

**BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Prince, Dana M

eRA COMMONS USER NAME (credential, e.g., agency login): DANAPRINCE

POSITION TITLE: Associate Professor, Jack, Joseph and Morton Mandel School of Applied Social Sciences, Case Western Reserve University

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	Completion Date MM/YYYY	FIELD OF STUDY
Oberlin College	B.A.	05/2002	Gender Studies
University of Pennsylvania	M.P.H.	05/2008	Health Promotion
University of Washington	Ph.D.	08/2014	Social Welfare
Yale University, School of Medicine, Psychiatry	Postdoctoral	06/2016	Substance Abuse

**A. Personal Statement**

I have extensive expertise in the application of social welfare, public health, and community-based system dynamics approaches to identify and intervene on the culturally-specific mental health and service needs of sexual and gender minority youth (SGMY) in public systems, and to develop and test multi-level interventions to promote optimal health and wellbeing. I am a member of the LGBTQ+ community and have advocated on behalf of my community for over twenty-five years.

I am an early career investigator (Ph.D., 2014). I have published extensively in the fields of system-involved youth and SGM health disparities and successfully garnered both extra- and intra-mural support for my research. My studies are among the first to show evidence of variation in state system-level factors on homelessness and substance use, among young adults exiting foster care, and to apply system dynamics to identify multi-level factors contributing to psychological comorbidities, including self-injurious thoughts and behaviors, among SGM youth in child welfare. My research training has been consistently supported by NIH-funded mechanisms. I am a recipient of the NIH-National Institute of Minority Health Disparities Loan Repayment Program. During my doctoral training, my research on cumulative disadvantage and youth physical/mental health disparities and alcohol use trajectories was supported for multiple consecutive years by the NIH [TL1 RR 025016; T32 MH20010]. As a NIDA T32 Postdoctoral Fellow in Substance Abuse Prevention Research at Yale University, I was involved in the collection, management, analysis, and dissemination of findings from two federally-funded grants to improve permanency outcomes and trauma-informed service delivery to children and youth in foster care [PI: Connell: NIMH, R21MH09606; ACF, CO13000147]. For five years, I collaborated with Cuyahoga County (Ohio) Division of Children and Family Services on funded research to implement specialized services and reduce mental health comorbidities for SGM youth in foster care. I am currently co-I on the NIH-NCATS-funded study to leverage system dynamics and social marketing to accelerate the uptake of health innovations to close the gap on systemic health disparities.

Ongoing and recently completed projects that I would like to highlight include:

NIH/NCATS

Hovmand and Biroscak (Co-PIs), Role: Co-I

07/2023-06/2028

*RC2 Systems Marketing Analysis for Research Translation (SMART) Innovation Program*

NIH-National Institute of Minority Health Disparities UMD002264

Sehgal (PI), Role: Pilot Study PI

01/15/2018-06/30/2020

*Intersection of Foster Care Involvement and Sexual and Gender Minority Status: The Impact of Social Support on Youth Mental Health and Resilience*

U.S. Department of Health and Human Services, Children's Bureau 90CW1145

Matarese (PI), Role: Local Site Evaluator

03/15/2017-06/30/2021

*National Quality Improvement Center on Tailored Services, Placement Stability and Permanency for Lesbian, Gay, Bisexual, Transgender, Questioning, and Two-Spirit Children and Youth in Foster Care*

US Department of Housing and Urban Development H-21693CA

Fischer (PI), Role: Co-investigator

9/1/2020-8/31/2023

*Leveraging Integrated Data to Examine Youth Homelessness*

NIH National Center for Advancing Translational Sciences, CWRU Clinical and Translational Science

Collaborative Pilot Study Awards

Role: Co-Principal Investigator

04/30/2020-04/30/2021

*Rainbow Connection: Continuity of Care across the Lifespan for Sexual and Gender Minority Individuals*

*Publications on system-involved SGM youth; child welfare and juvenile justice; SGM health disparities.*

1. **Prince, D. M.**, Ray-Novak, M., Tossone, K., Peterson, E., Gillani, B., & Mintz, L. (2024). Psychological comorbidities and suicidality in sexual and gender minority foster youth. *Children and Youth Services Review, 156*, 107379
2. **Prince, D. M.**, Ray-Novak, M., Gillani, B., & Peterson, E.\* (2021). Sexual and gender minority youth in foster care: an evidence-based theoretical conceptual model of disproportionality and psychological comorbidities. *Trauma, Violence, & Abuse, 15*(248380211013129).
3. Schuler, M. S., **Prince, D. M.**, & Collins, R. L. (2021). Disparities in Social and Economic Determinants of Health by Sexual Identity, Gender, and Age: Results from the 2015–2018 National Survey on Drug Use and Health. *LGBT Health*. <https://doi.org/10.1089/lgbt.2020.0390>
4. **Prince, D.M.**, Vidal, S., Okpych, N. & Connell, C.M. (2019). Effects of individual risk and state housing factors on adverse outcomes in a national sample of youth transitioning out of foster care. *Journal of Adolescence, 74*, 33-44. <https://doi.org/10.1016/j.adolescence.2019.05.004>

## **B. Positions, Scientific Appointments, and Honors**

### **Positions and Scientific Appointments**

2022-present Associate Professor, Assistant Professor, Mandel School of Applied Social Sciences, Case Western Reserve University (CWRU), Cleveland, OH

2016-2022 Assistant Professor, Mandel School of Applied Social Sciences, Case Western Reserve University (CWRU), Cleveland, OH

2014-2016 NIDA T32 Postdoctoral Fellow in Substance Abuse Prevention Research, Yale University School of Medicine, Department of Psychiatry, New Haven, CT

- 2011-2013 Predoctoral Clinical Research Trainee, NIH/ National Center for Research Resources funded Institute of Translational Health Sciences
- 2009-2011 Predoctoral Trainee, NIH-National Institute of Mental Health funded University of Washington School of Social Work Prevention Research Training Program

### **Honors**

- 2021 Nominated for the NIH- Sexual & Gender Minority Research Office Early-Stage Investigator
- 2020 Selected as Junior Faculty Nominee for the Andrew Carnegie Fellows Program Junior
- 2018 Selected for National Institute of Minority Health Disparities' Health Disparities Research Institute
- 2017 Selected for the National Institutes of Health Future Research Leaders Conference
- 2016 Selected for the Cornell University Summer Research Institute, National Data Archive on Child Abuse and Neglect
- 2013-214 School of Social Work Doctoral Dissertation Award, University of Washington
- 2013; 2015 Student Travel Award—Society for Prevention Research conference
- 2012 Doctoral General Examination, Defended with Distinction, University of Washington
- 2008 Top Scholar Award for Excellent and Innovation (*tuition funding*), University of Washington

### **C. Contributions to Science**

**1. Understanding multi-level factors that influence involvement and outcomes for youth in child welfare and juvenile justice.** Using national, and state-level linkable data my work investigated significant outcomes and predictors of system involvement. Existing evidence is clear that youth who “age out” of the foster care system are at greater risk for adverse young adult outcomes, including homelessness, incarceration, substance use and early childbirth. Policy interventions for this population exist to curb the negative effects. The Chafee Foster Care Independence Act (CFCIP) amended Title IV-E to expand funding to states to provide independent living services for older youth in foster care. Under this law, states could spend up to 30% of their CFCIP on room and board for foster youth. States spend hundreds of millions of dollars each year on CFCIP, and yet no research investigated the variation in housing support spending on transition-age youth outcomes. To fill this gap, I harnessed multiple, linkable, national datasets and applied multilevel modeling to test the impact of increased CFCIP spending on youth outcomes among a national cohort of youth exiting foster care. In fact, 30% of the variation in outcomes could be attributed to state-level housing factors. Youth residing in states that allocated more of their CFCIP dollars to housing had lower odds of homelessness and incarceration. While many individual-level factors of risk were still significant, increased CFCIP spending on housing supports is warranted. In other studies, I use integrated data and theoretical modeling to show social group memberships and family poverty significantly predicted movement from foster care to juvenile justice involvement, highlighting the need for greater attention to these characteristics that may place youth at greater risk of prolonged and more serious system-involvement. *Addressing multi-level factors that affect system involvement and outcomes can inform targeted system-level interventions to reduce health disparities among youth in child welfare and juvenile justice.*

1. Shpiegel, S., Aparicio, E. M., King, B., **Prince, D.M.**, Lynch, J.\*, & Grinnell-Davis, C. L. (2020). The functional patterns of adolescent mothers leaving foster care: Results from a cluster analysis. *Child & Family Social Work*, 25(2), 478-487. <https://doi.org/10.1111/cfs.12704>
2. **Prince, D.M.**, Vidal, S., Okpych, N. & Connell, C.M. (2019). Effects of individual risk and state housing factors on adverse outcomes in a national sample of youth transitioning out of foster care. *Journal of Adolescence*, 74, 33-44. <https://doi.org/10.1016/j.adolescence.2019.05.004>.
3. Vidal, S., Connell, C.M., **Prince, D.M.**, & J. K. Tebes. (2019). Multisystem-Involved Youth: A Developmental Framework and Implications for Research, Policy, and Practice. *Adolescent Research Review*, 4(1), 15-29. <https://doi.org/10.1007/s40894-018-0088-1>
4. Vidal, S., **Prince, D.M.**, Connell, C., Caron, C., Kaufman, J., & Tebes, J. (2017). Maltreatment, family environment, and social risk factors: Determinants of the child welfare to juvenile justice transition among maltreated children and adolescents. *Child Abuse & Neglect*, 63, 7-18. DOI: 10.1016/j.chiabu.2016.11.013. <https://10.1016/j.chiabu.2016.11.013>

**2. Mental Health Disparities among SGM Youth in Foster Care.** SGM youth are disproportionately overrepresented inside the foster care system with estimates ranging from 15-30% compared to 9.5% of the general U.S. population. The complexity of the foster care system creates a fragmented delivery system that is even more complicated for SGM youth as the system is not designed with their needs in mind. I apply System Dynamics (SD) to examine the multi-level risk factors and protective resources available to SGM youth in foster care. My most recent publication in *Trauma, Violence, and Abuse* presents a theoretical-conceptual model of SGM youth disproportionate overrepresentation and psychological comorbidities, using SD to show how this phenomenon are best represented as a complex and dynamic system with multiple self-reinforcing feedback loops. To my knowledge, this is the first empirically driven theoretical-conceptual paper which identifies specific factors, pathways, and multi-level intervention targets to curtail foster care involvement, and subsequent psychological comorbidities among sexual and gender minority youth in foster care. Pilot study research with this population ( $N=35$ ), showed significant morbidity 65% of youth met criteria for clinical depression and 79% for clinical anxiety disorder, higher than other SGM youth samples. In addition, 70% reported suicidal ideation and 45% past suicide attempt. The need for affirmative mental health providers was highlighted by SGM youth. *SGM youth in foster care are a high needs/high risk population in need of system-level affirmative care interventions.*

1. **Prince, D. M.**, Ray-Novak, M., Tossone, K., Peterson, E., Gillani, B., & Mintz, L. (2024). Psychological comorbidities and suicidality in sexual and gender minority foster youth. *Children and Youth Services Review*, 156, 107379. <https://doi.org/10.1016/j.childyouth.2023.107379>
2. **Prince D.M.**, Ray-Novak, M., Gillani, B., & E. Peterson. (2021) Sexual and Gender Minority Youth in Foster Care: A Theoretical Conceptual Model of Disproportionality and Psychological Comorbidities. *Trauma, Violence and Abuse*. <https://doi.org/10.1177/15248380211013129>
3. **Prince, D.M.** & L. Love. (2021, April 9). *Affirmative Care for Sexual & Gender Minority Youth* (Webinar Training). Case Western Reserve University, Community-Based Integrated Behavioral Health Opioid & Substance Use Disorders Training Program, Cleveland, OH.
4. **Prince, D.M.**, Ray-Novak, M., Peterson, E., Gillani, B., K. Berringer. (2021, Jan. 22). Centering Sexual and Gender Minority Youth in Foster Care: Implications for Practice, Policy and Research, Research. Three Paper Symposium [Organized, Prince], 25th Annual Conference of the Society for Social Work Research [Virtual Conference].
5. **Prince, D.M.**, Croessman, J., Sewell, K., Anderson, K., Wenderoth, J., Love, L., & W. Simpson. (2020, Sept. 24). *Public-Private Collaboration to Transform Child Welfare Systems for LGBTQ+ Youth Thriving*. Ohio Attorney General Dave Yost's Bridging Research to Practice: A Virtual Research Series of the Linking Systems of Care for Ohio's Youth (Webinar). Ohio.

**3. Heterogeneity in suicidality and substance use among SGM subgroups.** Using national- and state-level data, I have contributed to studies investigating differences in suicidality and substance use among lesbian, gay, bisexual, transgender, and gender diverse individuals compared to their heterosexual and cis-gender peers. Results from work with national data show that sexual minority women, and bisexual woman in particular, are at greater risk of substance use. Moreover, the greatest magnitude in difference was for Black and Latina sexual minority women when compared to White sexual minority women. This highlights the unique intersection of gender, sexual orientation, and race/ethnicity on excess substance use among SM women, but not gay and bisexual men. In a state-based sample of SGM youth, transgender and gender diverse youth who did not identify within a masculine/feminine binary and who were also sexual minorities were 2-3 times more likely to experience suicidality compared to their peers who were cisgender, not questioning their gender identity, and who were heterosexual. *Based on the intersections of gender identity, sexual orientation, and race/ethnicity, risk for adverse mental health and substance use are heightened for subgroups of SGM individuals, and should be accounted for in targeted interventions.*

1. Atteberry-Ash, B., Kattari, S. K., Harner, V., **Prince, D. M.**, Verdino, A. P., Kattari, L., & Park, I. Y. (2021). Differential experiences of mental health among transgender and gender-diverse youth in Colorado. *Behavioral Sciences*, 11(4), 48. <https://doi.org/10.3390/bs11040048>
2. Schuler, M. S., **Prince, D. M.**, & Collins, R. L. (2021). Disparities in Social and Economic Determinants of Health by Sexual Identity, Gender, and Age: Results from the 2015–2018 National Survey on Drug Use and Health. *LGBT health*. <https://doi.org/10.1089/lgbt.2020.0390>

- Schuler, M. S., **Prince, D. M.**, Breslau, J., & Collins, R. L. (2020). Substance use disparities at the intersection of sexual identity and race/ethnicity: Results from the 2015–2018 National Survey on Drug Use and Health. *LGBT Health*, 7(6), 283-291. <https://doi.org/10.1089/lgbt.2019.0352>

**4. COVID-19 and Translational Health Studies with SGM populations.** The COVID-19 pandemic has had an unprecedented negative impact on minority group physical and mental health. Using data collected from an on-line cross-sectional survey of 1380 US adults, we found that SGM (n=290) respondents had a significantly higher proportion of depression and anxiety scores exceeding the clinical threshold compared to cisgender heterosexual counterparts (n=1090). Our COVID study is among the first to document disproportionate burden of the COVID-19 pandemic on SGM mental health. Disparities are exacerbated by lack of access to continuous to SGM-affirming physical and mental health care. In community-based translational health pilot study work with SGM individuals across the life course, I applied system dynamics modeling techniques to understand factors that drive lapses/avoidance/delays and reconnections/connection to health/mental health care. Factors that relate to connection/reconnection to care include queer community belonging, SGM-affirmative care (e.g. Pride Clinics), and community elders' mentorship. *Affirmative care models are needed to address key drivers of health disparities and facilitate linkage to care for SGM-populations.*

- Gillani, B., **Prince, D. M.**, Ray-Novak, M., Feerasta, G., Jones, D., Mintz, L. J., & Moore, S. E. (2024, February). Mapping the Dynamic Complexity of Sexual and Gender Minority Healthcare Disparities: A Systems Thinking Approach. In *Healthcare* (Vol. 12, No. 4, p. 424). MDPI.
- Moore, S. E., Wierenga, K. L., **Prince, D. M.**, Gillani, B., & Mintz, L. J. (2021). Disproportionate impact of the COVID-19 pandemic on perceived social support, mental health and somatic symptoms in sexual and gender minority populations. *Journal of Homosexuality*, 1-15. [doi.org/10.1080/00918369.2020.1868184](https://doi.org/10.1080/00918369.2020.1868184)
- Prince, D.M.** & M.E. Moore (2021, May 12). Early Results, Opportunities, and Challenges in the Rainbow Connection Community & Collaboration Pilot (Webinar). Prevention Research Center for Health Neighborhoods at CWRU, Seminar Series, Cleveland, OH.

**5. Protective factors germane to high-risk, vulnerable adolescents.** I have conducted studies that establish evidence for the importance of future orientation to reduce delinquency (and subsequent system involvement) and substance use among African American and Latino adolescent boys. Future orientation, which includes a positive view of the future and belief in one's ability to achieve personal goals, has the potential for large impact as a public health intervention strategy and point of change. Although positive future expectations have been associated with adaptive functioning, perceived threats to safety and survival represent a significant public health concern for racial and ethnic minority young men. Therefore, I first established longitudinal support for a multidimensional measurement model of future expectations inclusive of both positive expectations and expected threats to future safety among a sample of African American and Latino young men. Then, I applied cross-lagged structural equation modeling to examine the relations between these two aspects of future expectations, individual substance use, and delinquency from ages 13 to 17. Importantly, negative future expectations predicted both substance use and delinquency, both of which in turn decreased positive expectations and increased expectation of threats to future safety across adolescence. *Individual-level protective factors for underserved adolescent populations should be included in targeted interventions to reduce delinquency and substance use.*

- Prince, D.M.** (January 2017). Longitudinal Relationship between Future Orientation, Substance Use and Delinquency among African American and Latino Young Men. Symposium, "Attending to Place and Spatiality in the Healthy Development of Vulnerable Youth", 21st Annual Conference of the Society for Social Work Research, New Orleans, LA.
- Prince, D.M.**, Epstein, M., Nurius, P., D. Gorman-Smith, & Henry, D. (2016). Reciprocal effects of positive future expectations, threats to safety, and risk behavior across adolescence. *Journal of Clinical Child and Adolescent Psychology* DOI: 10.1080/15374416.2016.1197835
- Prince, D.M.**, Epstein, M., Nurius, P., King, K., D. Gorman-Smith, & Henry, D. (2016). Assessing future expectations of low-income minority young men: Survival-threats and positive expectations. *Journal of Child and Family Studies*, 25, 2089-2101. DOI:10.1007/s10826-016-0384-y.

**Complete List of Published Work in MyBibliography:**

<https://www.ncbi.nlm.nih.gov/myncbi/dana.prince.1/bibliography/public/>