

# “Bringing Life into a Chaotic World”

## A Qualitative Analysis at the Intersections of Gender, Race, Climate Change & Childbearing

Natalie Blanton, PhD

University of Tennessee at Chattanooga, USA

### BACKGROUND

#### Global Climate Change

- If greenhouse gas emissions continue at the current rate, global atmosphere will warm by 2.7 degrees Fahrenheit (1.5 degrees Celsius) above preindustrial levels by 2040.
- The 2018 report by the Intergovernmental Panel on Climate Change describes a world of massive food shortages, wildfires, severe storms, and biodiversity loss.
- Addressing climate change entails restructuring the global economy, cities, transportation, consumer habits, food systems, and family formation.
- General uncertainty is increasingly a defining aspect of this century. **Widespread “Eco-Anxiety” is on the rise.**



Photo by Jeffrey D. Allred

#### Environmental Sociology

- Modern, industrial society tends to ascribe to the “Human Exemptionalist Paradigm,” in which natural limits are denied and humans are seen as independent from the “web of nature.”
- Counter to this, there is need for a “New Ecological Paradigm,” whereby it is understood that human society must operate within the larger biophysical world and recognize limits.
- Social drivers, such as economic and population growth, are major factors contributing to carbon dioxide emissions, deforestation, and air pollution.
- Population dynamics can be mediated through education and employment opportunities for women, access to health care, birth control, and family planning resources, age structure of society, and religious influences—though are often rooted in ethnocentrism and direction from the Global North, misplacing blame for environmental degradation on the Global South (Sasser 2018).
- The influence of population growth is not uniform. The carbon legacy of a child born in the United States is 160 times that of one from Bangladesh (Murtaugh & Schlax 2009).
- **While scholars focus on the consequences of population growth, few studies have examined how environmental concerns, such as climate change and air pollution, are influencing reproductive decisions.**
- Perceptions of health risks due to pollution have been linked to forms of “pro-environmental behaviors,” with some nods to fertility intentions or reproductive attitudes.

#### Intersections of Gender and Race

- **Women are more uncertain about becoming parents than men.**
- **Race and ethnicity shape the way individuals perceive economic conditions, context, and the future.**
- **Women of Color are more uncertain about parenting than white women.**
- People of the Global Majority shift their childbearing intentions and behavior based on poor economic conditions, sometimes opting out of having children, when resources are scarce. White individuals are more confident in their ability to support a child in times of precarity (Geist and Brauner-Otto 2017).
- **The gender disparity in environmental concern** has been established in the literature—**women, typically, have higher levels of eco-anxiety, and subsequent pro-environmental behaviors.** Conservative white males are more likely than other adults in the US to hold climate change denialist views (McCrigh and Dunlap 2011).
- Complex issues of **intersectionality** (Kimberly Crenshaw) and **Environmental and Reproductive Justice** (SisterSong Collective).

### QUESTIONS

- How are air quality and climate change influencing people’s fertility intentions and childbearing decision-making?
- How does gender compound or interact with these environmental concerns, risk perceptions, and future ideations?
- How do intersections of identity such as race and ethnicity further compound or interact with these concerns, perceptions, and futures?

#### Salt Lake’s Environmental Pollution & Health Disparities:

- The average person on the Wasatch Front loses about 2 years of life expectancy due to air pollution. Nearly 80% of Utah’s population lives here (Salt Lake Valley or Basin).
- American Lung Association graded Utah with an “F” for unhealthy levels of ozone and particulate pollution.
- Poor air quality and high pollution levels are more prominent on the west side of the city, which is more densely populated with low-income, ethnic-minority residents.
- Higher rates of Asthma (9% of Utah’s population), heart disease, and high blood pressure.
- ER visits increase 40% on days when pollution is high or ranked as “unhealthy” (above PM2.5).
- **Pregnancy complications:** Higher risk of miscarriage. 13-22% increased risk of stillbirth due to the level of ozone exposure. Alteration of fetal chromosomes, brain maldevelopment, greater likelihood of developing heart disease, cancer, and brain disorders in infants.
- 1,000-2,000 people die in Utah, yearly, as a result of poor air quality complications (Utah Physicians for a Healthy Environment).
- Predominant religious context, The Church of Jesus Christ of Latter-Day Saints, also headquartered in Salt Lake, features a central tenant to “populate and replenish” the earth.

### Theoretical Framework

#### Fertility Intentions & Reproductive Behaviors

- Scholarship in this area focuses on how economic and sociocultural factors influence decisions whether to have children.
- Economic factors include financial strain, educational attainment, employment status, income level, and job prospects.
- Uncertainty and precarity are central concerns that influence decisions.
- **To date, little consideration has been given to how environmental factors influence fertility intentions and reproductive behaviors.**
- Highly educated and financially stable individuals have more resources and ability to execute their fertility goals and intentions.
- Debt and financial insecurity often delay or diminish childbearing intentions and behavior.
- Millennials are faced with increased economic strain, due to the Great Recession and general economic and political flux.
- Unintended pregnancies are higher among those in worse economic conditions, due to less access to health care, birth control, and family planning resources.
- Higher religiosity and traditional gender attitudes are both associated with higher fertility intentions, earlier births, and less acceptance of “Childlessness” or “Childfree by Choice.”
- “Two Child Norm” has held for decades in the United States, but now shifting.
- Total fertility rate in United States: 1.84 children born/woman (2020 CIA). Total fertility rate in Utah: 2.03 children/woman. Replacement rate is considered 2.1 (Utah was at that level in 2017 but dropped below in 2018).

### METHODS

- **Semi-structured, in-depth interviews with 65 residents of Salt Lake County, Utah, USA**  
Sample:  
N=31 undergraduate students from the University of Utah  
N=20 participants from Family Planning Elevated, HER Salt Lake Contraceptive Initiative, in partnership with the University of Utah Department of Obstetrics and Gynecology  
N=14 community members accessed through snowball sampling
- **Qualitative, inductive, exploratory methods** to get at the “rich,” “thick data” and nuance of life course, fertility intentions, and family formation.
- Questions covered a wide range of factors and influences such as family of origin, childhood experiences, family and home power dynamics, childbearing desires, fertility intentions, and **perceptions of global climate change and regional air quality.**
- Questions explored mental health affects or “**eco-anxiety**” and risk assessment, as well as hope for the future.
- Interviews ranged from **30 - 90 minutes in length and took place between October - June 2020.**
- Interviews were conducted, audio-recorded, transcribed, coded, and analyzed by Blanton.
- Qualitative analysis and coding software of Atlas.ti was utilized.
- All respondents resided, at the time of interview, in Salt Lake County, Utah.
- Pseudonyms were assigned for confidentiality.

### Demographics of Interviewees

<b>Age Range:</b> 19 - 45 years old (average of 27.1)	<b>Race &amp; Ethnicity:</b> 3 Black Individuals 10 Latino/x 4 Asian American 1 Middle Eastern 47 White
<b>Gender:</b> 49 Women Interviewed 15 Men 1 Gender-Nonconforming Individual	<b>Religions Represented:</b> LDS-Mormon, Catholic, Buddhist, Muslim, Atheist, “Cultural Christians” (raised in a variety of Christian sects)
<b>Sexual Orientation:</b> 12 Bisexual or Queer 1 Gay 39 Straight 8 “Straight-ish” or Questioning	

### Not Out of Sight, Not Out of Mind: Air Quality Concerns

“We can see it right in front of our faces, unlike climate change, and we really can acknowledge that it’s a problem, but I don’t think many people know how bad of a problem it is...the birth defect and suicide rates...”

- **High Prevalence of Asthma:** Most interviewees would bring up asthmatic individuals in their families – be it themselves, their children or immediate family members having difficulty breathing.
- **Use of masks, and frustration with lack of access to clean air and filtration technology. Compounded by Covid-19 Mask Protocols.**
- **Some individuals interviewed would report “not environmentally concerned” regarding global climate change. However, when local or regional poor air quality was introduced as a topic, there was a code switch into sincere concern, confusion, hopelessness, and even anger, at times.**
- Risk Society – the perception of risk, visualized/actualized in one’s everyday experience, affects decisions and planning.
- Interviewees spoke of inversions as the infamous “line” in the sky, across the geographical “soup bowl” of “smog” in the Salt Lake Valley.
- Individuals (especially pregnant women, youth, and the elderly are encouraged to) wear “smog,” “vog” or pollution filtration masks on “bad air days” – eerie, dystopic reality.

#### Assessing level of concern:

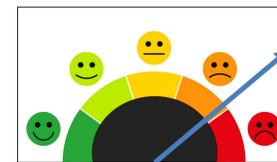
The interviewees were asked to rank their level of concern of Utah’s air quality on a Likert scale of 1 to 5.  
1 = Not worried at all  
5 = Extremely worried  
Minimum reported concern was 1.5, Maximum was 5  
One bewildered response of “Can I say...11?”

Average level of concern = 3.98  
Student subsample had lowest average concern at 3.5

**Anguish and high levels of air quality concern in the everyday, lived experience of individuals in Salt Lake, their families, and their future perceptions.**

“...It’s a good reason to not to stay in Utah, especially the Wasatch Valley. It’s a good reason to leave. I wouldn’t want to raise a child in this kind of air and I wouldn’t recommend anybody else do so either. And you know, money talks. They won’t make any changes until it’s so bad that things won’t get any better. Oh, somebody told me that it has gotten better, but I have a hard time believing that, unless the factories are closing down because they’re not profitable anymore...It’s a very visible reminder for these people, you know, their children are needing the inhalers before they go outside.”

- Todd, 26, Gender-Nonconforming White Individual’s thoughts on moving to Utah for school, and air quality as the main reason they don’t want to have “biological” children here.



### DISCUSSION

#### Embodied and Disassociated Environmentalism: Gender Disparity

“Climate change, like all things, is an embodied experience.”

- Jade S. Sasser, PhD

- **Women interviewees largely held to an “embodied environmentalism” centering this macro or global concern of climate change and environmental degradation into their very personal, intimate decisions, a nod to the early Feminist mantra “the personal is political.”**
- Themes of climate “**doomism**” and **pre-traumatic stress disorder** was present.
- The choice to forego having children as their most impactful form of activism: many spoke of a “forced-hand” or lack of “choice” invoking an infringement on reproductive justice, not feeling they had a safe or healthy environment to give birth or parent within, particularly in Salt Lake City—and intersection of **Environmental and Reproductive (In)Justice.**
- The women interviewees would speak of shame or guilt when it comes to environmental degradation, denoting that they, personally, could do more.

“If I’m raising my child in Salt Lake City, Utah, they’re going to be impacted by the air quality and it’s only bound to get worse, even with reduction in emissions, but other things, such as food or water security, how are we going to feed this growing population globally? ...Children are forced to be environmental activists from the start. Environmental migration is not prevention.” - Kaya, 23, Filipina woman, saying she wanted to have children up until “everything changed” when a friend talked about the climate crisis in connection with not having a child.

- **Men spoke of climate change being overblown by their peers and community. Utilized climate denialist language,** explaining that this process is “natural” and is not spurred on by human activity.
- When asked of their childbearing intentions and behaviors, they would speak of freedom, liberty, and the protection of their personal “choice” to carry on their legacy and lineage – and nothing could hinder that.
- When asked about their future hopes, the men in this study would speak with “techno-optimism” or how green energy, electric vehicles, and **eco-modernization/technology will help us invent our way out of the problem.**
- My data revealed that politically conservative, straight, white men were more likely to hold climate denialist views. Some men scoffed at “the idea of” climate change, and even more so, those who were factoring a macro factor into their micro decision-making schemas.

“I don’t really believe it [climate change]...I think that I’ll be able to live my life without the whole world exploding. We are going to see the impact and stuff’s gonna change.” - Ethan, White, Male, College Student

“I do think that we contribute and speed it up, but I don’t think that it’s only cars and factories that are playing into it. It’s a very natural process of our planet and we can see that over our history. So, it doesn’t affect me much.” - Steven, White, Male, College Student

#### Interviewees of the Global Majority and Risk Perception

- Interviewees of the Global Majority or systemically marginalized ethnic and racial identities (N=18), **centered issues such as racism and white supremacy, gender inequality, gun violence, mental health, and socio-economic and political precarity when making pregnancy and parenting decisions.**
- **These concerns often took precedence over environmental concern,** noting that, under this current system, as a minority in the US, everyday there is climate collapse, with various conceptions and contexts of environment (unstable housing, lack of safety and security in schools and workplaces, lack of access to healthcare, etc.).
- **Themes of environmental and reproductive injustice, with lasting intergenerational effects.**

“I know that not everybody has asthma, but maybe if we all had asthma, people would understand. And it makes me feel bad because I’m like, what world are we leaving for our kids? I don’t know how much worse it’s going to be here in 10 years. Are people comfortable with the fact that we may all have to go outside with masks? I don’t mean medical masks, like actual masks that will help you breathe, like in a war?” - Marisa, 26-year-old, Latina Mother of 3 Children

### CONCLUSIONS

Findings indicate that environmental concerns influence fertility intentions and family planning, which is compounded through the intersections of gender, race, and ethnicity. Additionally, it was helpful to consider both climate change and air pollution, as distinct environmental concerns, as the responses and perceived risks varied among the interviewees (Dietz, Frey, and Rosa 2002; Freudenburg 1988). This research expands upon the previous, though minimal scholarship addressing eco-reproductive attitudes and behaviors (Arnoct et al. 2012; De Rose and Testa 2015; Ghimire and Mohai 2005; Helm et al. 2021; Schneider-Mayerson and Leong 2020). Most of the individuals in this study feared for future generations and the lack of life chances they may encounter on a warming planet. **Climate change and regional environmental degradation (air pollution) did not affect individuals equally, given the distinct positionality and forms of environmental injustice interviewees confronted. In the context of fertility intentions and social reproduction, environmental concern was present for most of these individuals.**

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Contact: natalie-blanton@utc.edu

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