Duduzile Phindile Mashinini dmashinini@unc.edu | 989-884-2704

Education & Training

Ph.D.: Interdisciplinary Health Sciences Western Michigan University | Kalamazoo, MI **Dissertation title**: The Impact of Michigan's Administrative Rule/Policy Change for Nonmedical Vaccine Exemptions

Master of Science: Experimental Psychology Northern Michigan University | Marquette, MI Thesis title: Sexual Attitudes and Perceptions of Gendered Sexual Roles from the Perspective of Urban South African Women

Bachelor of Science: Psychology, Minor: Performance Theatre Northern Michigan University | Marquette, MI

Research Interests

Utilizing interdisciplinary methodology to address pressing public health issues such as vaccine hesitancy and HIV/AIDS. Applying methodologies including geographic information systems (GIS) to aid in targeted implementation of successful health interventions thus guiding the best use of limited public health resources. Applying a psychological framework to understand and inform public health efforts, including the examination of socio-cultural, socio-political, socio-economic, and socio-demographic barriers to health.

Current Position

Biosocial Postdoctoral Scholar

University of North Carolina Chapel Hill | Chapel Hill, NC | August 2021 – Present Involved in interdisciplinary research projects employing creative and integrative approaches to understanding the complex factors that influence health and health disparities across the life course. Including projects examining barriers to COVID-19 vaccine uptake and vaccine hesitancy.

Peer Reviewed Publications

Nurjannah, N., Baker, K. M., & **Mashinini, D. P**. (2021). <u>Spatiotemporal trends in diabetes-</u> related mortality by school district in the state of Michigan. *Epidemiology and health*, e2021098. Advance online publication. https://doi.org/10.4178/epih.e2021098.

Mashinini, D.P. Fogarty, K.J., Potter, R.C., & Berles, J.D. (2020). <u>Geographic hot spot analysis</u> of vaccine exemption clustering patterns in Michigan from 2008 to 2017. *Vaccine*, *38*(51), 8116-8120. <u>https://doi.org/10.1016/j.vaccine.2020.10.091.</u>

Mashinini, D.P., Fogarty, K.J., Potter, R.C., Lagerwey, M.D. (2019). <u>The impact of Michigan's</u> nonmedical vaccine exemption rule change on philosophical exemption rates. *Journal of Community Health*. https://doi.org/10.1007/s10900-019-00727-5.

Mashinini, D. P., & Pelton-Cooper, M. (2012). <u>HIV risk in a group of educated urban Black</u> <u>African women in South Africa: private accounts of gendered power dynamics</u>. *Feminism & Psychology, 22*(2), 204-219. doi: 10.1177/0959353512439190.

Manuscripts Submitted or In Revision

Kahn, K., Pettifor, A., Mataboge, P., Kelly, N.K., **Mashinini, D.P.**, Nair, H., Campbell, H., Cohen, C., Gómez-Olivé, F.X., Tollman, S. (2021). Vaccine hesitancy in rural South Africa: deepening understanding to increase uptake and access. *JAMA*. Submitted.

Mashinini, D.P., Lagerwey, M.D., Fogarty, K.J. (2021). Methods of current practice: Qualitative analysis of intervention strategies utilized by vaccine waiver educators. *Policy Polit Nurs Pract.* Submitted.

Manuscripts In Preparation

Mashinini, D.P., Kelly, N.K, Delamater, P. Demographic Factors of Vaccine Uptake Among Blacks in Detroit Michigan: A Community-Level Analysis

Mashinini, D.P., Fogarty, K.J., Lagerwey, M.D. Michigan's administrative rule change for nonmedical vaccine exemptions: Upholding freedom of choice or forced into compliance?

Conference Presentations

Mashinini, D.P. (2020, September). Geographic hot spot analysis of vaccine exemption clustering patterns in Michigan from 2007-2016. 14th Vaccine Congress-online edition. Poster.

Mashinini, D.P. (2020, September). Methods of current practice: Qualitative analysis of intervention strategies utilized by vaccine waiver educators in Michigan. 14th Vaccine Congress-online edition. Poster.

Mashinini, D.P. (2016, October). Philosophical immunization exemption rates among kindergartens: The effect of Michigan's 2015 nonmedical exemption policy change. Michigan AGEP Alliance Fall Conference, East Lansing, Michigan. Oral.

Mashinini, D.P. (2016, July). Philosophical immunization exemption rates among kindergartens: The effect of Michigan's 2015 nonmedical exemption policy change. Interdisciplinary Research Conference, Western Michigan University, Kalamazoo, Michigan. Oral.

Radi, J.K., Mashinini, D.P., Curtis, A.B. (2016, July). Deployment Preparedness, a Qualitative Assessment of Currently Deployed US Army National Guard Combat Medics. Interdisciplinary Research Conference, Western Michigan University, Kalamazoo, Michigan. Poster.

Mashinini, D.P. (2009, March). Attitudes and perceptions of gendered sexual roles, from the perspective of urban South African women. Association for Women in Psychology (AWP) Conference, Newport, Rhode Island. Poster.

Other Presentations

Mashinini, D.P. (2019, February). Methods of current practice: A qualitative analysis of vaccine waiver educators' intervention strategies employed during nonmedical vaccine waiver education

in Michigan. Michigan Department of Health and Human Services (MDHHS), Statewide Local Health Jurisdiction Immunization Coordinator's meeting. Oral.

Mashinini, D.P. (2017, June). Philosophical immunization exemption rates among kindergartens: The effect of Michigan's 2015 nonmedical exemption rule change. Centers for Disease Control and Prevention (CDC) Immunization Division Branch meeting. Oral.

Mashinini, D.P. Attitudes and perceptions of gendered sexual roles, from the perspective of urban South African women. (2009, September). Colloquium Series sponsored by the Department of Psychology, Northern Michigan University, Marquette, Michigan. Oral.

Pascoe, N., Mashinini, D.P., Leith, C. & Burns, S. (2002, April). Mental Rotations and perceptual learning in college students. Northern Michigan University's Annual Spring Colloquium, Marquette, MI. Oral.

Funding / Grants

AmeriCorps Youth Volunteer Corps Service-Learning Implementation Grant. \$5,000. 2006 Kickstarter – Funded to attend International Congress of Psychology conference. \$800. 2010

Honors and Awards

Thurgood Marshall Fellowship, 2014-2018, Western Michigan University Pisaneshi Prize for Best Scientific Presentation, 2016, Interdisciplinary Doctoral Research Conference, Western Michigan University Nomination for 2009 Outstanding Graduate Student, 2010, Northern Michigan University King, Chaves, Parks: Future Faculty Fellowship, 2007, Northern Michigan University Graduate Teaching Assistantship, 2007-2009, Northern Michigan University Bachelor of Science Honorary Graduate (cum laude), 2003, Northern Michigan University John P. Johansen Memorial Scholarship, 2002-2003, Northern Michigan University Susan P. Manley Memorial Scholarship, 2002, Northern Michigan University International Academic Award, 2001-2003, Northern Michigan University National Honor Society in Psychology (Psi Chi), 2000, Northern Michigan University Adventure Travel International Scholarship, 2000, Northern Michigan University International Student Scholarship, 2000, Northern Michigan University

Past Positions

Health Science Instructor

Western Michigan University | Kalamazoo, MI | August 2016 – June 2021 HSV 2250: Life Span Development HSV 3700: U.S. Health Care System Teaching Portfolio: https://wordpress.com/view/duduzilephindimashinini.wordpress.com

COVID-19 Case Investigator/ Contact Tracer

District Health Department # 4 | | Alpena, MI | April 2021 – June 2021

Thurgood Marshall Research Fellow

Western Michigan University | Kalamazoo, MI | July 2014 – July 2018 Applied quantitative, qualitative, and GIS methods to conduct a three-part epidemiological study evaluating the impact of Michigan's nonmedical vaccine exemption policy change in with Michigan

Co-Investigator

Western Michigan University | Kalamazoo, MI | October 2016 – October 2017 Deployment preparedness among currently deployed US Army Combat Medics

Psychology Instructor

Alpena Community College | Alpena, MI | August 2011 – May 2012, May 2009 – June 2009 PSY 226 - Developmental Psychology

Graduate Psychology Teaching Assistant

Northern Michigan University | Marquette, MI | August 2007 – May 2009 PSY 100L: Introductory psychology laboratory science sections

Graduate Research Assistant

Northern Michigan University | Marquette, MI | August 2007 – May 2009 Applied mixed method analysis examining HIV risk among educated Black African Women in South Africa

Professional Affiliations

Michigan Public Health Association (MPHA) – June 2020 – June 2021 Epidemiology and Policy Committee Psi Chi Psychology National Honor Society – lifelong member

Service to Profession

Manuscript Reviewer: The *Lancet* Abstract Reviewer: International Congress of Psychology (ICP) – July 2010

Service to Community

COVID-19 Volunteer Contact Tracer: Michigan Department of Health and Human Services (MDHHS) – May 2020 – December 2020

Currently supporting the state of Michigan in their efforts to contact individuals with suspected or confirmed COVID-19 infection

COVID-19 GISCorps Volunteer: ESRI GISCorps – March 2020 – August 2021 Currently contributing to nationwide creation of geographic information system testing and vaccination sites layer, mapping COVID-19 testing & vaccination-sites in the United States. The GIS dataset forming the website findingcovidtesting.com contributes to an open dataset that serves FEMA and other public health agencies and NGOs

Humanitarian OpenStreetMap Team (HOT) Volunteer - February 2020 - Present

Involved in closing mapping gaps by providing map data around the world in areas susceptible to or identified as impacted by COVID-19 outbreak in partnership with international agencies such as the United Nations Humanitarian Data Exchange

Board of directors: Art in the Loft – December 2019 – August 2021 Advocate for and ambassador of the arts. Engaged in securing funding and developing

partnerships to advance the arts within the local community

Continuing Training & Education

Contact Tracing Training - MDHHS – 3-hour course	2020
COVID-19 Testing, Tracing, and Tracking, University of Michigan – 1hour course	2020
Practical Epidemiology Management Tools Course (MI-TRAIN) – 1 hour course	2020
COVID-19 Contact Tracing Course (MI-TRAIN) – 30 min course	2020
Michigan's Annual Immunization Conference	2019
Michigan's Annual Immunization Conference	2018
Michigan's Annual Immunization Conference	2016
Epidemiology and Public Health, Michigan State University	2016
Geographic Information Systems (GIS), Alpena Community College	2016
Centers for Disease Control & Prevention Pink Book Class	2015
Community Change in Public Health, Johns Hopkins Bloomberg School of Public Health	2012

Skills

- Quantitative & Qualitative data analysis
- SPSS
- Geospatial Analysis (ArcGIS)
- Manuscript writing and editing
- Questionnaire design

Languages

- Zulu Native
- English Fluent
- Swati intermediate
- Sotho-intermediate

- Interdisciplinary collaboration
- Public health & policy analysis
- Training & presentation
- Program evaluation
- Crisis management
- Xhosa basic
- Afrikaans elementary
- French elementary