Reproductive Identity: An Emerging Concept

Aurélie M. Athan
Teachers College, Columbia University

Deciding whether or not to become a parent is a developmental milestone in the adult life course yet the specific term of reproductive identity is not commonplace. Significant demographic shifts in fertility and the social ideals of self-realization have impacted how reproduction is performed and families are structured, particularly for women and Lesbian, Gay, Bisexual, Transgender, Queer, Intersex and Asexual (LGBTQIA) communities. Like gender and sexuality, reproduction is a healthy aspect of human expression to be openly explored, destigmatized, and self-authored. This article will review relevant identity development theories and propose a preliminary definition for the emerging concept of reproductive identity. Implications for research, education, and counseling will be considered.

Public Significance Statement
This article presents a new concept known as reproductive identity that mirrors preexisting models of human identity such as race, gender, and sexuality. Educators, practitioners, researchers, and policymakers may use this novel term to explore how individuals realize parenthood or nonparenthood, develop their reproductive identity, and integrate it into their overall sense of self.

Keywords: adult identity development, sexual and reproductive health education, reproductive justice, fertility awareness, self and identity

Deciding if, when, and how to become a parent is a significant developmental milestone in the adult life course, yet it is largely dispersed in the psychology literature with regards to identity implications. There are few dimensions of the human experience of this magnitude, shared by all peoples and societies, and reproduction is arguably one of them. It is analogous to race, class, gender, and sexual orientation in that every adult must relate to these reference points, is referred to them by others, and is fundamentally shaped and shapes others through their prism. By the end of their lifetime, most everyone will have had a reproductive encounter of some kind with an enduring impact on their personhood, in both positive and negative ways (Miller, 1994). Unlike other commonly understood self-identifiers, however, an overarching concept of reproductive identity in human development is remarkably absent and in need of its own distinct elaboration.

The well-established models of psychosocial identity (e.g., racial, cultural, sexual, gender, disability) came to prominence during the mid-20th century by demanding greater representation and challenging the biased assumptions of what was considered normal and acceptable (Myers et al., 1991). Pioneers of these earlier theories questioned power hierarchies which excluded people from accessing equal opportunities and created disparities, such as poverty and poor health outcomes for marginalized groups. In the social sciences, this line of thinking was furthered during a more recent wave of discourse, this time with renewed attention on intragroup rather than between-groups differences. By centering the subjectivity of individuals and their lived experience, cutting-edge scholarship disrupted the "tidy binaries" of fixed social categories and positioned them as poor reflections of how people actually make sense of themselves. Studies applying these principles to gender and sexual orientation, for example, proliferated a new range of voices characterized by a fluidity of self-

Aurélie M. Athan
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identification, contextual meaning-making, and nonlinear adaptation across the life span (Hammack & Cohler, 2009; Hird, 2000; Worthington, Savoy, Dillon, & Vernaglia, 2002).

As the issues of human reproduction are evolving, so too must the conceptual tools to understand it be refashioned (Johnson, 2012). The term *reproductive identity* is intentionally broad to convey both conventional categories of parenthood/nonparenthood, related reproductive experiences, and how people make sense of their feelings in the sphere of reproduction more generally. This more abstracted formulation allows for the "miscellany" of identity subtypes, and future ones yet-to-be-seen, to be coalesced into one "grand" or unifying superordinate construct. The language of identity reframes psychosocial reproduction as a spectrum rather than an either/or binary, and signifies a dynamic, improvised adaptation to new creative ends, rather than a predetermined, rational or predictable plan. By extension, the traditional term *reproduction* will be preserved for a shared parlance across the many fields of its study, but will be reinterpreted as the diverse ways individuals and communities openly explore, participate, and make meaning of their procreative potential and generativity.

The essential aim of the article is to offer a new concept through which to view the emerging realities of the world. The approach will be one of a working hypothesis that offers an intermediary conceptualization in its early stages, rather than a fully elaborated framework, model or theory to be immediately operationalized. This exploration is not exhaustive or, like reproductive identity itself, fully realized from its outset, but rather an initial step in a larger process of theorization. This article will, therefore, (a) describe current fertility transitions, (b) review literature on reproduction and identity development, (c) outline a working definition and biopsychosocial model, (d) narrate it across the life course, and (e) discuss its application.

Age of Change

In a forward-thinking quote in the *American Psychologist*, Henry David (1994) wrote that in the 1960s after years of studying reproductive health issues around the world, he was persuaded that they "were among the central issues of our time and that psychologists had something to contribute" (p. 343). Half a century later, adults are living in an especially confusing time of reproductive health losses and gains. Today, sexual and reproductive life is undergoing revolutionary change, in an increasingly multicultural, interconnected, and globalized world with rapid technological innovations (Hammack, 2008). For the first time in the history of the human species, 80% of the world lives in a country where the fertility rate is equal to three or fewer children per woman, marking one of the most profound social changes ever recorded (Colleran, 2016). Conversely, advances in both reproductive medicine and societal norms now afford options to individuals previously unable to form families.

Macro-Level

Reduced family size, plummeting adolescent pregnancies, postponed entry into parenting, and voluntary/involuntary childlessness are on the rise. Europe, North America, Australia, and parts of Asia and South America (e.g., Japan, Brazil) are experiencing below-replacement fertility levels—a trend that is continuing to spread to a near-global phenomenon (Colleran, 2016; Wilson, 2011). The "Africa effect" is one exception, where a high number of ~6 children persists in nations that rely on agrarian economies (Bongaarts & Casterline, 2013). Despite these overall declines, demographers continue to find surprising subregional variations in the desire to either increase or limit family size (Bongaarts, 2017). This "fertility gap," the difference between observed and desired fertility, is arguably bidirectional, and while not always measured as such, might be best applied to both unrealized fertility (wanted-but-not-yet-had children) and unmet needs (wanted-but-not-yet-had contraception)—each a form of "latent demand" for family policies that are ripe for intervention (Mbacké, 2017).

Micro-Level

Research studying the realization of reproductive intentions on a person level, has found that males and females of all ages and sexual orientations are inconsistent when it comes to their attitudes (feelings of attraction/repulsion), decisions (timed/mistimed conceptions), postassessments

(wanted/unwanted children), and practices (contraception use/risk-taking; see Liefbroer, Klobas, Philipov, & Ajzen, 2015 for a full review). This "mixed bag" suggests either methodological imprecision or that the nature of reproductive intention is genuine uncertainty (Bhrolcháin & Beaujouan, 2019). Relatively fewer people hold strong and unequivocal beliefs, and instead, typically fall somewhere in the middle, are ambivalent, or even indifferent (Miller, Jones, & Pasta, 2016). People may be loyal deciders, change their mind, or use meaningful, but alternative "ways of knowing" to guide their goals (e.g., "God's plan," intuition; Athan & Miller, 2013; Berrington & Pattaro, 2014). Fertility desires and intentions may have a positive or negative valence, or a combination of both (Langdridge, Sheeran, & Connolly, 2005; Miller, 2011; Peterson, 2015; Purewal & Akker, 2007; Riskind & Patterson, 2010). They may include romantic needs such as affection, fulfilling or appeasing a partnership, continuing the family line, loving children, or wanting to provide one with a good home. They may also include a dislike of children, fear of childbirth, wish for fewer dependents, and not contributing to overpopulation.

Driving Forces

If larger trends are made of individuals, then in aggregate more people are managing infertility, investing in fewer children, avoiding unintended pregnancies, and opting out altogether (Ravitsky & Kimmins, 2019; Sedgh, Singh, & Hussain, 2014). Theories have been offered to connect personal decision-making to broader trends via a complex interplay of "macro–micro" forces such as health, wealth, and education (Colleran, 2016; Liefbroer et al., 2015). One theoretical framework to explain the global convergence of reduced childbearing is the second demographic transition (SDT), first applied to Europe, then the Western world, and now Asian and Latin American countries (Lesthaeghe, 2010). It suggests an ideational transformation toward the postmodern attitudes of individual autonomy and self-actualization as the most compelling driving force (Zaidi & Morgan, 2017). This "Maslowian shift" to higher order needs is characterized by a rejection of external authority and a value orientation of inward self-realization as the primary determinant of fertility behavior (Zaidi & Morgan, 2017). Viewed from this perspective individuals and nations are "laggards or leaders" when adopting this "new outlook" and eventually conforming to this "unilinear end" (Zaidi & Morgan, 2017). SDT theory was later critiqued for its "teleological grand script" and instead revisited as a general narrative of social history that gives room for subnarratives or entirely new narratives in regions that demonstrate differences (Zaidi & Morgan, 2017). Moreover, recent rebounds and recoveries in low fertility suggest macro-micro evolution and that the future is yet unwritten.

Sexuality/Gender

More recently, SDT theory was amended to emphasize the coevolving consideration of gender/sexuality which has gained agreement by scholars as critical and not to be underestimated (Liefbroer et al., 2015; Zaidi & Morgan, 2017). The advent of the Pill in the 1960s along with sociopolitical movements such as the sexual revolution and reproductive rights marked a significant turning point decoupling sex from reproduction. This unprecedented split both physiologically and philosophically has yielded advantages including new discourses on queerness and sexual pleasure as well as feminist emancipation from default motherhood and increased workforce entry (Peterson, 2015). In Western countries, sex for recreation rather than procreation has become acceptable for all ages, genders, and sexual orientations (van den Akker, 2012). A parallel liberalization of traditional family structures has also led to "transgressive compositions" that are more fluid, in flux, and heterogeneous than the once proclaimed and now disrupted ideal of the "nuclear family" (e.g., single mothers, step-siblings, same-sex marriage, transnational adoption; Gerson & Torres, 2015; Powell, Hamilton, Manago, & Cheng, 2016).

Changes brought about by individualism and secularism, improved access to education and employment, elongated life span and emergence into adulthood, gender equity and declines in partnering are opening up new frontiers (Bongaarts & Casterline, 2013; Zaidi & Morgan, 2017). While parenting used to be a given in most societies—an expected, perpetual consequence of heterosexual sex and an unquestioned life goal after the onset of puberty and marriage—it is now for the most part volitional. The fact that a broader range of people can choose to have children regardless of partnership status, postpone it to a later age, or abstain altogether and enjoy sex for its own sake, is indeed remarkable. Improvements in the social status of women have especially transformed how reproduction is performed and families are structured. LGBTQ communities once prevented from participating openly in marriage and family building, can now do so in creative ways (e.g., third party reproduction) with increased agency, support, and protection. This burgeoning era of gender, sexual and reproductive self-expression necessitates a new metaphor reflecting the freedom to write one's own story. Marrying the term identity to reproduction may be an apt addition to the pantheon of other forms of self-realization and identity explorations. Furthermore, the clunky phrase of realizing reproductive intentions may be more simply stated as *identity*, befitting the primacy given to self-definition in today's world.

Identity in Reproduction

According to the *Handbook of Identity Theory and Research* (Schwartz, Luyckx, & Vignoles, 2012), identity is one of the

most popular constructs in the social sciences with exponential scholarship since its debut in the 1950s in parallel to demographic revolutions. With newfound attitudes, social norms, and behavioral control, the identity considerations for reproduction have become magnified to a degree never seen before (Hammack, 2008; Riskind & Tornello, 2017). The psychological implications of reproduction has been increasingly explored throughout all steps of the reproduction journey from preconception (e.g., thinking and preparing), its challenges (e.g., infertility, surrogacy), the transition to non/parenthood (e.g., birth, adoption, voluntary childlessness), and its revisitation (e.g., multiparity, in vitro fertilization [IVF] cycles, death of a child). It has also been studied across the life span and reproductive window, as well as intersected with a host of other identifiers such as age, gender, sexuality, ethnicity, race, class, immigration status, and disability. A review of the identity literature, however, has yet to reveal the specific term "reproductive identity" as commonplace. This might seem at odds with the abundance of publications on the subject, yet upon closer examination, research on the various subtypes of reproductive identities is scattered and in need of coalescing.

Variability

Early research into parenthood and childlessness focused on distinct categories such as biological mothers and fathers or infertile heterosexual couples, but then expanded using "deviancy discourses" to fill in the missing voices of people who did not conform to the constricting norms of the time (e.g., gay adoptive parents, single-mothers-by-choice; Arendell, 2000; Wilson & Huntington, 2006). This growing body of literature demonstrates that with greater sensitivity to participant sampling, the underexplored groups of today (e.g., international surrogates, egg/sperm donors, plurisexual parents) may become the commonly understood ones of tomorrow (Goldberg, Manley, Ellawala, & Ross, 2019; Turner & Coyle, 2000). The variations in reproductive differences are also more readily captured with qualitative methods that invite people to reflect on their own growth and self-development rather than checking premade boxes. Taken together, the myriad examples of reproductive identities, like pieces of a puzzle forming a larger picture, establish the rationale for a higher order construct. Namely the need for one that is nonbinary, multifaceted, and posed as a *spectrum*.

Self-Actualization

While an exhaustive review of shared themes is beyond the scope of this article, reproduction has sometimes been described as a life transition marked by disequilibrium and adaptation along with an opportunity for greater psychological integration and self-awareness akin to posttraumatic growth (Athan, 2011; Henning, 2011; Taubman–Ben-Ari, 2019). Its potential for personal transformation is consider-

able given its impact on major spheres of influence such as partner and peer relationships, leisure habits and work-life, and prior interests or cherished worldviews (Höfner, Schadler, & Richter, 2011). The efforts to bring the physiological body in line with the psychological self can also be a formidable undertaking much like gender/sexuality conflicts (Matthews & Desjardins, 2017). The unforeseen crises of reproduction can upend life expectations and lead to "disrupted biographies" marked by loss of previous identifications, feelings of unreadiness, demoralization, and eventual self-compassion and self-acceptance (Letherby, 2002). The process-oriented term *becoming,* rather than achieving, is preferred to describe this unfolding, as it embodies flexible, dynamic, and open-ended reproductive explorations rather than close-ended or static endpoints (Mercer, 2004).

Pathologization

The creation of more psychological frameworks that map out iterative, developmental change and that showcase resilience and learning are sorely needed in response to the risk paradigms predominant in mental health (Arnett, 1999). For example, Athan and Reel (2015) suggest reviving Dana Raphael's (1975) anthropological concept of *matrescence*, which, like adolescence, more aptly connotes normative adaptation:

> an experience of dis-orientation and re-orientation . . . in multiple domains: physical (changes in body, hormonal fluctuations); psychological (e.g., identity, personality, defensive structure, self-esteem); social (e.g., re-evaluation of friendships, forgiveness of loved ones, gains in social status, or loss of professional status), and spiritual (e.g., existential questioning, re-commitment to faith, increased religious/spiritual practices). (p. 9)

The transition to adulthood was once similarly viewed as a time of storm and stress, with adolescents negatively depicted as "children gone mad" (Arnett, 1999). Letherby (2002) similarly warns against pejorative labels (e.g., barren) that perpetuate stigma and occlude the ability to see desperate situations rather than damaged people, and survivors rather than victims. Instead, a more sensitive focus on individual differences and cultural variations would be less dehumanizing and provide more useful insight into to why some people successfully realize their reproductive independence and others do not (Arnett, 1999).

Diversity

How people have been discriminated against as a result of their reproductive status may share the same unfortunate legacy as gender, race, class, and sexual orientation. This common stressor may serve to integrate these bodies of work with particular attention paid to those residing at the intersection of multiple marginalized identities especially prone to stereotyping (e.g., poor, immigrant, unmarried,

teen, Black, bisexual; Myers et al., 1991). Moreover, the reproductive identity record is incomplete and in need of updating. An inclusive term like reproductive identity boldly opens the imagination to evolve outdated frameworks that are biased in several important ways. First, reproduction has largely been considered a heteronormative women's issue (Riskind & Patterson, 2010), leading to the marginalization of males (Culley, Hudson, & Lohan, 2013; Ravitsky & Kimmins, 2019) and sexual minorities (Moradi, Mohr, Worthington, & Fassinger, 2009; Mercurio, 2019) who could equally benefit from and share the burdens of, reproductive health reforms. Second, women, are differentially affected given the "motherhood mandate" (Gotlib, 2016), maternal mortality rates (Khorrami, Stone, Small, Stringer, & Ahmadzia, 2019), career–family conflicts (Seierstad & Kirton, 2015), and risks for trauma and perinatal mood and anxiety disorders (Barnes, 2014; Hart & Flynn, 2016). Third, the reigning pregnancy prevention paradigm must integrate more culturally competent approaches that normalize the positive value of childbearing across diverse communities that do not share the Western ideals of selfhood (Arnett, 2008).

In conclusion, the oversimplification of reproductive life has had the unfortunate legacy of segregating, and caricaturing society according to appearances rather than what are intrapsychic continuums. The language of identity allows for this ambiguous, often unsettled space to be articulated, and for its "matrix of tensions" (e.g., betwixt/between, this/nor that) to become more mentionable and manageable (Letherby, 2002; Manoussakis, 2002; Oberman & Josselson, 1996). The parallel identities of gender and sexuality were long ago reframed to allow for fluidity of expression and liberation from membership in warring factions, psychologically and socially (Warner & Shields, 2013). The long-standing divide between those with and without children must be remediated because childlessness should be reconceptualized as an equally valid reproductive identity existing perhaps on the very same continuum. A singular, one-sided vision of reproductive identity at best denies the complexity of individuals and at worst risks miscategorizing people into groups they do not themselves self-identify with (Hammack, 2008).

Relevant Identity Theories

If the identity literature on reproduction is indeed disconnected and "all that we really know is one corner or piece" (Schwartz et al., 2012, p. 1), then a unifying concept may be welcomed that does not suffer similar theoretical isolation. The emerging concept of reproductive identity will, therefore, build its conceptual home in proximity to four previously established models of identity upon which it may be superimposed.

Many current understandings of identity owe their roots to Erik Erikson's life span approach in "The Eight Ages of Man" with its perennial questions of "Who am I?" (McAdams, 2018). He described the ego as undergoing a cyclical process of formation and transformation over the course of a lifetime. It was not until midlife, during the "watershed" of the generativity stage, that Erikson addressed the identity crisis of becoming a parent. Generativity was defined as an inherent prosocial need to contribute and improve the lives of others by, ". . .establishing and guiding the next generation" (Erikson, 1950, p. 267). It is important to note that while parenthood was depicted as an important source, Erikson did not consider offspring as necessary for achieving generativity. Theorists have since broadened its various forms: biological (bearing), parental (nurturing), technical (teaching), cultural (creating), and societal (mentoring) and found them all to be associated with well-being, opportunity for reinvention, and a second chance at life (McAdams, 2006; Slater, 2003). Because no longer prescriptive as to what form generativity should take, any attempt at this stance of care and concern for others is considered a positive and a growth-producing endeavor by scholars.

The now popular multicultural models of identity adopt a similar trajectory of movement toward greater self-acceptance and prosocial engagement that may also be relevant for reproductive concerns (Cass, 1984; Downing & Roush, 1985; West & Zimmerman, 2009). Most importantly, these theories incorporate the additional impact of "social stratification along lines of race, gender, social class, and sexual orientation" as to whether a person is even aware of their oppression or privilege (Worthington et al., 2002, p. 500). Subordinate and ordinate groups are said to mutually influence one another, and membership in one versus the other has psychological significance for identity development. People with and without children can be argued to have different access and advantages in societies that mandate compulsory reproduction and therefore suffer or thrive more or less as a result. Identities such as childless women or gay male parents may further experience the "double" oppression of gender/sexuality plus reproduction (Letherby, 2002). While helpful, these hierarchies should always take into consideration the diversity of experiences within each stratum (Salomaa & Matsick, 2019).

Narrative identity models offer the means through which people create their autobiographical life stories (Singer, 2004). Identity and stories were not conceptually linked ideas until McAdams (2018) put the pieces together. He wondered how a person would actually "configure" or "integrate" their experiences into a coherent identity formation. It was through the engineering of stories that were not merely disparate self-events cobbled together, but a transformative meaning-making process of narrative engagement that was the very engine of self-development. Furthermore, such storytelling had plotlines, heroic themes, and turning

points that spoke of adaptation and overcoming developmental challenges. McAdams (2006) noticed that redemptive stories, in particular, were associated with positive adjustment because at their core they were about deliverance from suffering. This approach is especially well-suited to reproductive life with its accounts of hardship such as infertility journeys, fraught adoptions, or the raising of children with disabilities. McAdam's central "adaptation and compensation hypothesis" is also true for those without children in the end. Societal or personal fears of the so-called empty-life wane as "childless persons gradually adapt to their child-free situation . . . finding satisfying alternative roles and relationships" of fulfillment and generativity (Hansen, 2012, p. 48). All reproductive stories are equal, worthwhile, and powerful paths of self-realization.

Narrative identity may now be, "considered the central psychosocial challenge of emerging adults in modern societies" (McAdams, 2008, p. 252). It has since evolved to include the idea of master narratives that puts the "social back into personal identity" (Hammack, 2008; Hammack & Toolis, 2015). The creation of a personal narrative must be understood as a psychosocial coconstruction, a negotiation between the self and its context, where the material for the self is drawn from the larger environment (and vice versa). Penuel and Wertsch (1995) stated that "cultural and historical resources for identity formation are integral as empowering and constraining tools for identity formation" (p. 90). Mclean and Syed (2015) further warned against the overemphasis of personal agency in identity formation. They characterize master narratives as operating largely outside of awareness because they are ubiquitous, invisible, compulsory and often rigid. Even conscious attempts at nonconformity cannot eradicate them because counternarratives by default refer in some way back to the master narrative. This has particular relevance for reproductive identity as some may resist identifying with reproduction altogether, finding it confining and stifling, and preferring to eradicate it from their self-concept altogether. However, this article would similarly argue that reproduction is a fact of life, which like gender and sexuality, is embedded in the master narrative of all cultures and as such cannot be denied out of existence, nor totally under the control of an individual (McLean, Shucard, & Syed, 2017).

Biopsychosocial Influences on Reproductive Identity Development

Alongside known identity models, a classic biopsychosocial framework may also be employed to further humanize and contextualize an individual's reproductive potential. Self-actualization is one of perceived control and does not happen in a vacuum, but rather within a developmental niche that constrains or supports its optimal progression (Super & Harkness, 1986). The following selections from

complementary fields are not a comprehensive review but have been privileged above others because they can be used to assess an individual's level of basic reproductive literacy or psychological awareness.

Biological

Age-related fertility decline and a proper understanding of the reproductive life cycle is a central concern of reproductive medicine (Harper et al., 2017). An important distinction is "fecundity"—the capacity or potentiality for reproduction—versus "fertility"—the actuality of having produced a live offspring (Davies, Delacey, & Norman, 2005). The biomedical paradigm states that fertility is not a given and that it can be disrupted or mobilized. While the popular name for impairment is infertility, this simply announces the absence of children but not the means (e.g., via infection, miscarriage, stillbirth, etc.). Medical professionals lament poor fertility awareness and lack of education as the leading cause of ignorance into the female "biological clock," risks of unprotected intercourse, chances of IVF treatment success as well as the realistic challenges of assisted reproductive technologies (ARTs), surrogacy, or adoption (Peterson, 2017).

Psychological

The presence of trauma (e.g., sexual/domestic violence) is now an established risk factor for negative pregnancy, delivery, and parenting outcomes (Leeners, Richter-Appelt, Imthurn, & Rath, 2006; Lev-Wiesel, Chen, Daphna-Tekoah, & Hod, 2009). Conversely, studies have connected trauma to once seemingly benign physiological experiences such as birth and breastfeeding. A thorough pre-and-post trauma assessment is therefore always warranted. In addition, the theoretical framework of procreative identities is the closest precursor to reproductive identity, and while gendered, has been recently applied more broadly (Marsiglio, 1991; Murphy, 2013; Sells, 2014). The terms *procreative consciousness* and *responsibility* were originally coined to assess the extent to which males become aware of their ability to impregnate and incorporate fatherhood into their self-concept (Marsiglio, Hutchinson, & Cohan, 2001). This concept is applicable to all people exploring their nascent reproductive identity development.

Cultural

An underlying pronatalism prevails worldwide and like gender norms, dictates what is expected, optimal, or even moral (Hansen, 2012). The value of children (VOC) theory from the 1970s framed children as holding diverse types of value around the world from social/psychological (e.g., joy, fun, companionship) to economic/utilitarian (e.g., income generators, old age security; Fawcett, 1988; Hoffman &

Hoffman, 1973). In a recent update from Turkey, a sharp increase in the psychological type and decrease in the economic/utilitarian type was found, as well as a surprising new preference for girls (Kagitcibasi & Ataca, 2005). Assessing for conformity is helpful in determining whether traditional expectations are being adopted or rebelled against in favor of countercultural ones (e.g., antinatalism; Hendrixson et al., 2019). Furthermore, the more contemporary norms of individualism may raise the status of "cultural parents" (e.g., CEOs, entrepreneurs) to be as desirable as biological ones or in turn decrease the value of children if they are deemed to constrain personal freedom or creativity (Colleran, 2016).

Social

If having children is increasingly viewed as detrimental to autonomy and wellbeing, practical help from the community is critical. Evidence from the rapidly growing "happiness gap" research has demonstrated cross-country variation in parenting satisfaction and its link to the structural support offered to its citizens. Low levels of wellbeing exist in the most advanced industrialized societies with the least robust family policies—the United States being the most resource-poor in this regard (Glass, Simon, & Andersson, 2016). Hansen's (2012) writing on "folk theories" questions the quixotic "rosy view" of parenthood that is oddly strongest in these nations and considers them a form of psychological self-delusion or cognitive dissonance to be confronted and debunked. Lacking interpersonal and institutional support (e.g., dispersion of kin, flexible working hours) also differentially affects genders, with women especially vulnerable to perinatal mood and anxiety disorders as a result (Barnes, 2014). Parenting education would do well to prepare parents to advocate for their own developmental needs and to avoid presenting parenthood as "all good or all bad," but as a stressor, that like any other, can be buffered with proper resources.

Defining Reproductive Identity

A revitalized research tradition, from population demography and evolutionary biology to reproductive health psychology is actively studying "if, when, and how" people come to realize their fertility. These broad range of scholars are in agreement that the literature on ideational factors lacks conceptual clarity and that the presence of confusing terminology has led to imprecise measurement. The offering up of reproductive identity as a potential solution will admittedly, and perhaps inevitably, borrow from comparative theories of gender/sexuality in the literature. The preliminary definitions and axioms provided in this section should, therefore, be considered as a bricolage, or construction using residual materials from other existing formula-

tions, redeployed in new combinations (Johnson, 2012). While an intermediary step, it is expected that with systematic development these similarities will diverge or converge accordingly.

Terminology

Two major pitfalls of reproductive research appear to reign: terminology and rationality. Unfortunately, the words "unwanted," "unplanned," "mistimed," and "unintended" are still used interchangeably though they measure different things, elicit vastly different reactions, and are false dichotomies that do not accurately capture people's realities (Aiken, Borrero, Callegari, & Dehlendorf, 2016). Conversely, phrases such as fertility desires, childbearing intentions, and reproductive decision-making may, in the end, be different words for saying the same thing, and "for all the semantic differences between these concepts . . . tapping a common psychological orientation" (Bhrolcháin & Beaujouan, 2019, p. 5). Special attention should be given to the word *orientation* in this instance as a viable alternative. Relatedly, these and other scholars have critiqued the overuse of rational choice theories from economics and planned behavior. As described by Sell (2007), the term *sexual preference* was similarly problematic for implying a conscious or deliberate decision that trivializes its depth and assumes certainty. Bhrolcháin and Beaujouan (2019) also challenged this view for fertility and point to the high frequency of uncertainty in surveys as believable and not to be dismissed. All told, the evidence argues for a conceptual transformation from that of intention to orientation.

Orientation

Proposing an analogous term to sexual orientation such as reproductive orientation may provide a good short-term solution for describing the overall idea of "reproductively related predilections" that like "sexuality-related predispositions . . . may be genetically, biologically, environmentally, and/or socially determined or constructed" (Worthington et al., 2002, p. 497). In terms of its operationalization, one could measure its relative strength and direction along the gradations between extreme poles of desire for children or childlessness. Such a measurement would capture directionality and extremity. Additional dimensions could be added such as relative intensity (I feel very strongly, somewhat strongly, etc.) and centrality (it is a "master status" compared to other coexisting identities). A person who is in equal favor of both may fall in the middle of the scale or off of it and in a separate category if altogether indifferent (e.g., asexual). A multidimensional measure will need to properly assess the many components that make up a reproductive orientation such as attraction and action. The field of sexual orientation continues to debate whether psychological or

behavioral aspects count the most, desire or conduct, what one feels or does. Some may love children but not get to have them, and some may have children but regret them (Donath, 2015). As with sexuality, reproductive orientation may be the "shorthand" to describe a person's inclinations or conduct in the realm of reproduction, while reproductive identity refers to how a person "self-labels" in the end (e.g., biological father, childfree, infertile, stepmother, etc.; Salomaa & Matsick, 2019).

Axioms

The previous review of preexisting identity models may also provide valuable guiding principles upon which to build a parallel conceptualization and operationalization of reproductive identity. A life-course formulation of reproductive identity must similarly (a) be inclusive and flexible; (b) acknowledge subordinate and ordinate groups differences; (c) disrupt fixed categories and avoid dichotomization; (d) allow for fluctuations in the stability of commitments over time; (e) invite fluidity and nonlinear unfolding without rigid sequences; (f) center subjectivity, meaning-making, and stories; and (g) see individuals as embedded in their culture and account for the master narratives that influence their personal identity construction. In the end, the essential key to defining reproductive identity is how an individual self-identifies and their subjective interpretation of objective reproductive events.

Narrating a Reproductive Identity Across the Life Span

The collecting of a reproductive life history is considered a gold standard when assessing healthy adaptation within each domain: developmental milestones (e.g., onset of puberty, age at first pregnancy), abnormalities (e.g., genetic, cancer), behavioral methods (e.g., birth control, cesarean delivery), and assigned roles (adoptive parent, genetic donor). Hammack and Cohler (2009) warned against mere acts of accounting that render this content meaningless because "lives are more than mere products of some biological or psychological sequence" (p. 11). By comparison, a narrative life course approach privileges the "subjectivity in reproductivity" and guards against objectification when interpreting a presenting problem. This night-and-day difference does not sideline soft opinions in favor of the hard evidence but instead probes for the deeper register of an individual's inner life. Hammack and Cohler (2009) further argued that creating, for example, a sexual orientation narrative serves an agentic purpose that leads people through a gateway back to meaning and empowers them to "chart their own developmental trajectories" (p. 12). A reproductive life story is a similarly reflective and self-reflexive process that can lead to the realization of one's reproductive orientation, which can, in turn, be guiding and orienting.

A life course model is well suited for reproductive identity development because aging brings with it mounting pressures and opportunities for stagnation or generativity. The normal developmental transitions of age (e.g., turning 30) may trigger the onset of a reproductive identity exploration as can an unexpected health scare (e.g., personal illness or partner's death) or a procreative surprise (e.g., unplanned pregnancy). With the passage of time, there is age-related fertility decline alongside increased risk for unplanned pregnancies as exposure to sex accumulates. Over the course of a reproductive window, energy may initially be spent defending against conception only to sharply pivot when the end approaches. A person may opt-out of parenthood with certainty only to later grapple with an unexpected conception. The costs and benefits of reproduction also vary with every life stage (e.g., teen pregnancy vs. "empty nest"), each with their unique tradeoffs.

The conclusion of a reproductive journey rarely ends up where it began. The path for someone desiring parenthood may be without notable complications while for another it begins with early reproductive health issues (Mynarska, Matysiak, Rybińska, Tocchioni, & Vignoli, 2015). Some people are early deciders and may sterilize to ensure a life without children, some "try for a child" until it is achieved by any means or cost, and others abandon their efforts after a few or repeated failures. Reproductive identities are not stable or fixed, nor are they lived out in perfect linearity or prototypical stages (Hammack, 2008). Miscalculations can result in formidable dilemmas such as weighing an abortion against religious beliefs, the affordability of ARTs versus other investments, or reconciling permanent childlessness with advanced age (Athan, Chung, & Cohen, 2015; Berrington & Pattaro, 2014; Koert & Daniluk, 2017; Shanahan, 2000). Interference from co-occurring and intertwined pathways may compete for the same attention such as the ticking of the "coupling clock" (finding a mate) or pursuing an education until postponement becomes the default choice (Berrington & Pattaro, 2014). Reproductive stories are filled with narratives of setbacks and redemption, dramatic plot twists, prayers to higher powers, and human resilience in the face of adversity (Pollard & Saleem, 2019).

How will a person self-define in the end? Rarely is the answer straightforward because some conceive unassisted or through IVF and surrogacy, with their own gametes or donated genetic material; adopt, foster, or step-parent a nonrelated child; or abort, abandon, or adopt-out their own children (see Langdridge et al., 2005; van den Akker, 2012). As discussed, people are often poor forecasters and not wholly rational. A pregnancy may become a "happy accident" and reveal an unconscious wish via unprotected sex. An abortion may be actively pursued, or passively accepted due to relational, economic, or cultural pressures (e.g., partner coercion, unaffordability, sex selection, "one-child policy"; Zoja, 2006). With divorce, biological parents may conceive their children only to

later become less involved in raising them, or simultaneously stepparent within a new blended family. Regardless of whether individuals finally arrive at parenthood or nonparenthood, or what that looks like externally, internally, they may hold different understandings of themselves. An infertile person who has never conceived a child (or who has lost a child of any age) may continue to relate very much like a parent. Conversely, another may wrestle with identifying as a parent long after their baby arrives (Slater, 2003). Just as individuals may not feel like adults despite their chronological age, people may feel similarly incongruent about their reproductive experiences with discrepancies between the real and ideal, the imagined and lived parts of themselves (Arnett, 2000). The need for self-verification is normal—to be seen by others as one would like to be seen—and presumptions by strangers and loved ones places a person at risk of feeling alienated or contaminated by external projections and disapproval. These misunderstandings are commonplace and play out with discomfort in everyday interactions whether at social gatherings (e.g., children's parties), places of employment (e.g., human resources) or medical offices (e.g., intake forms). Over a lifetime, an individual might hopefully arrive at a sense of equanimity regarding the multiplicities residing within.

Applications of the Concept

Identity issues naturally rise to the forefront in both the scientific and popular imagination when societies are undergoing flux. Reproductive identity has rightfully ascended to its own relevancy given the rapidly changing procreative lives of 21st-century people. Those coming of age today are simultaneously offered the "newest new" reproductive technologies, such as egg freezing, while also receiving inconsistent access to reproductive health (e.g., abortion, insurance coverage of birth control, affordable ARTs) and sustainable family policies (e.g., daycare, work-leave; Inhorn, 2017). Reproductive identity formation may be a natural developmental process, a reflection of the contemporary culture, or both. Public platforms such as social media may be interesting sources to capture the zeitgeist and witness in real-time how reproductive identities are being "imaged" and narrated by individuals around the globe. More facilitated venues with trained professionals, however, are needed to midwife these life-altering decisions and to help people integrate the complexities of reproductive demands. The emerging concept of reproductive identity may provide a "sticky" idea that can be readily incorporated into education, research, and practice in the following ways.

Public Education

Planful competence and intentionality are not antithetical to the spontaneities of the life course (Shanahan, 2000). Aware-

ness of one's identity can be a very orienting and welcome addition to the public health approach of reproductive life planning, whose person-centered principles are rooted in empowerment to avoid potentially coercive recommendations especially for social minorities (Mercurio, 2019). It can also be integrated into sexual health education curricula so that youth might intentionally imagine their possible reproductive selves—"what they might become, what they would like to become, and what they are afraid of becoming"—just as would be expected of other future commitments (e.g., career development; Markus & Nurius, 1986; Oyserman, Bybee, Terry, & Hart-Johnson, 2004, p. 135). Creative tools such as storytelling are preferred to best capture in-depth material and to transform mechanical "if, when, how" planning into substantive explorations of "who."

Research and Practice

As already suggested in the *American Psychologist*, there is a growing need for trained reproductive health psychologists to be hired in basic bio-behavioral settings (e.g., contraception clinics, ob-gyn practices) with psychotherapeutic approaches that sensitively address the underlying feelings associated with fertility and family building challenges (e.g., grief, hopelessness; Poleshuck & Woods, 2014). Obtaining a proper assessment and reproductive life story is imperative to inform researchers and practitioners of the risks at hand, make proper recommendations, and may be a therapeutic intervention in itself (Salomaa & Matsick, 2019). All professionals would do well to identify their biases and assumptions about various reproductive identities and to use sensitive measurements that are inclusive and do not perpetuate the stigmatization of nonconforming groups (e.g., transgender parents, childless-by-choice; Haines, Ajayi, & Boyd, 2014; Matthews & Desjardins, 2017). Like sexuality, the development of reproductive identity should be supported as a healthy aspect of human expression across a continuum of options, and to be self-authored.

Conclusions

The emerging concept of reproductive identity has the potential to unify the many fields that study human reproduction using disjointed terminologies and definitions. This preliminary exploration may stimulate further theorizing, conceptualization, measurement, and application so that it may be used in real-world settings to dispel the myth that there is one essential or normative reproductive pathway for successful aging and generativity. Reproductive identity development will be summarized in conclusion as a process whereby individuals, in dialogue with their particular macro-micro context, experience an enlarging awareness of their reproductive potential (e.g., procreative consciousness), explore and accept their reproduc-

tive desires and predilections (e.g., reproductive orientation), narrate and make meaning of their lived reproductive experiences, and in doing so feel more agentic and decisive as they integrate this evolving understanding into their whole self-concept. This process is fluid, nonbinary, and can cycle back and forth repeatedly in a dynamic fashion as the storied self develops. Furthermore, because the notion of agency is fundamental to both identity formation and reproduction, this emerging concept must sit on a foundation of reproductive justice that demands its equal access and representation, with special attention given to the most vulnerable (Luna & Luker, 2013). Just as reproductive autonomy has been expanded to include the dignity to procreate at will, as well as to respectfully constrain it, reproductive identity has the potential to advance this line of thinking even further to its largest scope to date and to secure it as an inalienable human right of all individuals to ultimately self-identify as they see fit.

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