“It changed the atmosphere surrounding the baby I *did* have”: Making sense of reproduction during sustained uncertainty

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INTRODUCTION

In this study, I show how individuals use specific schemas in a time of prolonged social upheaval to maintain, reassess, or relinquish their expectations for reproductive experiences. Despite a robust body of literature that quantitatively describes population fertility responses to crises—both long and short—we know less about how individuals make sense of their reproductive experiences within these scenarios. In this study, I use a unique qualitative dataset—29 in-depth interviews with women of reproductive age interviewed 7-8 months into the COVID-19 pandemic, prior to the development of a successful vaccine—to offer insights into the research question: “How do adult women make sense of their reproductive experiences in the context of prolonged uncertainty?” In exploring women’s narratives, I show how the material experience of the pandemic reveals the heteronormative, affective, and medical schemas that women use to normatively make sense of reproduction. I demonstrate that these schemas have real consequences for experiences of reproduction.

This work utilizes the COVID-19 pandemic in two distinct ways: in the first, it considers the pandemic as a period of prolonged uncertainty—this type of experience, because of its traumatic or destabilizing nature, often allows participants to narrate experiences with greater clarity and precision (Becker, 1997; Johnson-Hanks et al., 2011; Swidler, 1986). Thus, in my findings, I refer to making sense of reproductive experiences that are not COVID-specific. Second, I examine where participants elaborate on the direct effects the COVID-19 pandemic had on their reproduction processes. To do this, I employ the “Theory of Conjunctural Action” (TCA) to examine relevant schemas for assessing reproductive experiences within critical moments, or conjunctures (Johnson-Hanks et al., 2011). In the framework of TCA, the COVID-19 pandemic represents a larger material context within which reproductive conjunctures, or

critical moments for making sense of experience, can occur. Within these moments, individuals employ specific schemas, or ways of making sense, to justify their reproductive experiences (Johnson-Hanks et al., 2011). I describe the three major schemas which emerged: heteronormativity, affectivity, and medical.

Here, schemas of heteronormativity refer to timelines (often linear) that adhere to strict social scripts around the timing and order of milestones within heterosexual, middle-class, white reference groups, despite these arrangements being historically atypical in terms of family life (Coontz, 1992; Halberstam, 2005; Mann, 2013). For example, within these schemas, marriage and reproduction follow standardized pathways that normalize ways of being—specifically those that prioritize heterosexual, married, procreative relationships (Halberstam, 2005; Mann, 2013). When participants in this study talk about heteronormative timelines, they are aligning themselves with practices that make their own lives appear to conform to taken-for-granted respectability and legitimacy (Mamo, 2007). In this study, I refer to schemas of affect as the use of emotions to describe how daily lived experiences shape how participants tell their reproduction stories. These expressions of affect serve as expressions of relationality; for many participants, talk about emotions serves to make sense of the self in relation to the changing social world represented by the pandemic (Margolis, 1998). Some of these affective experiences come to light because the experience of the pandemic has offered participants time for reflection; others are affective reactions to experiences directly related to COVID-19. Finally, a medical schema hybridizes orthodox medicalization critiques to show how participants use feelings of fear, risk, and loss to characterize birth experiences to collude in the medicalization of birthing practices (Lupton, 1997). This schema builds on extensive literature demonstrating that the

transformation of reproduction into a medical “problem” instills reliance on medical institutions that may not meet birthing people’s social, emotional, or physiological needs (Rapp, 2001).

By examining how the schemas both adhere to and challenge heteronormative, affective, and medical schemas, this research has broader implications for demographic research on fertility and families. The respondents’ experiences during the COVID-19 pandemic demonstrate that conceptualizing reproduction as a complex, relational set of processes may help researchers better understand how socio-material backdrops, like the pandemic, affect meaning-making, which in turn may better help theorize demographic behavior. Navigating historically contingent moments has real consequences for childbearing through the social construction of emotions and the life course. This work can be extended to bolster critiques of reproduction research which argue that a historical focus on cross-sectional fertility preferences or on preventing “undesirable” pregnancies ignores how pathways to realizing reproductive intentions are restricted by social expectations and material circumstances (Aiken et al., 2016; Bell et al., 2018; Geronimus, 2003; Gomez et al., 2020). The schemas that individuals and couples use to navigate these relational processes are an important issue to investigate further, as they offer insight into how individual reproductive decisions are made, broken, and reshaped.

BACKGROUND

Theoretical Framework: Theory of Conjunctural Action

Johnson-Hanks et al. (2011) describe a theory of conjunctural action (TCA) where fertility is perceived as a sequential decision-making process, and people operate on an autopilot system until a critical juncture (“conjuncture”)—a temporary but important node which combines specific schemas and materials—occurs. Within these conjunctures, individuals react in ways that reconfigure or affirm existing structures (Johnson-Hanks et al., 2011, pp. 1-22). In

TCA, this conjuncture is defined as a brief confluence of specific structural configurations that result in social action. In the case of my participants, this social action can consist of maintaining or changing preferences for whether and when to have children, for how to have children, or for making sense of reproductive experiences (pp. 15-17). The authors use the term “schema” as an umbrella term for a variety of related social science ideas that describe our taken-for-granted expectations and evaluations of the world, which allow us to translate behavior and understanding across time and contexts (Johnson-Hanks et al., pp. 2-8). They describe how the diffusion of social schemas is built into social lives and how these schemas can shape and alter conjunctures to allow for heterogeneous responses to similar emerging material conditions (Johnson-Hanks et al., 2011, pp. 12-14).

Within TCA, we can consider the COVID-19 pandemic to be an emerging material condition that creates critical junctures for reproductive sense-making in participants’ lives. In combination with existing social schemas, the material reality of the pandemic allows participants to articulate idealized typologies and restrictions for social behavior (for example, when and how to have a child) that they must then re-establish or relinquish in the face of massive societal disruption. The experience of the pandemic—as a crisis, an ongoing event, and as an upheaval—makes decisions about reproduction, whether real or imagined, unyieldingly salient as participants adjust or reorient their visions of their ideal life progressions to fit within a disrupted world. Throughout this paper, I will consider three important schemas that emerged from inductive thematic coding: heteronormative timelines, affective experiences, and medical narratives, and demonstrate how participants used these schemas to maintain, reassess, or relinquish their existing reproductive experiences.

Locating an individual's perceptions about reproductive experience in the context of conjunctures allows researchers to understand experiences of uncertainty, like an epidemic or quarantine, by making taken-for-granted schemas more explicit. With everyday life interrupted, people are forced to reckon with the mundane in entirely different ways (Becker, 1997; Swidler, 1986). These disruptions can occur because the material foundations of daily life are interrupted by restrictions on movement or by household quarantines, or it can happen via the interruption of everyday schemas, such as perceiving there to be a higher-than-normal mortality risk in one's community (Sandberg, 2005). Furthermore, these conditions are embedded within an individual's life-course trajectory. Prior life experiences will influence the options and constraints individuals perceive at a given conjuncture and shape the values ascribed to any subsequent social action.

Human life is characterized by uncertainty and the desire to reduce or manage uncertainty (Becker, 1997; Swidler, 1986). Existing demographic literature seeks to address how populations respond to population-wide uncertainty across a range of scenarios, including conflict, environmental disasters, and economic crises (see Heuveline & Poch, 2007; Nobles et al., 2015; Seltzer, 2019). While this literature is vital for understanding aggregate responses to changing material contexts, it does little to help scholars understand how individuals navigate critical conjunctures using specific schema. Below, I define how I am using the concepts of uncertainty and reproduction within this study and describe existing work on reproductive decision-making within epidemic contexts.

Defining Uncertainty and Reproductive Experience

In the context of this study, I define uncertainty using an expanded consideration of Trinitapoli and Yeatman's concept of "existential uncertainty" (Trinitapoli & Yeatman, 2018). In

their work in Malawi, Trinitapoli & Yeatman (2018) demonstrate that existential uncertainty, defined as increased proximity to death and its correlates, increased participants' flexibility in reproductive decisions. This evidence suggests that the existential uncertainty posed by epidemics may result in a larger variety of strategies for adaptation of childbearing preferences than other uncertain circumstances. Notably, as both Trinitapoli & Yeatman (2018) and Johnson-Hanks (2005) have commented, the context of daily life in many Sub-Saharan African countries is characterized by uncertainty. Participants in the U.S. may assume that their lives may be more standardized and predictable, on average, than a woman in Sub-Saharan Africa; however, Mills & Blossfeld (2013) have characterized societies of modernity as being in constant economic upheaval. The uncertainty related to potential mortality and potential job loss most likely have distinct characteristics; however, existential uncertainty is not only associated with mortality—it also finds significant footholds in employment, education, and family. Our existence might become increasingly salient when faced with imminent or widespread mortality, but human existence is not just about living and dying; it is about living and dying well within the social structures that make up our worlds. Thus, in this study, I define existential uncertainty as both the proximity to the potential for increased mortality and as the proximity to fundamental disruptions in everyday life.

In this research I used a broad definition of reproduction, which includes the biological components traditionally thought of as constituting reproduction—pre-conception, conception, pregnancy, and birth—and expands on these components to include the emotional and relational characteristics that make up reproduction as well. Examples of these include negotiations between partners for the number or timing of children to have, relating oneself to social norms

and expectations around having children, and experiencing grief at the inability to share the presence of a new baby with others socially.

Epidemic/Existential Uncertainty and Reproductive Decision-making

Existing literature that examines the relationships between epidemics, uncertainty, and fertility is focused primarily on generalized HIV/AIDS epidemics in Sub-Saharan Africa. Young adults who experienced epidemics or situations of high mortality may be motivated to either accelerate or decelerate childbearing (Rutenberg et al., 2000; Sandberg, 2005; Trinitapoli & Yeatman, 2011). Some research finds that individuals infected with HIV want to stop having children out of concern about transmission to theoretical offspring and because women perceived pregnancy as “quickenings” the HIV infection (Rutenberg et al., 2000). At the same time, some people wish to accelerate fertility in response to perceived uncertainty about their lifespans (Trinitapoli & Yeatman, 2011; Sandberg, 2005).

An emerging modality of work examines the effect of the Zika epidemic in South America on participants’ reproductive preferences and practices. Marteleto et al. (2017) used focus group data collected in Brazil to demonstrate that many women did not desire to become pregnant during the Zika outbreak due to intrauterine consequences of infection. However, this finding was moderated by respondents’ socioeconomic status. Women with higher levels of socioeconomic advantage were able to mediate the potential for infection, while less-advantaged women had more difficulty avoiding both infection and pregnancy during the epidemic (Marteleto et al., 2017). Marteleto et al. (2021) expanded upon this work during the COVID-19 pandemic to examine whether prior exposure to the Zika epidemic predicted women’s fertility intentions during the COVID-19 outbreak. Using survey data, they found that social proximity to the Zika virus, regardless of infection status, was positively associated with increased perceived

risk of COVID-19 infection and concerns about intrauterine complications from pregnancy during the COVID-19 outbreak (Marteletto et al., 2021).

This work suggests several key findings: individuals or couples may engage in childbearing in circumstances of uncertainty to reduce the uncertainty they feel within their lives, individuals in epidemic circumstances may demonstrate increased flexibility specifically in response to existential threats, or could be scarred by exposure to previous, similar threats, and adjust their childbearing preferences accordingly. This work also suggests that epidemics or pandemics may have transformative influences over the social and economic conditions of everyday lives and individuals' reproductive preferences and experiences. While these are intriguing findings that warrant further investigation, understanding the schemas that individuals use to navigate these situations, for example, to maintain, to re-assess, or to re-linquinsh their reproductive experiences, is essential to better understand the psychosocial life course consequences of foregone, adapted, or maintained fertility.

METHODS

Sample

The data presented in this article came from a study on lived experiences during COVID-19 pandemic “stay-at-home” orders and were collected in September-October 2020. This study focused on how participants used the experience of the pandemic to make sense of their own reproductive lives. I purposively recruited 25–35-year-old woman participants who were year-round residents of a mid-sized Midwestern County to participate in semi-structured in-depth interviews via several mutual-aid community Facebook groups. The members within these mutual aid groups occupy a broad range of social strata, and membership represents approximately 3% of the county's population. I focused on recruiting women from this age

group because it is a period that is considered “demographically dense,” i.e., many normatively important life events, such as education, employment, marriage, or reproduction, often occur within this age range (Rindfuss, 1991). The interruption of this period of “dense” life experiences represented by the COVID-19 pandemic reveals existing gender inequalities that have become exacerbated during the pandemic.

Data Collection Procedures

After filling out a pre-interview screening questionnaire, I invited participants to do an interview over the phone or a web-based video chatting platform. All participants chose to participate in interviews over a web-based video platform, and these interviews lasted from 45 minutes to 2 hours. In each interview, I asked participants for informed consent and to describe their average day on a typical day in January 2020, in March-May 2020 (when the county initiated responses to COVID-19), and in September-October 2020, when participants were being interviewed. Importantly, participants were asked about time points prior to the news that a successful vaccine had been developed. The timing of these interviews thus allows us to think about participants’ responses within a framework of long-term, sustained uncertainty, both about the present and future, i.e., a long-term “conjuncture.” These temporally anchored narratives primed participants to be thinking about their reproductive lives in the context of how their lives may have been changing before the COVID-19 pandemic occurred and how they changed or stayed the same during the pandemic itself.

Following descriptions of a typical day, I asked participants to describe how the experience of the COVID-19 pandemic has affected their current romantic relationships or views on potential romantic relationships, parenting or ideas about parenting, and their preference for having or not having any or more children. I also asked participants about their fertility desires—

what may be traditionally labeled as wanting no children, no more, any, more, or being “ambivalent” about childbearing. Participants could often name one of these categories as most relevant to their situation; however, their actual reproductive aspirations rarely completely fit into one of these categories. Rather, most preferences articulated by participants are conditional on a relational or affective aspect of life. This section of the interview guide is where I draw most of the findings for this study.

Table 1 demonstrates the distributions of the 29 women who participated in this study. This is a small, selective sample of primarily highly educated, partnered, and employed women. I did not ask participants to disclose other identities in an intentional strategy to allow participant-driven identities to emerge and to avoid scientific reification of categories like race or class. Because of this, I do not include participants’ race, ethnicity, or class in my analysis unless they brought it up as important to a discussed theme—however, it is important to note that the county itself is majority White and middle-class.

Analytic Methods

A third-party transcription service transcribed all interviews. After the interviews had been transcribed, I went through the following analytic process: first, I listened to participant’s interviews while reading along with their transcripts. Through this process, I constructed timelines (from January to March-May to September-October) of each participants’ employment, family life, socialization, childcare, worries, and fears, and I wrote a summary of each participant’s reproductive story. While going through this process, I wrote memos about emerging themes alongside memos that fit into themes originating in my initial interview guide (Saldanda, 2009). Based on this initial process, participants used several major schemas to make sense of their reproductive decisions from the data. I focus on three of these schemas, which I

have termed heteronormative, affective, and medical. These themes respond to my original research question: “How do adult women make sense of their reproductive experiences in the context of prolonged uncertainty?” Here, I draw on multiple queer and feminist theorizations of heteronormativity to define it as a way of making sense of the world which equates heterosexuality with legitimacy, and which operates as taken-for-granted knowledge that

Table 1: Participant Characteristics

Pseudonym	Age	Sexual Orientation	Marital Status	Education	Employment Status	Children	Pregnant during Pandemic
Alicia	35	Heterosexual	Married	Any graduate	Part time, salaried	2, ages 4 and 1.5	
Amber	29	Heterosexual	Married	Any graduate	Full time, salaried	Currently pregnant	√
Brittany	27	Bisexual	Single	Some college	Full time, non-salaried	No	
Christina	31	Heterosexual	Married	Any graduate	Full time, salaried	1, infant	
Claire	29	Heterosexual	Married	Bachelor's	Full time, salaried	Currently pregnant	√
Danielle	30	Heterosexual	Single	Any graduate	Full time, salaried	No	
Erica	32	Heterosexual	Married	Bachelor's	Full time, salaried	1, aged 2	
Faye	29	Bisexual	Married	Bachelor's	Part time, salaried	No	
Grace	25	Heterosexual	Serious Relationship	Any graduate	Full time, salaried	No	
Heather	30	Queer	Single	Any graduate	Full time, salaried	No	
Ines	35	Heterosexual	Serious Relationship	Any graduate	Full time	No	
Jenna	35	Queer	Married	Any graduate	Full time, salaried	No	
Katherine	31	Heterosexual	Married	Bachelor's	Part time, non-profit	2, ages 5 and 3	
Laura	31	Heterosexual	Married	Didn't answer	Stay-at-home parent	1, aged 4	
Lily	29	Heterosexual	Married	Any graduate	Full time student	No	
Liz	38	Heterosexual	Married	Any graduate	Full time, salaried	2, infants	√
Melanie	34	Heterosexual	Married	Any graduate	Stay-at-home parent	2, ages 2 and infant	√
Mia	32	Heterosexual	Married	Bachelor's	Part-time, hourly	2, ages 5 and 3, currently pregnant	√
Natalie	35	Heterosexual	Single	Bachelor's	Full time, salaried	No	√
Olivia	27	Bi-sexual	Single	Bachelor's	Full time, salaried	No	
Pheobe	25	Heterosexual	Single	Any graduate	Full time student	No	
Quinn	30	Heterosexual	Serious Relationship	Bachelor's	Full time, salaried	No	
Reese	25	Queer	Engaged	Any graduate	Full time student	No	
Sofia	33	Heterosexual	Single	Any graduate	Full time, salaried	1, aged 2, adopting second at interview	√
Stephanie	28	Heterosexual	Single	Bachelor's	Full time, non-salaried	No	
Tiffany	30	Heterosexual	Engaged	Didn't answer	Stay-at-home parent	1, infant	
Vanessa	34	Heterosexual	Married	Bachelor's	Stay-at-home parent	2, ages 4 and 1	
Whitney	33	Heterosexual	Single	Some college	Stay-at-home parent	3, ages 15, 8, and 2	
Yvette	33	Heterosexual	Married	Bachelor's	Stay-at-home parent	3, ages 5, 3, and infant	√

undergirds relations of respectability, class, and power (Halberstrom, 2005; Ingraham, 1994; Mamo, 2007; Mann, 2013). I define heteronormative schemas as timelines, actions, or processes that have an inherently heteronormative nature around which individuals or couples orient their reproductive activities. Implied within this schema is that the heterosexual couple is the default or the norm and that idealized versions of heterosexual lifestyles and timelines become the reference groups, for example, White and middle-class couples. Participants use these responsibilities and timelines, where certain actions or events preclude other events (i.e., getting married before buying a house), and where women's lives and priorities can be insidiously subsumed to priorities for their male partners, to explain their reproductive behavior, thinking, and actions (Halberstam, 2005). Some participants push back at the heteronormative experience as the standard or default; however, heteronormative practices still appear in their talk as the inevitable standard against which they must justify their decision-making (Ingraham, 1994). Affective schemas refer to the concept that the way in which participants know about their reproduction choices and processes is specifically through an emotional experience. Although few have explored the relationship between emotion and fertility (for an exception see Axinn et al, 2017), emotions are widely understood within the social sciences as both socially constructed and constitutive of shared sense-making (Margolis, 1998; Mattley, 2002). Affective schemas can employ any type of emotion; however, within the context of the COVID-19 pandemic, many of these affective schemas focused on negative emotional experiences to make sense of reproduction. These emotional experiences affect how individuals understand their reproductive selves in relation to family and community networks, and draw boundaries for what kinds of reproduction can be tolerated going forward (Margolis, 1998). Finally, medical schemas refer to participants making sense of their reproductive experiences with an explicit reference to

medical encounters. Medical schemas expand on orthodox medicalization critiques to show how medical institutions and providers have power over reproducing individuals, and to demonstrate how participants in this study also co-construct this power by restricting birthing imaginaries to only be in the context of institutionalized medicine (Lupton, 1997).

To explore patterns and findings across these two categories, I completed attribute coding (deductively derived from the interview guide) and thematic coding on the three defined themes by hand (Saldana, 2009). For each schema, I delineated important conjunctures that led to the use of these schemas and identified which participants fell into these themes. Below I discuss these findings.

RESULTS

Heteronormative Schemas: Sense-making through heteronormative ages and stages

The experience of the pandemic led participants to identify tacit knowledge, ages, stages, and what I call “heteronormative events” because they generally reflect a heteronormative, structured timeline for engaging in reproduction. While these events may appear somewhat arbitrary, they have important meanings to individuals as representations of idealized circumstances in which “perfect” reproductive experiences happen. When these perfect experiences are lost—through disruption or changes—participants must deal with how to re-establish or relinquish their ideal.

Examples of these events include using chronological age or a date (month or year) to delimit a stage in reproduction processes (such as “starting to try”), marriage, or buying a house. One participant, Stephanie, a 28-year-old professional caregiver, articulated the importance of why these ages, stages, and events have such salient meaning for women’s reproductive lives in particular: “The 30 milestone. People are expecting you to be married, have been married for

years, starting the family.” Participants across this study referred to these events routinely and in ways that reified a heteronormative life course progression. Even participants who did not wish to participate in these progressions articulated them as known archetypes against which to measure their lives. Jenna, a 35-year-old IT professional, who has never wanted children, talked about her partner stating that, although he doesn’t want to have children, he felt left out of everything that’s happening to their friends and peers: “From the beginning, it’s like you go to school and you graduate, and then you go to college and you graduate, and then you get married, and then you have kids, and there’s just big milestones where, unless you do those big milestones, people don’t really pay that much attention to you.”

Age was not inherently linked to these normative life course concepts unless used to justify why an individual or couple was or was not adhering to a standardized and idealized reproductive timeline. For many of these women, this ideal typology consisted of marriage or monogamous, long-term relationships prior to childbearing in their late 20s or early 30s, which was to be completed by their late 30s. Several participants who already had children used their ages at births to justify their reproductive timing; these justifications were often linked to having completed certain “stages” of their adult life or to the implied limitations of their biological fertility. Alicia, a 35-year-old social worker, stated, “we knew we wanted to wait until our late 20s or 30s...to start a family,” because she and her partner had things they wanted to experience in their 20s, like traveling, schooling, and feeling established in their careers. Liz, a 28-year-old behavior analyst, stated, three times in a row, that her husband is “turning 30 this year.” This repetition demonstrates the salience that his and her age have on their reproductive timeline, and she used their ages and their preference for four or more children to declare that reproduction must start now because she did not “want to have kids at 40.” Melanie, a 34-year-old stay-at-

home parent, said, “[my partner’s] nearing 40, and I’m in the middle of my 30s. We met later in life, so the idea was we’re going to have kids and we’re going to have them soon.” She described the age at which she met her partner as integral to the process of becoming a couple, with the explicit knowledge that there was no time to date or try out a new person if they did not have the same reproductive goals as she did.

Amber, a 29-year-old tech professional who became pregnant after the COVID-19 pandemic had begun, justified her decision in terms of her age. She and her partner had planned a trip that was interrupted by the outbreak; this trip was the marker for them to initiate trying to become pregnant:

We had a big international trip planned for the end of this year. We were going to go to Japan together, which I've never been to Japan. And I was like, ‘I'm not going to be pregnant when we go to Japan, I want to eat sushi and I want to have a good time.’ But we knew pretty quickly that that trip was not going to happen. So that kind of threw off our schedule a little bit. And I was like, ‘If we wait until after that to start trying to have a kid, then I'm going to be 32 by the time or 31 by the time I actually have a child.’ And I was just like that's such a long time to wait, and he felt the same way. So, we decided to throw the original plan out the window and start trying.

Here, we can see that Amber and her partner relied on a non-routine event, their vacation, to inform when they started trying to get pregnant. We can also see that through having this event disrupted by the pandemic, Amber linked waiting until they can go on their vacation to the age-graded idea that she should not be 31 or 32 years old when having her first child. So, she and her partner decided to become pregnant during COVID-19. This example demonstrates the fluidity

of reproductive decision-making in how participants adjust to the loss of or disruption of events. As we saw above, Amber and her partner used an implicitly medicalized and gendered way of reasoning to let go of their vacation milestone and move on with their reproduction—that Amber’s reproductive body will be “too old” to have a child if they wait too much longer.

More often, non-parents used age to justify their preferences for whether and when to have children—these women also widely appealed to the concept of limits on biological fertility. By using age as part of a heteronormative life course timeline, participants drew on social norms and expectations and on their assumptions about their biology and where they “should” be at certain stages in their lives. Here, age acts as a referent against which to assess oneself against idealized typologies of heteronormative success and biological feasibility. Most participants who draw on the concept of age use it to ensure that they are maintaining their status as adherents to these typologies. For example, Lily, a 30-year-old Ph.D. student, who is deeply ambivalent, along with her partner, about whether to have children at all, said, “there’s some new pressure that I just turned 30. So, I realized I really have to [decide] at some point soon...we’re really between that professional coming of age stuff, and then the sort of biological clock.” Lily felt the pressure to know, for certain, whether she wants children, not only because it is the next decision to be made in the “professional coming of age stuff,” but also because her decision has implications for how the rest of her life unfolds. Quinn, a 30-year-old talent acquisition manager, talked about being 30 and wanting to have children as a “gut feeling” because “the clock is ticking.” Although Quinn does want to have children with her current partner, either biological or adopted, she drew heavily on her current age to make sense of her feeling pressure to do so imminently.

In a concept strongly linked to age-graded timelines, most participants also articulated stages or events that required completion as a pre-condition to childbearing. These were often completing education, becoming established in a career, marriage, or engagement, and buying a house. A smaller but substantial number of participants also articulated that gaining enough “experience”—whether travel, concerts, or hobbies—and feeling emotionally stable and prepared were prerequisites to becoming parents. These requirements held for participants who wanted to have biological children and for those who wanted to foster or adopt. While the first set of stages or events described adheres well to a heteronormative or traditional life course timeline, the latter (focused on experiential and emotional development) suggests that participants felt that they had to become self-actualized or engage in concerted cultivation of the self to become a successful parent. These events or stages are often pre-requisites on the path to childbearing, adopting, or fostering; an important way that the COVID-19 pandemic engaged with these pre-requisites was to interrupt them. Thus, for a sub-sample of participants, the accomplishments used to determine whether or when to have their child were interrupted in ways that made utilizing these schemas impossible for further decision-making.

Most participants in this study articulated that it was important to achieve completion of at least part of planned education, become established in a career, and get married or engaged prior to becoming parents. These participants link these accomplishments to having succeeded at some sort of marker, after which they can proceed onto the next “phase.” For example, Lily, the 30-year-old Ph.D. student, who, throughout her interview wavered back and forth on whether she wanted children at all, stated, “the children thing feels related to work in some way...the professional effects that I’m reading about and seeing from mothers, it just feels like a concern...I’m worried that this is almost certainly going to ruin my career.” Alternatively,

Danielle, a 30-year-old public health professional, talked about how getting to a stage in her career where she feels stable had opened the door for her to be ready to have children, only to have that door closed by the pandemic. Others articulated career or educational attainments as pre-requisites to children they did have, even if having children had been more of a priority for them. Christina, a 31-year-old psychologist, spoke about feeling resentful towards her Ph.D. program because she wanted to get on with having children but did not feel like it was doable until she finished her degree. These milestones, associated with middle-class heteronormative life course timelines, strongly resonated in the study participants' lives, both guiding their actions and causing turmoil and distress when their actions did not align with the prescribed path.

The events represented by these milestones could come about in several ways. These could be vacations that marked an individual or couple's readiness to move onto the next stage of their life, a marriage itself or buying a house, or milestones that participants had mentally established to delimit childbearing decisions. In the example below from a 32-year-old government worker, Erica spoke about using her brother-in-law's wedding as an event to demarcate when she and her husband will start trying for a second child. The suspended uncertainty that the pandemic represented for Erica and her family made moving on from this milestone difficult. She talked about being not sure if there will be a wedding, let alone when, and hung onto the wedding as a demarcation even when she was speaking about potential risks and fears associated with pregnancy during the COVID-19 epidemic:

But our plan was, okay well we'll try and have another kid after this wedding...and then with his wedding getting pushed back, we were like, well now what? What do we do? Do we still wait?...and we weren't sure when all of this was going to go away, and when it was going to feel like, not only are there

less risks if COVID has gone but then how are we handling it with my medical appointments if I get pregnant and the delivery...but we ultimately decided, okay this is not going away any time soon, and we're just going to have to roll with it.

Erica's brother-in-law's wedding symbolized an anchor point for her to make reproductive decisions within the uncertainty of the pandemic context. However, as she talked past the wedding, we see that her worries about being pregnant during COVID and knowing that there is no known end date shifted her and her partner's decision-making apparatus from event-based to a going-with-the-flow approach. In a similar vein, Melanie, a 34-year-old stay-at-home parent, talked about how she and her husband got married in order to begin having children. She immediately stopped any form of birth control right after their wedding, as the marriage itself was the milestone for reproducing.

Others strongly linked reproductive experiences with buying a house, both to the decision to become pregnant and because of having been pregnant recently. For example, Christina, the psychologist, would have been willing and eager to consider getting pregnant as soon as possible after the birth of her infant son. However, her husband convinced her to wait until they finished buying a house so that they were only doing one major life process at a time. Quinn, the 30-year-old talent acquisition manager, had just purchased and moved into a house with her long-term boyfriend at the time of the interview. Despite buying the house on her own, Quinn linked the house itself to increasing talks and ideation about having children between her and her partner: "I think it was maybe moving into a house and being like 'kid's bedroom!' It's like 'how will this all work with kids someday?' We've started having more conversations, and...starting to think about it not as an if, but a when. The thought was kind of subconsciously there even before we bought the house, that it's something that we wanted to grow into." In Quinn's example, the

house she bought, the physical space representing a potential child's room led her and her partner to discuss whether and when to have children (biological or adopted) in the future.

Participants also widely articulated an ethos of self-discovery and accomplishment as a prerequisite to childbearing. Self-discovery often consisted of travel, where travel appeared to be a proxy for exploring the self and the world. Sofia, a 33-year-old teacher, knew she wanted to adopt children from when she was very young; in terms of the actual timing, she said, "it was just a matter of when I felt it was right. And I have always been really drawn to traveling and I wanted to explore that a little bit more before I started a family because I knew once you start a family, everything just becomes a little bit more complicated." Brittany, a 27-year-old administrative worker, made a similar argument about experiences, but for her, experiencing life was having time to see musicians that were important to her before settling down with a child. Others focused heavily on their own and their partners' emotional stability and development through activities like individual and couples therapy, hobbies, and schedule stability. In this way, individuals engaged in cultivating themselves and others to prepare for being a "good" parent long before becoming one.

For participants who needed access to dating markets to accomplish these timelines, the COVID-19 pandemic interrupted planned timelines. Danielle, a 30-year-old public health professional, almost perfectly captured these interrupted trajectories when she delineated 2020 as a year that was "supposed to" elicit several outcomes in her life:

I have been single since summer 2019...I was supposed to try and find my prince, as my mother put it...2020 was supposed to be the time when I would finally find the right guy...And not having been able to do that, that dramatically pushes back my even vague timelines of wanting to hopefully know someone for a few years

before committing to creating a kid. Then that starts pushing towards higher risk for pregnancy and pre-existing conditions. And then you get towards limits of the number of kids, and everything becomes more complicated.

Danielle spoke about how 2020 was “supposed to” be the year she would find “the right guy”—a prince. Finding the right guy must happen before she committed to creating a child with them, and by this time, Danielle’s biological age has limited her fertility options. Interruptions of these types appeal to the logic that partnership must occur for a certain amount of time prior to engagement or marriage, which must occur at least prior to childbearing. By interrupting the progression of this process, the process irredeemably altered Danielle’s life course. Danielle and others rely on the “normal” progression of events and ideas about biological fertility to express frustration and unfairness at the consequences of the pandemic on their dating lives. Stephanie, the 28-year-old professional caregiver, stated, “It’s the fact that things are changing and I can’t go out to the bar and prowl with my friends, looking for that Mr. Right or even Mr. Right Now. I can’t find somebody...is it safe to meet up with people?...dating may [go on until] maybe 29, maybe 30, who knows?” Stephanie, despite trying to counter social norms and pressures, often reverted to heteronormative expectations and phrases to describe how others will think of her as “an old maid” if she is not married with children by 30. What COVID-19 has done, then, is to disrupt timelines that represent an idealized confluence of events and imagined futures. By continuing to appeal to heteronormative logics within these interruptions, Danielle and Stephanie face a lose-lose situation: they cannot satisfy society’s expectations in the time in which they have been given, which in turn generates feelings of failure for themselves.

Affective Schemas: Grief, relational loss, and changing the experience of the baby “I did have.”

Affective experiences encompass a wide range of emotional responses to events and interactions, both mundane and sublime, and participants often used these to make sense of their reproduction experiences, and particularly to do so in response to the pandemic. The emotions expressed around reproduction within the pandemic period were often negative—themes of loss and grief prevailed as participants lost relational and “normal” experiences surrounding births they expected to have.

Although the pregnant women (see Table 1) in this sample were all excited about their pregnancies (including the unplanned ones), they, along with participants who recently had babies, universally expressed grief about the loss of the experience of having a baby due to COVID-19. This experience was relational and involved “showing off” one’s baby or receiving support from community and family—as Claire aptly put it, “no one will be able to see me pregnant or hold my baby.” The loss of the whole package of having a baby generated poignant statements, particularly among women who knew this would be their final child. For example, Yvette, a 33-year-old stay-at-home mother who became pregnant before the pandemic started, talked about losing the experience of her baby’s birth “forever” because she was unable to share it:

The influence that COVID had with it was just... Made it a lot more sad? That this is my last baby. It's my last hurrah. And I'm not even able to share it with my family. I was restricted with how much I could share with my family and friends. And for being somebody who enjoys sharing experiences, to lose that was really, really, hard. And it's going to make me sad. There's going to be an element of sadness surrounding her birth forever because of what we've lost. I still look at her

birth and I'm happy... But it changed. It definitely was a drastic, drastic change from what I had with [my first two children] to what I did with Diana. I was planning on having it all over again...I was planning on doing it all again with Diana. And I couldn't because of COVID. It didn't really change the number of babies that I was going to have. But it definitely changed the atmosphere surrounding the baby that I did have.

Before this, in her interview, Yvette had emphatically talked about how she had to have at least three children and how she went through lengthy negotiations and therapy with her partner to have the third. In a sense, having Diana, her third child, was a triumph—she had convinced her husband and was getting the reproduction experience she had wanted. However, the advent of the COVID-19 pandemic for Yvette meant that the triumph was transmuted into loss and grief. “Of course” she was joyous about her new baby, but she had lost many of the relational experiences that gave the new baby meaning in her social world. Although several participants talked about desiring another child to achieve a better pregnancy experience, this is not an experience Yvette can re-do—her husband won’t agree, and she had severe gestational diabetes with her last pregnancy. So, the loss stays with her forever, and her experience of reproduction is tinged with grief. While Yvette’s experience may not affect her prospective childbearing, it does affect her social experience of reproduction, which may, in turn, affect her networked and intergenerational transmission of fertility preferences.

The pregnant participants in this study often used the word “sad” to describe how they were thinking about the period following the birth of their children. Sadness became the dominant motif because these participants could not have the same things friends and family had previously—baby showers, hospital visits, mothers and in-laws staying and helping out. Not only

did this elicit grief, for example, Amber stated that when she thinks about this part of the reproductive process she is “usually crying by the end,” but it also elicited uncertainty as the women tried to come to terms with what this post-partum experience would look like for them. During the fear and risk that the COVID-19 pandemic presented, many were worried for the safety of their infants, themselves, and extended families. Melanie, a 34-year-old stay-at-home mom, described it in this way:

There were a number of people who were supposed to come and see us, and see our new baby. My kid’s going to be one year old before the people who matter most to me will ever see him. That’s disappointing. That’s not the vision I had for my child’s life. He was supposed to meet these people, even if he didn’t know it.

The loss of “doing it over again” in a positive and exciting way, the way that participants had experienced other pregnancies, was taken away, both from the stress caused by the pandemic but also because they missed out on these social aspects of having a new child to share.

Medical Schemas: Imagining Pandemic Medical Encounters

Many participants spoke about reproduction in relationship to imagined medical encounters. They talked about medical encounters as sites of uncertainty, stress, and loss. These were related to their own experiences trying to see a doctor for themselves or their children during the pandemic or hearing stories from family or friends about isolating and scary labor and delivery services. For currently pregnant women, there was significant anxiety around what their delivery experience would look like—as Claire asked, “what is the hospital going to look like when I give birth?” Women often related this to news stories they had seen about women delivering alone in the early months of the pandemic and emphasized the need for their partner, in particular, to be in the room with them during their delivery process. In these cases, many

women articulated their fear about medical isolation and infection risk as specifically related to their pregnant state, i.e., women articulated counterfactuals where the anxiety surrounding infection and concerns about exposure would have been mitigated had they not been pregnant.

In a more direct example, Natalie, a 35-year-old government worker, described experiencing a miscarriage during the pandemic. Natalie's example blends the affective with the medical. In Natalie's statement, she described the physical barriers of the institution (the hospital) and the protocols of the pandemic that kept her from the relational support that would have eased her loneliness and sadness.

As soon as I found out definitely was excited and really happy. Going through it, I mean I think if it was a planned pregnancy, I definitely would not be wanting to get pregnant at this time, just because it was my first pregnancy, I don't have any other children, so just going through that alone is a new experience. Then having COVID on top of that, I was having to attend doctors' appointments by myself and kind of learn and navigate and do all these things by myself. Then learning that there was no heartbeat at the ultrasound, and my partner is at the entrance of the hospital not knowing what was going on. Then needing, because unfortunately my body did not naturally miscarry, I had to have a surgical procedure done to remove the baby. The sense of just feeling completely alone and going through something like that alone was awful.

Later in her interview, Natalie talked about her miscarriage as an emotional delineator between how she viewed having a child prior to the miscarriage and after. For her, the experience of losing her baby, emphasized by the isolation from COVID, has made her re-evaluate whether she wants to try again ever.

Other women, all of whom were planning on a subsequent pregnancy within the next five years, imagined how it would be to be pregnant in the pandemic climate and talked about their worries and concerns about becoming pregnant in terms of medical encounters. Erica, a 32-year-old government employee, talked about getting pregnant and thinking about how she and her husband would handle medical appointments and the delivery, characterizing it as “completely changing the experience from the way it was my first time.” Laura, a 31-year-old stay-at-home parent, talked about waiting to have another child until she knows she and her infant won’t be at risk, and wouldn’t have to be “birthing a baby without [her] husband there.”

DISCUSSION

In this study the ways in which both pregnant and non-pregnant women experienced and imagined medical encounters may have long lasting effects on when people choose to start becoming pregnant after the pandemic and on how people utilize hospitals for deliveries. Almost all of the women interviewed articulated real or imagined encounters with medical clinics, hospitals, or staff, with mixed feelings. They articulated the power that these institutions had over them by imagining reproduction experiences only in the context of these institutions—none of the women interviewed talked about alternative birth plans or fighting the restrictions put in place by hospitals or clinics. In this way, they established classical authority of the medical institution over their reproductive lives, but also participated in the production of this authority by describing medical sites as sites of normality and regulation (Lupton, 1997).

I also demonstrate that experiences of affect—here, grief and loss, have real and enduring consequences for reproduction. Women described the loss of the social aspects of birth—the visits, the community support, the parties—as deeply affecting, and dismantling their experiences of childbirth during the COVID-19 restrictions. As part of our social milieu,

emotions help us to make sense of our own identities and our relationship to the groups in our social world (Margolis, 1998). The grief and loss around the absence of these events change the experience permanently by changing the relational experience of a profound social practice—reproduction. These changed experiences have the potential to affectively alter subsequent pregnancies or reproduction within participants’ networks. Although months-long stay-at-home orders are not routine in our everyday world, crisis and separation are and, stay-at-home orders have the potential to become more commonplace in the context of globalization and climate change. Here, the women I interviewed demonstrated that separation from social networks had unalterable effects on how they viewed their reproductive experiences. This type of grief—one of separation and loss of relationality—can apply across social contexts to alter individuals and couples’ perceptions of myriad life course experiences. Here, grief and loss have real and enduring consequences for reproduction—the absence of others reveals the importance of the relationality of the birth process.

I found that participants often appealed to heteronormative life course norms to define their reproductive experiences. Participants’ responses to the disruption of such events engaged with heteronormative ideas about biological limits on fertility for women, getting on with having children, and wanting to complete childbearing before a specific age- or stage-graded points. The prevalence of these schemas echo existing work that demonstrates that these norms are the foundation upon which many women make and evaluate their life choices, even if they are defining themselves in opposition to them (Dow, 2015; Fallon & Stockstill, 2018). Through these women’s stories, I show that normative heterosexual timelines are important for making sense of reproduction because they represent idealized typologies of the life course. Participants use these typologies to measure their reproduction against themselves and others to decide

whether they are “successes”—i.e., whether they are normal, legitimate, and respectable (Halberstam, 2005; Ingraham, 1994). These timelines are clearly articulated by participants—almost shockingly so—demonstrating that individuals can be aware of the social norms that guide and constrain their actions while still feeling compelled to participate in them or frame their actions against the archetypes they represent. Failing to fit into these prescribed timelines, especially for individuals who deeply ascribe to them, may result in feelings of failing to belong to the social standards. This could have significant effects on individual’s mental health as well as their self-efficacy to achieve preferred life goals, particularly if a social shock, like the COVID-19 pandemic, interrupts a structured plan to achieve those goals.

Additionally, these heteronormative timelines ask women to understand their reproduction through age-graded understandings of biology and the life course (Halberstam, 2005). These understandings constrict the time frame in which women can both become self-actualized adults and accomplish their life course goals and can result in a deep pressure to know about preferences, reproductive or otherwise, before one is ready (Fallon & Stockstill, 2018). Many of these women cited the age of 30 as a kind of deadline for knowing whether they wanted to have children or not and for beginning to try if they had not already. This appeal to a specific age reflects deeply ingrained “knowledge” about perceived biologic limitations on fertility. As Stephanie said “I’m worried about them thinking I’m an old maid. That my eggs are dried up and I’m no longer a potential partner. It’s, well obviously if she hasn’t found somebody by the time she’s 30 there’s something wrong with her.” These ticking clocks require women to accomplish their cultivation of self, and adhere to traditional timelines for partnering, marriage, and childbearing. This pressure has enduring consequences for reproductive experiences—the

inability to balance stages while feeling the pressure of age-based restrictions can lead women to different reproductive paths than they intended, or indeed, might prefer.

Although this research provides insights into how women make sense of reproduction during times of extensive social upheaval, this analysis is limited in several important ways. First, the sample is limited in size, primarily due to feasibility and recruitment concerns during the COVID-19 pandemic. Second, the sample is limited in terms of its representativeness of different reproductive experiences. This sample was, on average, highly educated, partnered, and employed. These circumstances don't represent the majority of all people who are capable of reproduction, and further research on meaning-making in reproduction should focus on diversifying samples to attain intersectional perspectives. Finally, this work is meant to historically situate reproduction intra-pandemically to offer insight into practices and experiences that are considered to be taken-for-granted and which often reflect dominant and ingrained social scripts. This historical moment of the pandemic allowed the participants in this study to articulate these taken-for-granted schemas by talking through how they made sense of their own reproductive experiences. However important this cross-sectional view of reproduction is, it is still cross-sectional. Future work should focus on following people who are reproducing prospectively to identify whether their meaning-making schema have substantive outcomes on their reproductive life courses.

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