My direct practice experience is the foundation of my research, which focuses on the role cultural and economic diversities play in accelerating health disparities. As a former child welfare worker, hospital administrator, and college athlete, I have seen the challenges children and adolescents with lower socioeconomic status (SES) face when trying to live to their full potential but are held back by physical health issues. Any number of factors including food insecurity, malnutrition, lack of safe spaces in which to be active, or lack of knowledge from parents to teach healthy behaviors can hinder children from reaching their full potential in and out of the classroom. In the COVID-19 era the challenges of ensuring children are both educated and physically healthy are heightened. However, the challenges of ensuring children are both educated and physically healthy always existed. When the world does return to some form of normalcy, children, especially minority children with low SES, will be severely lagging behind their peers in a number of areas. Physical health will be one of those areas. My experience in a number of areas mentioned above drives me to help children and families be safe, healthy, and self-sufficient.

The projects I currently work on contribute to the development of interventions that operate within structural and institutional domains, such as education systems and the economic context of communities. More specifically, my research centers on childhood obesity-related health disparities with an emphasis on the role of parenting. The data for my dissertation comes from an ongoing five-year evaluation of a parenting intervention, ParentCorps, currently taking place in partnership with Pre-K classes in Corpus Christi Independent School District, a largely Latino population in Corpus Christi, Texas. Unfortunately, due to COVID-19 the intervention did not take place last school year but we were still able to collect some excellent survey data at various timepoints. Interruptions in the study led me to be flexible in revising my research plan for my three-article dissertation. The dissertation includes two quantitative papers and one conceptual paper (article 1) on the association between SES and obesity in childhood. The data captures students nested in different schools and neighborhoods, allowing me to utilize hierarchical linear models to examine the effect of various levels of SES on children’s BMI (article 2) and healthy eating and physical activity levels (article 3).

I built a strong and strategic mentor team in my department to help me develop various skills to prepare for being an assistant professor and beyond. My dissertation chair, Dr. Catherin Cubbin, and I successfully collaborated on two published manuscripts and a third is currently under review. An expert in the intersection of social justice and public health, Dr. Cubbin has been invaluable to my mastering of oral presentations for conferences, learning complex quantitative data analysis methods, and scientific writing with a social justice lens.

Dr. Esther Calzada, an expert on diversity, equity, and inclusion, is the primary investigator of the five-year evaluation study mentioned above. I gained experience in various areas, such as survey design, building codebooks, data shells, and Qualtrics survey tools along with overall data management through working with her. Managing the data on that project for over a year and a half taught me an immense amount of knowledge about the day-to-day challenges of primary data collection. One example is understanding the importance of checking incoming data frequently to catch possible systematic errors that went unnoticed in the survey testing.
I worked with Dr. Ruben Parra-Cardona, an expert in implementation science, who helped me develop a NIH R34 grant proposal. As any faculty member knows, grant writing is an essential skill for scholars. Going through the cycle of constant revisions just to get a powerful AIMS page is an important process that sets the stage for the rest of the proposal.

Being a trainee of the Population Research Center (UT PRC) allowed me to take courses to learn demographic techniques and expand my knowledge of theories that contribute to my understanding of population health. Through my work with the UT PRC I was awarded a NICHD Ruth L. Kirschstein National Research Service Award - Predoctoral Fellowship in Population Studies. I made the difficult decision to decline this award because I was awarded another fellowship through The University of Texas at Austin Graduate School. The UT Graduate School fellowship was the better decision because it granted me additional funding and the intentionality of focusing only on my dissertation research.

Childhood obesity is a complicated issue that crosses various disciplines, enabling me to develop strong skills in interdisciplinary collaborations. For example, I worked with Dr. Megan Gray, an expert in pediatric overweight/obesity, at Dell Medical School on a qualitative study where I interviewed Latina mothers about their experiences raising an infant/toddler identified as overweight. We successfully published one manuscript using this data and have another under review.

I am also a part of an interdisciplinary team that received a grant from The University of Texas’ International Office. The project team consists of faculty from Sociology, School of Business, and Medical School. The project focuses on barriers to diabetes care among Mexican citizens in rural Puebla, Mexico. This project gave me more experience in writing and submitting a proposal, research design, as well as supervising undergraduate research assistants.

In order to gain skills in specific methods to strengthen my methodological skill set, I pursued projects outside of my area. For example, I collaborated with Dr. Miguel Pinedo, an expert in Latino migration and health, on a NIH R01 study to develop a culturally appropriate Barriers to Specialty Alcohol Treatment scale for Latino populations. The experience of conducting cognitive interviews and testing the scale will help me in the future with the development or adaptation of an existing scale. I also strengthen my methodological skill set by completing a graduate portfolio in applied statistical through the UT Department of Statistics and Data Sciences.

I received a research award from the National Collegiate Athletic Association (NCAA) to conduct a qualitative study to examine barriers to recruiting student-athletes from low-socioeconomic (SES) backgrounds. This is my first funded project in which I am the primary investigator and has taught me about the expectations of working with funders and administration related to the financial aspects of funded research. With the experience from this project, the award from University of Texas’ International Office, my fellowship record, and grant writing experience, I feel confident in being a successfully funded researcher.

Ultimately, I have built an expertise in understanding how children and families can achieve good physical health. This will enable me to produce research to help low SES children and families be safe, healthy, and self-sufficient.