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**BIOGRAPHICAL SKETCH**

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NAME: Elizabeth A. Vandewater

eRA COMMONS USER NAME: elizvan

POSITION TITLE: Senior Research Fellow

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**EDUCATION/TRAINING**

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INSTITUTION AND LOCATION	DEGREE	Completion Date MM/YYYY	FIELD OF STUDY
Boston, University, Boston, MA	BA	05/1986	Psychology
University of Michigan, Ann Arbor, MI	MA	05/1990	Psychology
University of Michigan, Ann Arbor, MI	PhD	12/1994	Psychology

**A. Personal Statement**

I lead the Data Sciences and Research Services Unit of the Population Research Center's Scientific & Technical Core. I bring a wealth of expertise and experience relevant to the specific aims of the Center and the Scientific & Technical Core (STC). As a former PRC Associate Director and faculty research associate, I am intimately familiar with the Center. I am an active population scientist in my own right, whose research on the development of well-being from early childhood to young adulthood falls directly under the PDB program area of Families, Health, and Productivity and into the PRC's primary research area of Demography: Family Demography and Intergenerational Relationships. As a population scientist and PDB-funded PI, I am well acquainted with the activities and resources faculty members need to be successful. As a methodologist with deep knowledge of statistical techniques for population science and a history of teaching advanced courses in methods and statistics, I am uniquely qualified to provide statistical and analytical expertise to PRC faculty members for projects at all phases of a research project's life cycle. I draw on these experiences to provide individualized consulting and support to PRC faculty members, including connecting them to needed services outside the STC. I have the expertise, leadership, training, and motivation necessary to successfully carry out the duties and responsibilities as Unit Lead of Data Science and Research Services (DSRS) of the Scientific & Technology Core.

**B. Positions and Honors****Positions and Employment**

1994-1996 Assistant Professor, Department of Psychology, St. Lawrence University, Canton, NY  
1996-1998 Postdoctoral Fellow, Life Course Development and Aging, University of Michigan, Ann Arbor, MI  
1998-2004 Assistant Professor, Human Development and Family Sciences, Department of Human Ecology, The University of Texas at Austin  
1999-2006 Research Associate, Population Research Center, The University of Texas at Austin  
2001-2007 Director, Center for Research on Interactive Technology, Television and Children (CRITC), The University of Texas at Austin  
2005-2007 Associate Professor, Human Development and Family Sciences, Department of Human Ecology, The University of Texas at Austin  
2006-2007 Associate Director, Population Research Center, The University of Texas at Austin  
2006-2012 Faculty Associate, Survey Research Center, Institute for Social Research, University of Michigan, Ann Arbor, MI  
2008-2010 Senior Research Scientist, Center for Molecular Epidemiology, Genomics, Environment and Health, RTI International, Research Triangle Park, NC  
2011-2016 Associate Professor, Health Promotion and Behavioral Science, The University of Texas School of Public Health, Austin Regional Campus, Austin, TX  
2016- Senior Research Fellow and Unit Lead, Data Science and Research Services, Population Research Center, The University of Texas at Austin, Austin, TX

## **Other Experience and Professional Memberships**

### ***Advisory Boards and Steering Committees:***

2001-2003	Advisory Board, PSID Child Development Supplement (CDS), University of Michigan, Institute for Social Research
2001-2011	Steering Committee, Children's Digital Media Centers (CDMC), Georgetown University
2002-2004	Governance Board, Population Research Center, University of Texas at Austin
2006-2016	PBS Kids Next Generation Media Advisory Board, Washington, DC
2008-	Scientific Advisory Board, It's Time Texas, Austin, TX
2010-2011	Innovation Forum Committee, American Heart Association, Washington, DC
2010-2012	Scientific Advisory Board, Baby Einstein Company, LLC, Los Angeles, CA
2013-	Member, Advisory Committee, PSID Child Development Supplement (PSID CDS), Institute for Social Research, University of Michigan, Ann Arbor, MI
2013-2016	Member, Steering Committee, Texas Tobacco Center of Regulatory Science for Youth and Young Adults, Austin, TX

### ***Editorial Boards and National Review Committees:***

2005-2007	Editorial Board, <i>Journal of Children and the Media</i>
2005-2010	Consulting Editor, <i>Monographs of the Society for Research on Child Development</i>
Oct 2005	Guest Member, Psychosocial Development, Risk and Prevention (PDRP) Review Committee, National Institutes of Health
Feb 2005	Guest Member, Community Influences on Health Behavior (CIHB) Review Committee, National Institutes of Health
2006-2010	Member, Social Science and Population Studies (SSPS) Review Committee, National Institutes of Health
2011-2012	Guest Member, Social Science and Population Studies Review Committee: Second Panel (SSPS-2), National Institutes of Health
Nov 2015	Member, Special Section, P01 Award Review Committee, National Institutes of Health

## **C. Contributions to Science**

1. In 1999, the American Academy of Pediatrics (AAP) first recommended no screen time for children under the age of 2, and no more than two hours daily after that (a recommendation that continues to the present day). In 1999, virtually nothing was known about young children's media use or its developmental implications, as research examining such questions on children under 2 was non-existent. To fill this gap, I and my colleagues at the Kaiser Family Foundation conducted two seminal descriptive surveys assessing media use among young children (ages 0-6) from U.S. representative samples in 2002 and 2005 (Rideout, Vandewater & Wartella, 2003; Vandewater et al., 2005; Vandewater et al., 2007). Still widely cited, we found that children under the age of 2 watched an average of an hour of television daily, that fully 1/3 of children under the age of 2 had a television in their bedroom, and that 25% or fewer of children under 2 followed the AAP screen-time recommendations. In related research, I examined the claim (made by the AAP and others) that developmentally appropriate activities were significantly displaced by time spent viewing, namely time spent with family and friends, time spent reading, doing homework, in pretend play or creative activities, and playing outdoors. We found that time spent viewing alone was negatively related to time spent with parents and in creative activities (although as a percent of total time spent with parents, the magnitude of effect was greater for older children than for young children); and we found no relationship between time spent viewing and time with friends, reading, doing homework, or playing outdoors (Vandewater, Bickham & Lee, 2006).
  - a. Rideout, V., **Vandewater, E.A.** & Wartella, E. A. (2003). Zero to Six: Electronic media use in the lives of infants, toddlers & preschoolers. Kaiser Family Foundation: Menlo Park, CA.
  - b. **Vandewater E. A.**, Bickham, D. S., Lee, J. H., Cummings, H. M., Wartella, E. A. & Rideout, V. J. (2005). When the television is always on: Heavy television exposure and young children's development. *American Behavioral Scientist*, 48, 562-577.
  - c. **Vandewater, E.A.**, Rideout, V., Wartella, E. A., Huang, X., Lee, J. H., & Shim, M. (2007). Digital childhood: Electronic media use among infants, toddlers and preschoolers. *Pediatrics*, 119, e1006-e1015. (PMID: 17473074)

- d. **Vandewater, E. A.**, Bickham, D. S., & Lee, J. H. (2006). Time well spent? Relating television use to children's free time activities. *Pediatrics*, 117, e181-e190. (PMC2862999)
2. After we established that children under 2 were exposed to a lot of screen media, many scholars set out to prove that screen time (particularly television or infant-directed videos) caused developmental delays or deficits. The vast majority of this research was either cross-sectional or, if experimental, found no relationship between viewing and developmental outcomes—which, puzzlingly, was interpreted to mean that infant media (e.g., Baby Einstein) was developmentally detrimental. With no prior convictions either way, I was one of few scholars to question this assumption at the time, and I experimentally assessed the possibility that, similar to children ages 2 and older (Vandewater & Bickham, 2004), children under 2 might learn specific skills from specific screen-based curricula. My findings in this area demonstrated that this was indeed so (Vandewater, Barr, Park & Lee, 2010; Vandewater 2011), with learning of both shapes and language higher among children under 2 exposed to the videos versus those who were not.
  - a. **Vandewater, E.A.**, & Bickham, D.S. (2004). The impact of educational television on young children's reading in the context of family stress. *Journal of Applied Developmental Psychology*, 25, 717-728.
  - b. **Vandewater, E.A.**, Barr, R., Park, S.E., & Lee, S.J. (2010). Transfer of learning from video to books during toddlerhood in the US: Matching words across context change. *Journal of Children and the Media*, 4, 451-466.
  - c. **Vandewater, E.A.** (2011). Infant word learning from commercially available video in the US. *Journal of Children and the Media*, 5, 248-266.
3. Much of the extant literature on the relationship between screen time and childhood obesity simply examines bivariate relationships between the two, leaving empirical examination of mediators or more nuanced theoretical explanations untouched. My work in this area has scrutinized the veracity of the simplicity often assumed to characterize the relationship between viewing and obesity, showing, for example, curvilinear relationships between the two (Vandewater, Shim & Caplovitz, 2004), important moderators of relationships between viewing and obesity (Vandewater & Huang, 2006), and the possibility that the relationship between them is due to the effect of obesity on children's friendship ties (Vandewater, park, Hebert & Cummings, in press). In addition, the lack of relationship between physical activity and viewing (Vandewater et al, 2006) led me to examine the possibility that other factors, such as media-based marketing, might be driving the relationship between obesity and childhood viewing (Vandewater & Denis, 2011). Taken together, my work on viewing and obesity has called into question over-simplified explanations of the relationship between them, and sought to add more nuanced information to the extant knowledge base through careful and comprehensive examinations of possible alternative mechanisms and effect moderators.
  - a. **Vandewater, E.A.**, Shim, M. & Caplovitz, A.G. (2004). Linking obesity and activity level with children's television and video game use. *Journal of Adolescence*, 27, 71-85. (PMC15013261)
  - b. **Vandewater, E.A.** & Huang, X. (2006). Parental weight status as a moderator of the relationship between television viewing and childhood overweight. *Archives of Pediatric and Adolescent Medicine*, 160, 425-431. (PMC16585489)
  - c. **Vandewater, E.A.** & Denis, L.M. (2011). Media, social networking, and pediatric obesity. *Pediatric Clinics of North America*, 58, 1509-1519. (PMID: 22093866)
  - d. **Vandewater, E.A.**, Park, S.E., Hebert, E.T., & Cummings, H.M. (2015). Time with friends and physical activity as mechanisms linking obesity and television viewing among youth. *International Journal of Behavioral Nutrition and Physical Activity*, 12(Suppl 1):S6. (PMID: 26221737)
4. My long-time interest in the development of well-being from childhood to midlife (e.g., Vandewater & Lansford, 2005; Vandewater, Ostrove & Stewart, 1987), coupled with my work on the influence of media on developmental outcomes, led to an interest in the impact of exposure to pro-tobacco marketing and media messages on young adult smoking behavior, including the possibility that genetic variants are at least partly responsible for differential responses to marketing messages (Wilkinson, Vandewater, Carey, Prokorohov & Spitz, 2013). To pursue this interest, I secured pilot funds from NCI to examine new and emerging tobacco product marketing on social media (see completed funding, below). Using text analytics

(which provide a technique for including text based data with quantitative data for use in predictive models), we were able to identify words differentially predicting two of four popular e-cigarette brands. Analyses revealed that the four e-cigarette brands used somewhat different types of messages to appeal to social media users. While terms used by the brands Blu and NJoy sold a “lifestyle”, words used by the brands Logic and Metro relied on product identification (e.g. ecig). This difference was apparent in the predictive models, where words differentially predicting Blu and NJoy could be discerned, but there was little differentiation between Logic and Metro (Vandewater, Clendennen, Bigman & Wilkinson, 2016).

- a. **Vandewater E. A.**, & Lansford, J. E., (2005). A family process model of problem behaviors in adolescents. *Journal of Marriage and the Family*, 67, 100-109.
- b. **Vandewater, E.A.**, Ostrove, J. M., & Stewart, A.J. (1997). Predicting women's well-being in midlife: The importance of personality development and social role involvements. *Journal of Personality and Social Psychology*, 72, 1147-1160. (PMID: 9150589)
- c. Wilkinson, A.V., **Vandewater E. A.**, Carey, F. R., Prokhorov, A.V., & Spritz, M.L. (2013). Tobacco use and exposure to pro-tobacco messages among Mexican-American youth. *Journal of Immigrant and Minority Health*. (PMID: 23584711).
- d. **Vandewater, E.A.**, Clendennen, S.C., Bigman, G., & Wilkinson, A.V. Text Mining: Characterizing e-cigarette brands from social media brand-page posts. Presented at The Society for Research in Nicotine and Tobacco, Chicago, IL, March 2-5, 2016.

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

<http://www.ncbi.nlm.nih.gov/sites/myncbi/elizabeth.vandewater.1/bibliography/40696010/public/?sort=date&direction=descending>

#### **D. Research Support**

##### **Completed Research Support**

P50CA180906 (C. Perry, PI)

09/1/13-08/31/18

National Cancer Institute

Texas Tobacco Center of Regulatory Science on Youth and Young Adults

This P50 grant consists of 3 R01-level research projects and 4 Cores devoted to science and training on tobacco regulatory science relevant to the mandates of the Food and Drug Administration. The R01s aim to conduct developmentally appropriate, longitudinal surveillance research among youth and young adults, to understand more about the diversity of tobacco products that they use and the etiology of their onset and progression, focusing on the potential impact that tobacco marketing practices may have on their tobacco use. Roles: P50 Co-I; Director of Development Core; Project 3 Co-I (through June of 2016).

Responsibilities: Serve on the Center Steering Committee; Provide scientific, administrative and financial oversight over all Development Core activities; provide methodological and analytical support to Project 3.

U18 DP003367 (D. Hoelscher, PI)

09/1/11-08/31/16

Centers for Disease Control and Prevention

Systems Approach to Obesity Prevention in Underserved Children in Texas

The major goal of this study (known as Texas Child Obesity Research Demonstration, or CORD) is to demonstrate that among low-income, ethnically diverse overweight and obese children aged 2-12 years, a systems approach to child obesity incorporating secondary prevention programs embedded within primary prevention will reduce body mass index z-scores compared to primary prevention alone.

Role: Co-Investigator

Responsibilities: Serve as the primary project methodologist and statistician, providing oversight and guidance on all project design, methodological and statistical decisions and analyses.

P50CA180906 (E. Vandewater, PI)

05/1/14-08/31/15

National Cancer Institute

New and Emerging Tobacco Product Marketing on Social Media (Pilot Funds)

The goal of this pilot project was to track the spread of new and emerging tobacco product discussions, posts, shares, likes, etc. on new and emerging tobacco products (e.g., e-cigarettes, e-hookah) on social media platforms including Twitter, FaceBook, Instagram, Pinterest, and Tumblr in order to assess the prevalence, sentiment, and types of such posts on social media.

Role: Principal Investigator

Responsibilities: Provide scientific and analytical oversight over all project activities, conduct text analytics.

R03HD066283 (E. Vandewater, PI)

09/1/11-08/31/14

National Institute of Child Health and Human Development

Coding Media Content in the Child Development Supplement

The goal of this project was to code the content of the 3rd wave of the Child Development Supplement (media data) in the time diaries and release the content codes to the public via the PSID-CDS website.

Role: Principal Investigator

Responsibilities: Provide scientific, analytical, and financial oversight over all project activities.

R01HD053652 (E. Vandewater, PI)

09/1/07-08/31/13

National Institute of Child Health and Human Development

Connecting Media Use and the Development of Obesity across Childhood

The goal of this project was to estimate growth curves of media use, physical activity, and weight status from early childhood to adolescence, estimate associations among them, and identify key moderators of the associations between media use, physical activity, and obesity overtime.

Role: Principal Investigator

Responsibilities: Provide scientific, analytical, and financial oversight over all project activities.