore how certain characteristics and/or demographics can affect belief in these conspiracy theories.

Isha Bajaha is a Muslim, Gambian, first-generation Mercy College student majoring in Biology. Isha aspires to attend PA school after obtaining her BS. She resides in the Bronx and has four brothers. She has been able to maintain over a 3.5 GPA and has been a part of a career/college readiness program called Breakthrough New York since the sixth grade. She also will have the opportunity to volunteer in Costa Rica this summer at local clinics in order to gain clinical experience and shadow medical providers. Isha's father (may his soul rest in peace) firmly believed in her and her siblings' ability to be successful in order to make change. Coming from an underdeveloped country is Isha's main motivation to pursue a career in medicine. The majority of her family lives in Gambia and she noticed that Gambia does not have easy access to a lot of the medication we can simply purchase over the counter. In Islam, we are encouraged to help those in need. The Prophet Mohamed (peace be upon him) also said, "Smiling is an act of charity". Growing up Muslim makes Isha believe simple acts of kindness can promote change. This is what pushes Isha to pursue a career in the medical field because change starts with one person and she believes if she does not step up to instill change in her country, who will? Isha knows McNair will provide full support in her future endeavours and is excited to go on this academic/career journey as a McNair Scholar.



Abstract by: Myazia N. Daye

McNair Faculty Mentor: Dr. Cynthia Walley

Social Media Influences Surrounding Conspiracies about the COVID-19 Vaccine

Abstract

COVID-19 (coronavirus disease) is a lethal virus that continues to impact numerous places and people throughout the world. In order to prevent the disease's spread and destructive consequences, researchers are still working on developing a COVID-19 vaccine. The outcomes of coronavirus vaccination studies have been favorable thus far, despite the fact that over the past few years, vaccination acceptance has been on a downward trend. The general public continues to express significant skepticism about the COVID-19 immunization program. Immunization hesitation and refusal are important health threats now that immunization is widely available across the world. As a source of health and medical information, social media is becoming increasingly important. When individuals use social media, they can easily share knowledge and information with others from all over the world. This is one of the most significant benefits of using social media. Some communication platforms, such as Instagram, Twitter, and Facebook, have been discovered to be more frequently used to distribute not only helpful information but false information and create conspiracy theories amongst the general population. There is a growing anti-vaccination movement that is spreading disinformation about vaccine safety on the internet, resulting in vaccine reluctance and rejection among the general public. In addition, medical conspiracy theories, lack of faith in governments, and how health experts have influenced people's choice to acquire the COVID-19 vaccine have had a major impact. Therefore, it is important to evaluate COVID-19 vaccination rumors and conspiracy theories that are spreading on social media platforms, analyze their context, and then their impacts on public health.

Myazia Daye was born and raised in the Bronx, and she is the oldest of three children. While growing up, Myazia often struggled in school as a child, experiencing failure and doubt. After watching many of her classmates and family members struggle with mental illness, she decided that she was interested in working with adolescents. She wants to aid in treating and supporting children with diseases by identifying them early, which gives them a higher chance of effective treatment.

Her passion for giving back, while still expanding her mind to new experiences, has driven her to do better and be motivated to make changes in her life. Myazia has an interest in the human mind and why people think, feel, and desire what they do. It was this interest, combined with her upbringing, that has driven her to major in psychology while hoping to one day become a psychiatrist or obtain her doctorate in clinical psychology.

Her desire to give back has been evident while attending Mercy College. As a second-year junior at Mercy College. She is involved in many extracurricular activities. For instance, she is President of the Mavericks Give-Back Club, Vice President of the Literary Association, a member of the Honors Students Council, as well as many other organizations.

She expanded her interest in clinical psychology by participating in the STEM summer research program under the mentorship of Dr. Julia Zavala. She recently presented her research topic on The Relationship Between Social Media Use and GPA in Males and Females at the Westchester Undergraduate Research Conference. She hopes to set an example for others that change in one's life can occur with determination, consistency, and understanding. After completing her academic studies, she wants to create her own clinical practice, which will allow her to create a non-profit organization for low-income countries and neighborhoods and travel the world to help people gain the help they need.



Abstract by: Jailen Q. Ferguson

McNair Faculty Mentor: Dr. Cynthia Walley

Who Is More Likely to Believe Conspiracy Theories?

Abstract

A conspiracy theory is a conviction that some undercover yet compelling association, typically the government, is answerable for a situation or occasion. Conspiracy theories are presented to us in various ways and some people are more prone to fall victim to these speculations and view them as facts. Conspiracy theories conventionally attempt to seize political or financial power, misuse rights, infringe upon set up plans, hold fundamental secrets or change bedrock foundations. There are many diverse types of people who believe in conspiracy theories. This study benefits all parties reading because you may recognize yourself while reading and determine whether you have fallen victim to belief in conspiracy theories or fake news. It is imperative to understand the characteristics of individuals who are vulnerable to believing conspiracy theories, and it's important to understand how to protect people from falling victim to one or many. This paper seeks to examine the different fields that conspiracy theories reside in. This paper will inspect and study the personality characteristics and traits individuals hold that allow them to fall victim to belief in conspiracy theories as well as the personality characteristics and traits that allow them to resist these theories. This paper will explore the reasoning behind those who believe in these theories as well as explore the reasoning of resistance for some individuals. After that is discussed, this paper aims to provide sufficient and precise information on what can be done for future references in order to provide a combative plan to fight off the belief of conspiracy theories and fake news as a whole.

"Be so good they can't ignore you," is a motto that Jailen Ferguson lives by. To Jailen, this quote highlights that in order to leave a lasting impression, you must always be on top of your game. Jailen has lived in four out of the five boroughs in New York at one time in his life, forming him into who he is today. Growing up, Jailen saw and faced many struggles from financial hardships to family division leading to emotional stress. Jailen was exposed to seeing different types of behaviors and thought processes that were deemed questionable to him. Behaviors such as manipulation, aggression, and blaming others for things not going accordingly from family members. However, he did not allow minor difficulties to diffuse his future achievements. Being an only child, Jailen and his mom maintain a strong bond as they push each other daily to be the best versions of themselves and to reach the goals they have set forth. Jailen believes that with understanding different actions and thoughts, he can understand how these practices of behavior can be diminished, keeping them from occurring for his future, which is where his interest in the field of psychology stems.

Jailen is in his third year at Mercy College, currently pursuing a Bachelor's degree in Psychology. Jailen is highly motivated and consistently performs to his fullest potential using his skills of adaptability and leadership. Jailen continues to strive for academic greatness while prioritizing his mother's mental and physical health while still in a pandemic.

Jailen shows high skills in leadership as he typically finds himself always leading in group work and projects either school-wise or in social settings. Jailen sees a future where he is doing something within the clinical psychology field, primarily focusing on mental health. Jailen sees himself doing that through counseling, therefore leaving him with the long-term goal of attaining a Master's Degree. Through the McNair Scholars Program, Jailen is currently doing research on conspiracy theories, the impact they have on individuals, and researching whom they affect.

Abstract by: Tamaris Hollar

McNair Faculty Mentor: Dr. Cynthia Walley

How Humans Are Vulnerable to Conspiracy Theories

Abstract

Conspiracy theories are beliefs that some covert, but influential person is responsible for a circumstance or event. Some people believe the American military installation Area 51 is researching and experimenting on aliens and their spacecraft. Some people believe in Bigfoot, while others believe in theories such as a giant active volcano under Yellowstone in Wyoming could erupt and wipe out the United States. Conspiracists believe the government knows when the eruption will happen and believe there are chips in vaccines, and trips to Mars, etc. These conspiracy theories can be helpful or harmful. Many people are prone to believe in conspiracy theories however there are ways to protect against them. This paper will explore how people are vulnerable to conspiracy theories and discuss the steps that might be most useful in combating conspiracy beliefs.

Biography

A promising student, Tamaris is a rising junior at Mercy College hoping to get her bachelor's and master's degrees in Early Childhood Education. As a first-generation college student, she is the oldest sibling in her family. Being so close to graduating motivates her to work harder to finish off strong. Tamaris comes from a place where opportunities don't come around often. She is blessed to have the opportunity to go to college and get a degree. Tamaris's background has had a great impact on her academic and career choice. The lack of resources and parental divorce made it difficult for her to strive in her early childhood years. As a young student, Tamaris tended to go through frustration and depression and is well aware of the struggle that young children can go through. This situation, combined with her work as a camp counselor, babysitting her siblings, and one brother having autism, developed a curiosity in her to work in special education and get a degree in Early Childhood Education. She hopes to be a good figure to look up to and make sure every student gets a chance to get their education. Although Tamaris was not an honor student throughout high school, she is a current honor student at Mercy College. Tamaris continues to work hard to expand her knowledge. In her spare time, Tamaris likes to listen to music and focus on self-care. She also would like to advocate for self-care and expose people to different forms of self-care. Tamaris is thankful for the McNair Scholars program for allowing her to have a voice and explore new topics.



Abstract by: Sarah J. Laguerre

McNair Faculty Mentor: Prof. Terrence Calistro

Social and Psychological Influences on Belief in Conspiracy Theories

Abstract

There are many prevalent conspiracy theories rumored to exist throughout the population for many years. Conspiracy theories are fundamentally explanatory ideas of probable secret tactics to control social order. These contradictory viewpoints of events from the standard explanations have prompted certain members to feel deception is thriving. Conspiracy believers are implied to be psychologically delusional by those who oppose and are skeptical of conspiring notions. In resistance to this notion, supporters of conspiracies believe the powerful are set to gain by altering occurrences in society. Many researchers have explored the nature of conspiracy believers. Motivation and affiliations were explored in search of a commonality. Control, fear, and exclusion were prevalent in these studies. With these extensive observations, selected researchers have found trends among the believers. These developments indicate both psychological and social motives are factored into the acceptance of these theories. These influences can alter perceptions and increase insecurities among individuals. Suggestive measures are noted in combating these views. Research findings have referred to analytical thinking as a key source of rationalizing and concluding that logical explanations are needed to eliminate conspiring perceptions.

Sarah Laguerre is of Haitian ancestry. Haiti is a country that struggles with poverty and issues regarding educational attainment. Her family has encountered countless struggles in completing academic studies. Though education was greatly valued by her parents, academic opportunities were limited due to financial constraints and the overall environment. Upon marriage, Sarah's parents migrated themselves, her, and her family to the United States in the pursuit of building a better life. Growing up, her parents frequently stressed the importance of education and how it leads to success and endless opportunities. Her parents worked extensively and struggled to provide for their family. Despite all their efforts, Sarah had to discontinue her academic journey at this point due to devastating life circumstances in the early 2000s. Though successful in her current employment at a thriving outsourced revenue management group, it dwelled on her for many years as she felt unaccomplished. This thought was retained as an intrapersonal conflict for her. Sarah possessed many concerns while pondering returning to school as an older adult (i.e., fears of keeping up with younger adept peers, adapting to current technology, work-school-family responsibilities balance, etc.)

After a long hiatus, she put aside her fears and re-enrolled into Mercy College in fall 2020. She is committed to the bachelor's program for behavioral science/health services management with a minor in sociology, with aspirations of going beyond for a graduate's degree. She believes that the fields of sociology and healthcare have a predominant relationship with each other and societal functionality. It is her thought that specializing in both fields can assist in cultivating quality and efficiency in healthcare delivery.

Though the initial transition was challenging, upon returning to her studies, she has maintained a 4.0 GPA. She was rewarded with acceptance to both the CSTEP and McNair Scholars programs. In the future, she has the entrepreneurial intention of opening her own independent quality healthcare management group. Sarah not only wants to set a high standard for her teenage son but also achieve intrapersonal fulfillment. She aims to inspire other single African American mothers that nothing is unreachable with hard work and perseverance.



Abstract by: Melissa Matamoros

McNair Faculty Mentor: Dr. Cynthia Walley

The Psychology Behind Conspiracy Theories

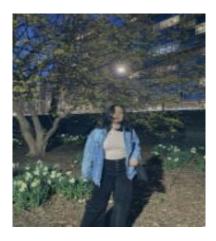
Abstract

People everywhere have heard of conspiracy theories as they have been around for a long time. However, we never judge or think twice about the repercussions of believing these theories over factual evidence. Conspiracy theories affect us in many ways. One of the more noticeable ways is psychology-based. If we keep on the same track of believing these theories, fake news, media outlets, etc. we only grow further away from what is factual. Thinking ahead, we need to understand the psychological reasoning behind the susceptibility and preference for choosing to believe these theories rather than scientific-based evidence and/or research. Our society and the way people are becoming more susceptible to these theories is threatening the credibility of years of research and factual evidence pertaining to various topics that end up being the target of conspiracy theories. Looking at it from an outer perspective, this paper researched various theories and the statistics of people who were susceptible and what exactly created that problematic urge to choose to believe said theories (psychology based). In this paper, the main focus is the psychological aspect behind the susceptibility of theories and how it presents itself in society. Furthermore, by studying these theories and how it affects people, we can offer a new insight as to why it is so easy to become susceptible and how people are misinformed on topics that have the ability to cause harm, unintentionally, to their mental health.

Melissa Matamoros is currently a full-time student working towards her bachelor's degree in biology/biomedical sciences with a minor in Spanish in the School of Arts and Sciences at Mercy College. Although Melissa is not the first to graduate from college in her family, she is the first to pursue a career in medicine. Her drive and ambitions for her future are what keep her on task and motivated to cross that finish line in a suitable time. The support and reassurance from her family and the tight-knit community present at Mercy College is what keeps her at bay and focused.

While keeping busy, Melissa enjoys getting involved in other organizations and projects. In the recent academic year of 2020-2021, Melissa conducted research in neurodegenerative diseases alongside her mentor, Dr. Haskew-Layton. During that time, the research presented itself as a way for Melissa to explore other opportunities available to her. This led to her finding the McNair Scholars Program. As a McNair Scholar, Melissa not only looks forward to being guided by knowledgeable and inspiring people, but she also hopes to take the skill sets learned throughout this program and apply that knowledge to her future studies.

In more recent times, Melissa found herself enjoying learning about the law which has opened a door for her to find programs that match with her career choice. Due to this new insight, she developed an interest in law. Melissa will be preparing to apply to medical schools in hopes to gain acceptance to practice medicine and law, earning her MD/JD or DO/JD degree.



Abstract by: Cynthia M. Meijas

McNair Faculty Mentor: Prof. Terrence Calistro

Conspiracy Theories in the Medical Field and Big Pharma

Abstract

According to Webster Dictionary, a conspiracy theory is a theory that explains a certain event or set of circumstances as the outcome of a covert scheme hatched by usually strong conspirators. One of the most argued about medical conspiracy theories in the medical field is the Big Pharmaceutical conspiracy theory. The Big Pharma conspiracy theory is a collection of conspiracy theories that claim that the medical community in general and pharmaceutical companies in particular, work for malicious reasons and against the public good, disguising effective treatments or even causing and worsening a variety of diseases. The purpose of this research aims to educate the general public on not only why people and especially minorities tend to believe in these conspiracy theories. Follow by historical data and, the most important in this case, scientific proof, and statistics. It is essential to explain what the Big Pharma theory is in general but also to give specific examples. Topics like HIV implantation among the population, the fight against cancer, anti-vaccine, and anti-depressant conspiracy theories are also discussed.

Cynthia Mejias is one of this year's new McNair Scholars. She immigrated to the United States in 2017 from Puerto Rico. Following her first steps towards a profession in medicine, she decided to move to the United States to fulfill her passion for helping people. That year was one of the hardest for her, not only because she needed to adapt to a whole new culture and learn a new language, but because two months after leaving her family, a natural disaster hits the island of Puerto Rico. She felt powerless because she could not help in more significant ways other than sending donations. This made her realize in a bigger way that her purpose is to help others. Cynthia began to get involved in volunteering activities. She volunteers in nursing homes and during the pandemic decided to get certified as a medical assistant to start helping people before she finishes her career. Cynthia is now a senior student at Mercy College, majoring in health sciences. After graduating next year, she desires to keep learning since in the career she chooses to follow it is necessary to obtain a master's degree. Cynthia wants to keep learning and help in various aspects of medicine like dermatology, emergency rooms, and preferred field surgery. Her main goal is to become a physician assistant and save lives in the operating room one day. Like she was helped in a critical moment of her life.



Abstract by: Rashida J. Bradley -Ortiz

McNair Faculty Mentor: Dr. Kimberly Rapoza

Acknowledging the Past Misconduct of the US Government to Understand and Combat Conspiracy Theories in Different Racial and Socioeconomic Communities

Abstract

Medical and science-based conspiracy theories have caused problems for a large percentage of the American population. It is important to discuss which people are affected most by these theories and how to combat them. This paper will address the socioeconomic and racial communities that subscribe to conspiracy theories the most.

Looking at past misconduct perpetrated by the United States government as well as medical and scientific organizations throughout history is a key step in preventing the formation and spread of current conspiracy theories. By increasing general education and science literacy before these theories are introduced, the relationship between the medical community and the population would improve. Results such as an increase in vaccination rates, a decrease in mortality rates of treatable diseases, and the betterment of overall health are possible.

Studies show that prevention is a far greater tool in combating conspiracy theories than any other tactic. To do this, the past must not only be acknowledged but the harmed communities must be given the appropriate funding for an increase in education and science literacy. There is a disparity in education amongst specific groups, such as black Americans and Latino Americans versus white Americans. Data will demonstrate that there is a correlation between past events and a present-day mistrust of the United States government and the medical establishment. From the Tuskegee trials to the contraception trials in Puerto Rico, it's apparent that the mistrust is warranted, but how do we move forward?

My name is Rashida Bradley-Ortiz, but everyone calls me RJ. My mother is Puerto Rican and my father is Black. I am entering my senior year at Mercy College. I'm currently maintaining good grades, a full-time job, various part-time work, volunteer hours, and building up my activities for my medical and graduate school applications. I love watching movies in an actual theater, reading fiction, and traveling around the world. My goal is to get as many stamps in my passport as possible!

I grew up across the street from a hospital in the Bronx, NY. For my whole life, all I can remember, all I've known, is that I wanted to be a doctor. That was the easy part for me. The road there has been long, winding, and filled with obstacles. Sometimes it seems like there's no end in sight, but I've learned to enjoy the journey. With a constant eye on the finish line, no matter how far away it seems, I remind myself that forward is forward. And so I put blinders on and run my own race, not looking left or right at where others may be on their paths.

I originally attended Mercy College in 2004. I was on the Dean's list during my first year, but due to family health problems and a lack of financial stability, I was no longer able to attend. I made a few mistakes and withdrew or stopped attending classes. I spent the next 15 years trying to get back. I took various jobs and paid Mercy College everything I owed. My professional development on the road to a medical license has included fighting for universal healthcare, increasing care in low-income, minority, and LGBTQ+ communities, as well as working towards a better political system. Everything I have done has been in service of reaffirming and building my way towards my goals. There have been many setbacks and pauses along the way, but I have always affirmed my commitment to achieving a medical degree. I am currently improving my GPA every semester and hope to graduate with honors from Mercy College in 2022.

I am the Secretary of the Student Government Association, Vice President of Tri-Beta Biological Honors Society, a Learning Fellow in the Structured Learning Assistance (SLA) program, President and Marketing Director of ALPFA Mercy, and Events Coordinator of Rotaract Club. I have been accepted into the McNair Scholars Program, Collegiate Science & Technology Entry Program (CSTEP), and the Neuroscience Initiative to Enhance Diversity (NIED) program. I also am a volunteer with the Red Cross, have an internship with The Autism Project, and do research at Mercy College via the Summer Research Program.

C-STEP New Scholar



Abstract by: Bisma Rafiq

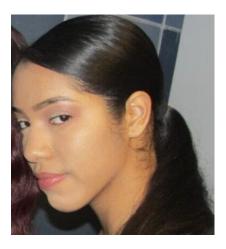
McNair/ C-STEP Faculty Mentor: Dr. Kimberly Rapoza

Conspiracy Theories about Covid-19 and the Covid Vaccine and Why Vaccination is Important

Abstract

There are many conspiracy theories about the Coronavirus and the Covid vaccine. These conspiracies can really impact people in various ways. People believe that the pandemic was planned by people of a higher authority to enclose rules on them since they are in great fear. They also believe that people are lied to about having Covid in hospitals. The internet conspiracies say that the vaccine was created to give pharmaceutical companies more ways to make money. These and many more conspiracies hinder the public from getting vaccinated. A group of young adults in one study were asked how to increase vaccination rates in young adults and some of the suggestions included having access to credible sources, making posters that list actionable messages that are short but precise, and have a vaccine that is supported by the government instead of companies. In the end, people should look for information from multiple sources, more studies should be done to understand people's views on vaccination, and the public should get educated on the virus itself.

Bisma Rafiq is a first-generation college student and biology major going into her junior year in Mercy College. This is her first year joining the McNair's Scholars/ CSTEP (College Science & Technology Entry Program) summer program. When Bisma first came to the United States, she was five years old and has been living in the Bronx ever since. She can speak Arabic, Urdu, and English. One day she hopes to visit different countries in the Middle East such as Egypt, Turkey, Yemen, and Pakistan for travel reasons and to provide help to those less privileged. Bisma has a passion for science and aspires to attend medical school in New York City. After medical school, she plans to become an internist or a pediatrician. In Mercy College, she is part of the Biology in S-Stem Scholars Program as well and took interest in their summer program to study plant biodiversity, focused on Gingko Biloba trees. She is also the Bronx Campus Executive, as she is part of the Student Government Association. Bisma is trying to obtain her Bachelor's in Science by 2023. This summer she is doing her summer research on conspiracy theories on the Coronavirus and the Covid vaccine. Like many people, she has been impacted by this virus, and researching about it will spread more knowledge about the time that we have been living in. Questions that might arise about the Covid vaccine are "Where do all those billions of dollars pumped into vaccine research and manufacturing go". Also, other conspiracy theories revolve around the idea that higher authorities are behind the development of the virus and manipulating/controlling everyone's mind. These questions/theories sparked Bisma's interest in the topic. She is willing to study and learn and have some fun while conducting research in the McNair/CSTEP summer program.



Abstract by: Arysbel Rosa Santana

McNair Faculty Mentor: Dr. Cynthia Walley

Social Media Platforms Spread False Covid-19 Information

Abstract

In human history, many major events that have attracted widespread or global attention have always tended to be characterized by one or more conspiracy theories, rumors, or misinformation campaigns that offered alternative explanations about how they occurred, or the possible outcome associated with them. The recent outbreak and rapid spread of Covid-19 is no exception since much untruthful information not supported by scientific evidence has been shared widely, especially on social media platforms. Social media platforms such as Facebook and Twitter have been fertile ground for spreading misinformation about Covid-19 due to their unique attributes, such as ease and fast transfer of raw or unedited information and the use of algorithms to identify the content that an individual is more likely to consume. The conspiracy theories have detrimental consequences and hamper the fight against Covid-19 and the ability to control the spread of the disease. It also results in uncertainty and confusion by causing vaccine hesitancy. Some of the major conspiracy theories that have been peddled about the Covid-19 in the social media platforms range from the claims that Covid-19 vaccination aims at depopulating the world, inserting microchips into human bodies to be able to control them and that the outbreak of the disease was major pharmaceutical companies' scheme to generate exorbitant profit in order to benefit themselves. The current paper reviews the recent resources in order to establish how the conspiracy theories and misinformation about Covid-19 are being spread and the importance of negating misinformation and refuting conspiracy theories.

Arysbel was born in the Dominican Republic and migrated to the United States with her family at 2 years old. Although Spanish is her first language, she was a quick learner and had little to no struggle learning English. Neither her mother nor her father had the opportunity to pursue higher education; therefore, as a first-generation college student, Arysbel is determined to be the first in her family to obtain both a bachelor's and a master's degree. Her parents have always encouraged and pushed her to pursue higher education because they believe that education is key to success. She strives to make her family proud and is eager to make a professional name for herself.

Arysbel is a rising junior at Mercy College and is pursuing a bachelor's degree in Business Administration: Marketing. Throughout the past two years at Mercy College, Arysbel has successfully been on the Dean's list every semester. With the hopes of graduating early, Arysbel has taken advantage of summer courses and college credit exams, like the CLEP exam. Not only is she very thankful for the McNair Scholars program for assisting her in getting ahead in her studies by providing her with summer courses, but she is also thankful for the motivation and mentorship that they have provided her. After completing her bachelor's degree in Business Administration: Marketing, Arysbel also aspires to obtain her master's in finance because she would love to work in the banking field, preferably investment banking.



Abstract by: Nataly E. Vigil

McNair Faculty Mentor: Dr. Kimberly Rapoza

Social Media's Influence in the COVID-19 Pandemic: How Fake News Is Leading Mistrust of the Vaccine

Abstract

The COVID-19 pandemic has been a very difficult and traumatic episode around the world, with many people dying due to this terrible disease, while others are still recovering from it. No one saw or expected this terrible episode in the history of humanity to come. It was very unexpected therefore many people did not have enough information about how to prevent the spread of the disease and avoid getting infected. Even countries did not even have the proper resources to fight such a pandemic. Also, when the pandemic started, many people published fake news and conspiracy theories about the origin of the pandemic; things got even worse when it was announced that there was a vaccine for the illness. Due to the lack of information and legitimate sources of information, people started speculating many things while others completely believed everything, they saw on social media which caused panic in some communities. The overwhelming amount of misinformation has led to many conspiracy theories about the COVID19 pandemic and vaccine and has had many negative effects on public health, such as many people not getting vaccinated because of mistrust of the healthcare system. This paper will discuss and analyze how fake news has played an important role in how some people reacted towards the pandemic and more specifically vaccination. It will also examine how the amount of information that is not legitimate is causing negative effects in the healthcare system, and the consequences that this misinformation can have on everyone else.

Nataly is a first-generation college student, a rising senior at Mercy College pursuing a bachelor's degree in biology, and would like to go to PA or nursing school after graduation. Since she was very little, Nataly has had a strong desire to be in the medical field influenced by the difficult situation back in her birth country (i.e., El Salvador). There she constantly witnessed and experienced the struggles and challenges of not having proper medical attention provided. This has inspired her to pursue a career in medicine and to be able to give back to those in need. She immigrated to the United States from El Salvador when she was only 12 years old, with the main goal of having a better education and future in the United States and to be able to give back to her community. At first, it was incredibly challenging for her to adapt to a new country that was nothing like her birth country; she constantly saw and experienced the struggles and many difficulties that non-English speakers face in this country on a daily basis, especially in the healthcare system. Even though it was particularly challenging for her to learn English and adjust to the educational methods of this country, it motivated her even more to become a medical professional and help her people to have better medical attention. In her years at Mercy, she has been part of the STEM Scholars in Biology, and part of Team STEM by being a peer mentor for incoming freshman and sophomore students in the biology program. She is a strong believer that all human beings deserve to be treated with respect and dignity, no matter the differences in skin color, race, nationality, or the language that they speak. As a McNair Scholar, Nataly plans to use the resources that the program offers to do research on the challenges that Hispanic communities face with access to proper healthcare and explore some of the cultural barriers that can also influence Hispanic communities to not seek the right medical attention.



Abstract by: Jessica J. Williams

McNair Faculty Mentor: Dr. Cynthia Walley

The Intertwined: Conspiracy, Paranoia, and Emotions

Abstract

Throughout time the belief in conspiracy theories has been widespread leading people to believe such things. Causing individuals to gain anxiety and high-stress levels around peers; which then brings up a social stigma. This leads to the emotions associated with the lies that come with conspiracy theories and the need to look deeper into what kind of people believe in conspiracies and how they come to believe. The idea of paranoia has its fair share of contributions to mental health that stems from the brain leaving someone with high anxiety such as believing they were being followed. This paper will show how emotion is a crucial factor that plays a part in both dealing with mental health and in deep thoughts. This research suggests that there is a strong correlation between conspiracy beliefs and paranoia in the mind and many emotions stem from there.

With being a first-generation college student, Jessica Williams is a rising junior for Fall 2021 at Mercy College with a major in communication disorders and a minor in psychology. Jessica is an only child, born and raised in the Bronx by her mom and grandmother.

Jessica plays many roles and has many hobbies that go along with her education. She is also a poetry writer on the side, takes up sign language, and is a major advocate of peace and positivity. Jessica is a diligent worker when it comes to anything, very humble, supportive, and wants to heal people whether vocally, mentally, or spiritually.

Jessica's journey started when she was younger, always wanting to help people, teaching them to be happy, and listening to people's troubles/ giving advice. When she realized she found her path in life she was introduced to psychology. It was the perfect match in helping others to make them feel better at the end of their journeys.

As Jessica entered college, she was introduced to the field of communication disorders, and while it is a little different from psychology, it helps people with speech difficulties such as stuttering or articulation disorders. This is where sign language plays a major part in her profession and her own knowledge. Poetry is also a major interest in Jessica's life, and she wants to publish books because poetry is a way for her to speak her truth and have words to help others. She writes about longing for peace, hardships, breakups, and even self-encouragement/confidence.

With the McNair Scholars program, she plans to research how teens and children today are different from past generations, in the sense of mental health or development as a whole. This program will open Jessica's eyes to research from a psychological viewpoint.

McNair Continuing Scholar



Abstract by: Estefania Garcia

McNair Faculty Mentor: Dr. Kimberly Rapoza Research Mentors: Dr. Minerva Guerrero

How Telehealth Can Benefit the Future of Medicine and Society's Use of Modern Medicine

Abstract

More than ever, telehealth has been thrust into the spotlight. Telehealth benefits the future of medicine and plays a factor in emergencies. It has been shown to be both beneficial and detrimental especially in the COVID-19 pandemic, where telehealth became the number one source of medical service delivery. Due to social distancing, in-person medical care became a challenge to achieve therefore medical practitioners had to treat remotely. Whether it was to call in instead of waiting in a waiting room or using video chat for a therapy session, or even virtual check-ins. Due to COVID-19 the use of telehealth has been greatly encouraged for health practitioners to not only protect themselves but their patients as well while also providing care. Telehealth will most definitely become a huge factor in how medical practitioners will treat their patients post COVID19. Medical practitioners going forward may take extra precautions in treating their patients including giving them the option to use telemedicine for their appointments. Since the pandemic began, many practitioners have indicated that telemedicine has been a great asset to have to help their patients. As great as telemedicine may be, it also has some negative aspects to it such as a risk of invasion of privacy, and the aspects of the physical examination of appointments are limited. Another factor may be that not many people can afford the technology due to financial insecurities, therefore, being excluded from telemedicine use.

Estefania Garcia Rios, one of the continuing McNair Scholars, was raised in Colombia by her father until the age of 8; she then moved to New York City and had the opportunity to meet one of her younger siblings, who has autism. To help her understand what an occupational therapist was, her mother would explain what the responsibilities were, and helped Estefania understand how they had fun helping her brother to improve his daily routine. After looking further into it, Estefania became enthusiastic about becoming an occupational therapist and strives to help those like her brother, the way the therapist helped him. She will be a senior at Mercy College in the fall, majoring in health science with a specialization in occupational therapy. Outside her responsibilities in school, she takes pride in being involved on campus by volunteering at the Mercy College Mav Market, to educate students on food insecurities. She is also the current president of the Association for Latin American Students (ALAS) and strives to incorporate events into the schedule that are tailored to the Latino American Community. She has also become a residential assistant for the Mercy community and tries to make residential students feel comfortable and have a home away from home. As an orientation leader, she welcomes incoming students with open arms and is the person they can lean on for any form of assistance needed. Estefania is open to learning more about her field, by educating herself in diverse and inclusive environments that specifically address issues within communities of color. Following completion of her undergraduate degree, she plans to pursue a graduate degree in occupational therapy at Mercy College, and eventually open a private practice, where she envisions helping people with disabilities make their lives simpler, by fostering equal opportunities for all. She plans to specialize in pediatrics and eventually open a private practice where children can come and feel like they belong. As a McNair Scholar, and with the support of the program's faculty, Estefania was able to research how occupational therapy can be a factor in a college athlete's life. The next year, Estefania went on to a new research project examining how telehealth can benefit the future of medicine and society's use for modern medicine. She hopes that her findings can open the eyes of health professionals to better understand telemedicine best practices and how they can be incorporated into future communication between medical practitioners and their patients.



Abstract by: Mariytaou Gumaneh

McNair Faculty Mentor: Prof. Terrence Calistro Research Mentors: Prof. Terrence Calistro

COVID-19 Impacts on Academic Performance, Sleep, and Mental Health Indicators Among College Students

Abstract

The purpose of this study is to examine the relationship between sleep, academic performance, student engagement, mental health indicators, and the impact COVID-19 has on students in terms of education and employment. The study will investigate how COVID-19 impacts and relates to variables such as sleep quality, academic performance, student engagement, and mental health indicators. This study hypothesizes that Covid-19 affected college students' sleep performance and academic performance compared to their previous semesters. The participants were Mercy College students from the age of 18 and up. Significant results included the relationship between being an essential worker and student engagement (r = .70, p < .05) and depression and anxiety (r = .85, p < .05).

Biography

My name Mariyatou Gumaneh and I was born in the Bronx, New York. I'm a senior at Mercy College pursuing a bachelor's degree in psychology and am a continuing McNair Scholar. I'm the first person in my family to go to college. I will be getting my bachelor's degree this August 2021. I will be taking a year off before attending graduate school and during my gap year, I would like to travel around the world and do photography on the side. I have been in school my whole life and would like to use this opportunity to see places and do things I would never do. I will attend graduate school in Fall 2022 to pursue a master's degree in counseling.



Abstract by: Junise LaRose

McNair Faculty Mentor: Dr. Kimberly Rapoza

Research Mentors: Prof. Brian Levine

The Impact of Physical and Social Development of Early Age Specialization in Sports

Abstract

Youth sports offer many great benefits to young children such as providing physical activity and steering them away from a lifetime of chronic disease. However, in recent years youth sports specialization has become extremely popular. Parents have been enrolling their children into year-round specialized sports more often with hopes of gaining an outcome of free/ discounted college, to become a pro athlete, or go to the Olympics. The results of youth sports specialization have increased the risk of injuries, overuse, and poor psychosocial development. In this study, a survey on sports specialization was created. The targeted participants would be college athletes at Mercy College. Data would be collected to find out if these athletes specialized in the sport they are playing currently or if they played multiple sports in childhood. Data will also be collected on their past injuries, how prone are they to be injured currently, and socialization.

Junise LaRose is a member of the McNair Scholars Program. She is currently a junior pursuing her bachelor's degree in exercise science with a minor in psychology at Mercy College. Junise has always had an interest in human anatomy and physiology and sports training; she is intrigued by how the physical body works. With proper training and motivation, the body is able to build up strength, endurance, and improve skill levels. Junise started taking a serious interest in the medical field after completing the biology/ chemistry program at her trade and technical high school. In addition to being a full-time student, Junise works full-time as a front desk associate at Scarsdale Medical Group and part-time as a NASM Certified Personal Trainer. During her free time, she is an active member of the exercise science club at Mercy College. She takes part in assisting the club president with event planning and working the booths during events. This past winter she spent 4 weeks in Vienna, Austria teaching kids English and the various aspects of American physical education. It was a learning and life-changing experience for her. The main language spoken in Vienna is German, and even though there was a language barrier she was able to instruct the students and communicate with them through different lessons and common interests.

Since Junise was accepted into the McNair Scholars program in summer 2019, she was fortunate enough to conduct her own research. During the first 6-week summer program she researched how gaming could be helpful to incorporate in medical training in the United States. During the school year, she started a research project on how exercise affects weight training in older women. Even though Covid-19 put a halt to her data collection she was able to finish the research, switching to a secondary analysis of government data. She is currently working on a new research topic examining how adolescent sport specialization affects injury in children.

As a former physical therapy aide and current personal trainer, she sees the benefits of constant physical activity. In her experience, she has learned some important lessons that she will continue to follow and expand on. One lesson is movement is medicine. One medicine that can reduce the risk of diabetes, heart disease, and osteoporosis is daily exercise. Another, lesson learned is that progress is not always linear. In life, there is never a straight line to success, so it is inevitable for recovery to have minor setbacks or not to be as quick and easy as you expected. Junise's goal after graduation is to pursue a master's degree in physician assistant studies. She would like to be able to pursue her passions which are exercise psychology, helping, and teaching children.



Abstract by: Akbar Narendran

McNair Faculty Mentor: Professor Terrence Calistro

Research Mentors: Dr. Jenean Castillo from the WIHD-LEND program

COVID-19 Related Stressors and the Coping Behaviors of Providers Working in the Disability Field

Abstract

The recent pandemic has created an unreceptive environment for nurse professionals. Even before COVID-19, nurses were already experiencing significant stressors and higher instances of burnout compared to other professions. High expectations, work overload, and horrible working conditions place nurse professionals at higher risks for burnout. Research on the implementation of mindfulness and meditation practices has been well reported to increase resilience, self-awareness, and self-acceptance among nurses and other medical professionals. This project will compare the effectiveness of mindfulness and meditation intervention on the burnout level of ICU nurses. Maslach Burnout Inventory (MBI) scale will use to measure the burnout levels pre-and post-experiment. This research aims to find which is more effective, mindfulness or meditation, to reduce burnout among ICU nurses during COVID-19.

Akbar Narendran has extensive experience in information technology, having started his IT career in 1999 as a Microsoft Certified Systems Engineer. His specialties include IT infrastructure management, disaster recovery, and security compliance. His mother's inpatient experience at the Memorial Sloan Kettering Cancer Center was the turning point that influenced him to transition to a career within the health care profession. The extraordinary compassion and dedication of the nurse practitioner from admission to discharge resonated in him and instilled a desire to pursue a career as a nurse practitioner. At a glance, technology and computing are worlds apart from the nursing profession, but Akbar feels they are connected. The anatomy & physiology classes Akbar has enrolled in have enabled him to visualize the human body systematically, similar to how computers function. The way they both correct defects, as well as the efficiency of their functional systems, fascinate him.

Currently a rising senior in Mercy College's Baccalaureate of Nursing program, Akbar has obtained numerous health care professional certifications such as the health informatics certification with the Columbia University, addiction treatment clinical skills certification with Yale University, transgender medicine certification with the Icahn School of Medicine, antibiotic stewardship certification from Stanford University, and a Patient Safety and Quality Improvement certification from Johns Hopkins University. He is also a member of Phi Theta Kappa Honor Society, Sigma Theta Tau Zeta Omega At-Large International Honor Society of Nursing, and the McNair Scholars Program at Mercy College.

During the Summer of 2020, he wrote an extensive literature review paper that explored economic, social, and racial differences in the effect of COVID such as income, access to health insurance, health facilities, underlying health conditions, anxiety, working & living environments, educational facilities, community settings, and historical racial discrimination of minority communities. Fall 2020, he assisted Dr. Jenean Castillo from the LEND program with a survey research project that examined stressors, health risk factors, and protective behaviors of health care providers.

In summer 2021, Akbar was developing a research project that examines the effectiveness of mindfulness and mediation intervention programs on ICU nurses' burnout levels during the COVID-19 pandemic. This subject is important to investigate due to the negative impact the COVID-19 pandemic has on health care providers is very apparent. ICU nurses have been on the front lines providing critical care, support, and comfort to those affected by COVID-19. Identifying the best coping strategies to support ICU nurses during the COVID-19 better has become critically important.

Professionally, Akbar is a solutions provider; he always finds a better, easier, and more efficient way to do things using technology. Akbar plans to pursue a three-year combined master's in Nursing Practitioner (NP) and Doctor of Nursing Practice (DNP). His goal is to work as an oncology nurse practitioner in a clinical setting to help manage the physical, psychological, and palliative needs of cancer patients through all stages of treatment. At the same time, he wants to use his information technology background to improve nursing informatics for better patient care outcomes and to improve the efficiency of nurses and other healthcare providers.



Abstract by: Viviana L. Ortiz

McNair Faculty Mentor: Prof. Terrence Calistro

Research Mentors: Dr. Julia Zavala

The Impact of Parental Mental Illness on Child Development

Abstract

Mental illness is a taboo topic in various cultures and countries, whether they are developed or not. Mental health is defined as how one communicates, behaves, and thinks. Illnesses of the mind inevitably impact the way one functions or copes throughout daily life. Many cultures refuse to believe that "mental health" is a real part of one's overall health since the philosophy is emotion-based rather than physical, in the sense of heart diseases or cancer. Fifty percent of the population in developed countries alone have untreated mental illness cases. Though, 15-25% of children live with a mentally ill parent that is not receiving treatment. Untreated parental mental illnesses are known to negatively impact children's development and increase their risk of developing anxiety, depression, and behavior issues. The purpose of this study is to examine the relationship between the parents' mental health quality and the prevalence of whether children have developed any mental, emotional, or behavioral problems. Through the use of secondary data analysis of the 2018-2019 cohort of the National Survey of Children's Heath results depict the significance maternal mental illness has on child development. Preventive measures can be taken, as parent-child therapy, school programs, and healthcare teams can all be implemented to help prevent the negative impact maternal mental illness has on children. Through these implications, tools and skills can be designed to support mother and child. Although mental illness is an unspoken struggle for over half the population, studies such as this will spread awareness to those suffering in silence. Especially to those mothers who struggle to get up in the morning but long to be a part of their child's life.

"Serve justice in a just way," a phrase that is engraved in the various science notebooks and colorful sticky notes belonging to Viviana Ortiz, a highly determined Latina woman. This phrase was held dear by Viviana during the start of her academic career at Mercy College as a biology major. This young woman did not always think she would be pursuing a career in science as she struggled academically and significantly while attending high school. As mental illness and internal difficulties arose, she grew unmotivated. She has faced much hardship since her childhood. After expanding her circle, visiting a Jewish synagogue, and conversing with new mentors she gained much confidence. Through the strong influence of an elderly Rabbi, a middle-aged Pakistani high school teacher, and her beloved grandmother, Viviana decided to pursue a career in healthcare. Not for the simple reason of helping people, but rather in hopes to give a voice to those in need of advocacy, to utter the failure of the system, and to nurture the needy.

While attending Mercy College, Viviana has applied and been accepted to a few scholarships and academic programs. She is an active member of STEM Scholars in biology as well as the McNair Scholars Program. Viviana has been a STEM Scholar since 2018. While in the program, Viviana conducted an experiment that evaluated the growth of biofilms on various surfaces such as foam or metal. The program also helped Viviana explore careers in science through educational trips to large labs. Viviana has participated in the McNair Program since summer 2020. As a McNair Scholar, Viviana has conducted a secondary data analysis project examining the relationship between medical college students' ethnicity and ageist attitudes towards elderly patients.

Currently, in terms of experience, Viviana has volunteered in a nursing home where she has encountered all walks of life. She learned various skills. While watching residents gather with their friends for morning coffee, afternoon Bingo, and evening board games, she now sees the value and importance of communication, patience, stepping out of one's comfort zone, listening, being understanding, compassionate, and empathetic. In healthcare, medical devices and equipment can only go so far; without trust, warm hands, and humanity, there is no true care.

This dedicated young lady longs to become the first registered nurse in her family. She dreams of traveling to countries undergoing catastrophe and bringing healthcare to those who are excluded due to subsistence level, race, or religious ideals. Viviana believes this is her purpose; to train and later be an active non-profit travel nurse. Such a goal may seem witless to many as the term success has subliminally developed into synonyms for, "wealth" and "money." For Viviana, success means being an advocate for the underrepresented, disadvantaged, and overlooked. To be an advocate for those whose voice is silenced because Viviana believes in serving justice in a just way.



Abstract by: Kevin G. Pantin

McNair Faculty Mentor: Prof. Terrence Calistro Research Mentors: Dr. Kathleen Kenney-Riley

Hesitancy for the COVID-19 Vaccine among Ethnic Minority Groups

Abstract

COVID-19 vaccines were approved for emergency use for the general American public by late 2020. Media reports then started highlighting COVID-19 vaccination hesitancy in racial and ethnic minorities. However, not enough is known about the amount of COVID-19 vaccination hesitancy in racial and ethnic minorities and whether there are exclusive sociodemographic factors that are associated with vaccine hesitancy. Therefore, the purpose of this study is to review national studies on COVID-19 vaccine hesitancy among racial/ethnic groups. The literature indicates the major predictors of vaccine hesitancy in African-Americans and Hispanics were sociodemographic characteristics (e.g., age, gender, income, education, and household size), health conditions, understandable mistrust and history of widespread misinformation, exposure to myths and misinformation, perceived risk of getting infected with COVID-19, beliefs about vaccines and past vaccine compliance, and concerns about the safety, efficacy, and side effects from the COVID-19 vaccines. The methods used were to take data from the U.S. Census Bureau, which is in collaboration with multiple federal agencies, and in a distinct position to produce data on the social and economic effects of coronavirus on racial/ethnic minority households. Data was disseminated in near real-time to inform federal and state response and recovery planning (US Census Bureau, 2021). The data set extracted came from The Household Pulse Survey, which is designed to gather data to assess household experiences during the coronavirus pandemic. The sample size used was approximately (n =

78,647). The demographic information regarding the sample were Females (59.0%), and Males (41%). The racial/ethnic groups were Hispanics (9.4%), Blacks (7.9%) Asians (5.6%) and Whites (82%). A multiple binary logistic regression analysis was used to test if participants' race and ethnicity can predict whether someone has been vaccinated. A significant regression was found (X2 (4) = 811, p < .001). The results were that Asian participants were more likely to be vaccinated compared to Caucasians (OR = 1.95), but Black (OR = 0.609, p < .001), Hispanics (OR =0.738, p< .001), and other listed race/ethnicity groups (OR = 0.529, p < .001) listed were less likely to be vaccinated compared to white participants. Given the high COVID-19 vaccine hesitancy rates in racial/ ethnic minorities and the unique factors associated with vaccine hesitancy in ethnic minority groups, several clinic-based and community-oriented practice recommendations have been included in this paper.

Biography

Kevin G. Pantin immigrated to the United States from Trinidad and Tobago in 1989, in search of the "American Dream." Originally in his country, Kevin majored in business studies. Immigrating to the US, he switched his career to nursing. His love for nursing allowed him to pursue an associate degree at Queensborough Community College. Kevin is an avid learner and believes that learning is "paramount." He is currently enrolled at Mercy College as a senior, doing his Bachelor of Science in nursing. Kevin sees himself as a hard worker and will go up and beyond to accomplish his goals.

Kevin is an advocate not only for patients but for the front-line nurses that provide direct care for their patients. He views the support and safety of staff as a major role in delivering excellent patient care. He is currently a member of the New York Nursing Association (NYSNA), where he is involved in the fight for nurses' rights. He was inducted into The Sigma Theta Tau International Honor Society of Nursing which focuses on global nursing excellence. In the future, Kevin hopes to earn a Chief Nursing Officer (CNO) position at a hospital, because he believes that "great leadership enhances great nursing."

In the Summer of 2020, he was accepted into the McNair Scholars Program which exposed him to a world of other scholars sharing knowledge amongst each other. His desire to enter the McNair Scholars program was based on a need for improvement and challenge. He also has a deep passion and pride in his education as he can easily see his career path being one that encompasses generating research on and for underserved populations, understanding the supports those nurses need to better perform their jobs and maximizing patient outcomes. He believes ambitious goal setting, consideration of the underrepresented, and dedication to lifelong learning are all characteristics that embody the best of the profession and what a solid nursing education can enhance.

During the McNair summer program, he worked on a scholarly project on social justice issues in mental health treatment and diagnosis disparities for African Americans. This project showed how biases are prevalent against African Americans when dealing with their mental health issues. He shared aspects of his work at the McNair Scholars Summer Research Forum with a virtual poster presentation and was able to educate the audience on this important topic.

In Fall 2020, Kevin conducted a secondary data analysis project that centered around understanding racial disparities in outcomes from the COVID-19 virus among those in the African American and Latinx communities versus Caucasians. His research exposed that there was a substantially higher rate of death and cases among African Americans and Latinx versus Caucasians.

In terms of career and academic aspirations, Kevin plans to further his education by pursuing a master's degree in nursing administration, and then a doctoral degree in nursing. He also wants to become an educator so he can pass the knowledge he has acquired within his professional and academic experiences onto others.



Abstract by: Rebecca M. Williams

McNair Faculty Mentor: Dr. Kimberly Rapoza Research Mentors: Dr. Sabrina Timperman

Bird Brain: Comparing the African White Necked Raven with the African Grey Parrot on the Ability to Master Critical Thinking and Problem Solving

Abstract

This experiment was designed to help understand the learning capabilities and qualities of two bird species. The goal was to assess if two bird species can associate specific colors with treats using three different puzzles. The puzzles had four sections that were colored red, blue, green, and yellow. The same design was used with both the African, white-necked raven and the African grey parrot. The first puzzle presented to the subjects was the simplest puzzle, which involved flipping over bone-shaped pieces and finding the treats underneath. The second and third-level puzzles were more complicated. The bird had to lift, pull, slide and press the puzzle to discover the treat. The treat choices used were chicken (blue), cashew (green), waxworm (red), and pellet (yellow). The question of interest is to what extent the African Grey parrot can master cognition and problem-solving? This study hypothesizes that the raven will produce a stronger desire to explore and solve the puzzle and understand the cognitive task over the parrot, which

may be able to solve the puzzle but will have to be taught first. The results demonstrate that the raven was indeed able to show a great number of cognitive skills. As the number of trials with the parrot was fewer, the parrot can only be compared with the raven based on the first two sessions. In the first two sessions, the raven showed immediate interest in going after the treats. When puzzle one was introduced she started to explore how to figure it out. Within the first 5 minutes, the raven was able to understand the concept of flipping over the plastic bone. The African grey parrot participated only in the beginning stages of the experiment. The results produced tell us that the parrot will need more of a one on one session to help them understand exactly what needs to be done in regards to the puzzle.

Biography

Rebecca is the youngest of six siblings. At the age of seven, she knew she wanted to help animals. Growing up she used to see stray and injured animals on the street and wanted to help them. It was those moments that convinced her that she wanted to do all that she could to help animals in the future. Since then, she has dedicated her time to work in animal-related businesses such as PetSmart, Petco, and veterinary hospitals. She also takes the time to do volunteer work, gaining experience in working with large animals such as horses. She was last found volunteering at Cornell Ruffian Equine Specialist in Elmont, NY. She currently works at Guardian Veterinary Specialist as a Surgery Technician in Training and as an assistant. There she practices alongside doctors with specific specialties including soft tissue, orthopedic, heart, and neurosurgeons. Her love for animals encouraged her to pursue a degree in veterinary technology at Mercy College, with plans to earn a Doctorate in Veterinary Medicine. Earning a doctorate will give her the knowledge and authority to complete her goals. During her time at Mercy College, she was accepted into the McNair Scholars Summer 2020 program where she completed her first research project: Animal Welfare for Exotic Pets in the U.S. The most recent research she has completed is titled "Bird Brain: How an African White Necked Raven Can Master Critical Thinking and Problem solving". This research was presented at the 10th annual Westchester Undergraduate Research Conference on April 30, 2020. It will also be presented at the national AVTE Annual Conference in 2021. Currently, she is looking to expand on that research and wants to compare the African White Necked Raven to the African Grey parrot using the same project proposal. Participating in this program has piqued her interest in research. In summer 2021 she plans to go to Belize to attend the wildlife medicine and conservation course at the Belize Wildlife and Referral Clinic (BWRC). There she will be educated on the native wildlife in Belize and help provide care for the injured animals there. Also, this summer she will be working on her application to veterinary school, with hopes of getting accepted for the spring or fall. A few of her goals include becoming a surgeon, opening her own practice, and establishing a rehabilitation center for wildlife and exotic animals. Rebecca also wants to educate and help others with learning about animals and the proper way to provide for them. For those who are interested in the animal field, she will offer her knowledge on how and what steps to take to head in the right direction for their careers. Outside of volunteering, she enjoys grooming dogs, writing, and working out. She believes that how one implements the use of their free time has a major impact on their future progress. A quote that she follows is "Life gets hard for everyone, how you choose to tackle it determines your success".



