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Conceptualizing Childbearing Ambivalence: A Social and Dynamic Perspective

Christie Sennott and

Purdue University, Department of Sociology, 700 W. State St., West Lafayette, IN 47906 Phone: (765) 494-4668; Fax: (765) 496-1476; csennott@purdue.edu

Sara Yeatman

University of Colorado Denver, Department of Health and Behavioral Sciences, Campus Box 188, PO Box 173364, Denver, CO 80217-3364, Phone: (303) 315-7180; sara.yeatman@ucdenver.edu

Abstract

Childbearing ambivalence is often conceptualized as a state of conflicting desires about having a child that is characteristic of particular individuals and/or life stages. This study proposes that childbearing ambivalence is dynamic and situational, resulting from the multiple socio-cultural frames surrounding childbearing. Using eight waves of prospective data from a population-based sample of young adults in Malawi, results show that 41% of women and 48% of men are ambivalent about childbearing at some point in the 2.5-year study. There is limited evidence that ambivalence is related to individual sociodemographic or psychosocial characteristics aside from gender; rather, ambivalence is tied to life course markers such as school enrollment and age. Additionally, life course transitions and changes in relationships, health, and economic factors are associated with the onset of ambivalence, supporting the theory that ambivalence is a dynamic state that men and women frequently pass through as their lives and circumstances change.

Keywords

ambivalence; fertility; longitudinal research; pregnancy; young adulthood

BACKGROUND

Childbearing ambivalence—often defined as conflicting desires about having a baby (Higgins, Popkin, & Santelli, 2012; Yoo, Guzzo, & Hayford, 2014)—has gained traction among scholars of sexual and reproductive health as a useful tool for explaining inconsistencies in reproductive desires and behaviors. The majority of this research has focused on the health implications of ambivalence. Studies have shown, for example, that ambivalence about childbearing is linked to reduced and inconsistent contraceptive use (Campo, Askelson, Spies, & Losch, 2012; Frost, Lindberg, & Finer, 2012; Higgins et al., 2012; Huber, Esber, Garver, Banda, & Norris, 2017; Miller, Trend, & Chung, 2014; Yoo et al., 2014), low birth weight for the resulting child (Mohllajee et al. 2007), and a higher

likelihood of miscarriage (Santelli, Lindberg, Orr, Finer, & Speizer, 2009). In an effort to identify those most likely to express ambivalence about childbearing, much of this research has implicitly treated ambivalence as a static state that is associated with an individual's sociodemographic or psychosocial characteristics or with particular stages of life (e.g., Higgins et al., 2012; Layte, McGee, Rundle, & Leigh, 2006; Miller, Jones, & Pasta, 2016; Schwarz, Lohr, Gold, & Gerbert, 2007; Withers, Tavrow, & Adinata, 2011; Yoo et al., 2014).

In this paper, we step back from using ambivalence as a way to understand health behaviors and outcomes and apply a sociological lens to better make sense of childbearing ambivalence. We start by asking whether it is appropriate to characterize ambivalence as static, or whether it is instead a state that men and women frequently pass through over time as their lives and relationships change. We then ask, if it is the latter, what predicts periods of ambivalence, and what can a better understanding of these dynamics tell us about what it means to be ambivalent about childbearing. To do so, we draw on insights from pragmatist theory (Joas, 1993, 1996; Joas & Beckert, 2002; Whitford, 2002) and theories of action (Bachrach & Morgan, 2013; Johnson-Hanks, Bachrach, Morgan, & Kohler, 2011; Sewell, 1992) to help us understand why individuals commonly report what seem to be conflicting desires about childbearing.

Rather than treat childbearing ambivalence as a fixed state of conflict that is characteristic of certain types of people, pragmatist theory suggests that ambivalence is likely to be mutable, context-dependent, and linked to the different socio-cultural frames surrounding childbearing (Joas & Beckert, 2002; Whitford, 2002). In this view, childbearing ambivalence is likely to be dynamic and situational, and therefore better understood through a longitudinal approach. It may emerge through experience as individuals encounter and acknowledge the different culturally valued "ends-in-view" (Dewey 1958[1925] as cited in Joas & Beckert, 2002, pg. 273) associated with having a child, such as transitioning to adulthood, attaining respect as a mother or father, or simply valuing a new life (see also Ní Bhrolcháin & Beaujouan, 2011). Moreover, as the characteristics of one's life shift over time, so too will ambivalence. We explore this proposition in the context of rural Malawi using longitudinal data to examine how ambivalence is tied to individual characteristics, markers of the life course, and/or particular situations and life changes.

Our study makes several theoretical and methodological contributions. First, we reframe the discussion of childbearing ambivalence from one based largely on psychological ambivalence (Schenk & Dykstra, 2012) to one based in a sociological paradigm (Lendon, 2017). Second, we use prospective data to measure childbearing ambivalence during the transition to adulthood, which allows us to investigate how desires are reshaped in tandem with the achievement of particular life course markers as well as in reaction to specific situations and unknown idealized futures (see Mische, 2009). In so doing, we build on the few longitudinal studies that have measured ambivalence over time but have not conceptualized it as a dynamic and social phenomenon (e.g., Miller, Barber, & Gatny, 2013; Miller et al., 2016, 2014; Moreau, Hall, Trussel, & Barber, 2013). Third, we examine childbearing desires among young women and men regardless of whether they are in a relationship. Men are often excluded from studies on childbearing ambivalence (see Frost et al., 2012; Higgins et al., 2012; Yoo et al., 2014 for exceptions); and many studies are limited

to women in romantic relationships or those who are recently or currently sexually active (see Bruckner, Martin, & Bearman, 2004; Higgins, 2017 for exceptions). By including people who are not currently in a relationship, we are able to measure the dynamic situations and experiences—such as entering or exiting a relationship—that may provoke or aid in resolving ambivalence about childbearing over time.

The Context of Childbearing in Malawi

Our study takes place in Malawi, a setting that is characterized by high but declining fertility, having dropped from 6.7 children per woman in 1992 to 4.4 children per women in 2015 (MDHS 2017). Over half (58%) of married women and 43% of unmarried women in Malawi use a modern family planning method and the median birth interval is 41 months or nearly 3.5 years (MDHS 2017). Nonetheless, over half of pregnancies (54%) in Malawi are estimated to be unintended (Vlassoff & Tsoka, 2014). Additionally, a recent study of 592 women aged 15–39 in Malawi found that 44% of women were either ambivalent or indifferent about childbearing (Huber et al., 2017).

Our study analyzes childbearing ambivalence among young women and men in Malawi during the transition to adulthood, a time that is dense with the achievement of life course markers. The median age at first sex is 16.8 for women and 18.5 for men, and the median age at marriage is 18.2 for women and 23.0 for men (MDHS 2017). Half of Malawian women have had their first birth by age 19 (MDHS 2017). Thus, a common sequence of events is for young women to start having sex before age 17, marry by age 18, and have their first baby a year later.

Theorizing Ambivalence

There are two primary ways that ambivalence about childbearing has been theorized in past research. The first and most common approach employs a psychosocial framework and situates ambivalence within the individual (e.g., Bruckner et al., 2004; Layte et al., 2006; McQuillan, Greil, & Shreffler, 2011; Miller et al., 2013, 2016, 2014; Sheeder, Teal, Crane, & Stevens-Simon, 2010; Withers et al., 2011). Studies in this tradition have focused largely on identifying the individuals most likely to express childbearing ambivalence by analyzing the sociodemographic (religion, social class, education) or psychosocial (self-esteem, impulsivity) characteristics that increase or decrease the likelihood of ambivalence about childbearing (e.g., Bruckner et al., 2004; Higgins et al., 2012; Layte et al., 2006; McQuillan et al., 2011; Withers et al., 2011; Yoo et al., 2014). This approach is built on the assumption that childbearing ambivalence is an individual trait associated with particular sociodemographic or psychosocial characteristics.

A second but related approach situates ambivalence within the context of the life course. Scholars employing this framework focus on how the achievement of particular life course markers (age, marriage, parenthood) might prompt ambivalence about having a child (e.g., Higgins, 2017; McQuillan et al., 2011; Schwarz et al., 2007; Withers et al., 2011; Yoo et al., 2014). Studies in this tradition often use life course theory to understand why individuals may be conflicted about childbearing at particular points in time. Although it has rarely been conceptualized as such, a life course approach to studying childbearing ambivalence is also

consistent with the argument that ambivalence changes over time as our lives, experiences, and expectations are structured by age-related social norms (Elder, 1975; Settersten, 2003). Additionally, some studies implicitly combine individual and life course approaches by examining both individual/psychosocial and life course variables (e.g., Bruckner et al., 2004; McQuillan et al., 2011; Withers et al., 2011; Yoo et al., 2014).

Studies focused on both the individual and life course frameworks have largely relied on cross-sectional analytic methods. Indeed, these frameworks may very well stem from a lack of longitudinal data on childbearing ambivalence thus necessitating a focus on interindividual differences and an oversight of what intra-individual differences could tell us.

Nonetheless, sociological theory suggests that there is a third way to approach the study of ambivalence, one that reflects the multiple socio-cultural frames that individuals hold at once. In this view, two seemingly competing desires—an attraction to childbearing and an aversion to it—may reflect one's thinking about the event (childbearing) vis-à-vis different socio-cultural frames of reference.

For example, one set of competing frames might pertain to the conflict between cultural ideals about the importance of childbearing and more "modern" aspirations. In sub-Saharan Africa, family building ideals that emphasize the value of children and the reproduction of the lineage (Caldwell & Caldwell, 1987; Fortes, 1978) may come into conflict with more contemporary family formation ideals that prioritize finishing education, delaying marriage, postponing childbearing, and limiting family size (Agadjanian, 2005). In Malawi, for instance, belief in the benefit of education has risen sharply creating near-universal aspirations for educational achievement in pursuit of a "bright future" that is all but unattainable (Frye, 2012). The fundamental incompatibility of education and pregnancy in Malawi (Grant, 2012) means that young adults must forego childbearing in the near term to maintain the possibility of an idealized future hinging on educational achievement (Frye, 2012). This does not mean that everyone delays childbearing—as demonstrated by the median age at first birth (19). Rather, in line with this contemporary cultural frame, young adults are likely to project their ideal time for childbearing further into the future than official statistics might suggest is likely.

A second set of competing socio-cultural frames might relate to conflicts between one's present circumstances (e.g., relationship or economic) and their broader, more generalized desires about childbearing. Describing the fertility imperative (in West Africa but he could have just as easily been describing it more broadly), the anthropologist Meyer Fortes called the transition to parenthood the "*sine qua non* for the attainment of the full development as a complete person to which all aspire" (1978, pg. 125). This remains the case in rural Malawi today, where one is considered a child whatever the age, and can be excluded from certain conversations until they cross through the rite of passage of having a child (Evens et al., 2015). Thus, although present circumstances might discourage childbearing now, there could still be a strong desire to bear children eventually—or at least an acknowledgment that a child would be accepted and welcomed, regardless of the circumstances (Aiken, Dillaway, & Mevs-Korff, 2015). Therefore, mapping childbearing desires onto current social realities or future possibilities (Mische, 2009) may invoke ambivalence if one's current circumstances

are not ideal for childbearing, but nevertheless, there is an acknowledgement that childbearing is valuable and desirable in and of itself (Evens et al., 2015).

Just as pragmatism offers a framework for understanding childbearing ambivalence as emerging from different socio-cultural frames, it also supports the conceptualization of ambivalence as dynamic. As Whitford reminds us, "Desires mature and change as we learn from experience. As ends-in-view, they are hypotheses about future conditions that may or may not come about and are subject to revision through deliberation" (2002, pg. 339). Indeed, research from a variety of contexts has shown that fertility preferences and intentions evolve over time and with the accumulation of experience (Bankole & Westoff, 1998; Hayford & Agadjanian, 2017; Kodzi, Casterline, & Aglobitse, 2010; Sennott & Yeatman, 2012; Yeatman, Sennott, & Culpepper, 2013). Thus, for example, even if a woman reports that she would like to avoid having a child in the near-term, if her circumstances change, her fertility preferences may also change. The expression of ambivalence, then, will also shift over time as individuals encounter new situations and experiences that may move them closer to or further from their idealized circumstances for having a child. Our longitudinal approach allows us to assess whether childbearing ambivalence is dynamic and responsive to situations or "conjunctures" (Johnson-Hanks, 2002) in individuals' lives and the ideal circumstances that may be linked in their imaginations to having a child.

Measuring Childbearing Ambivalence

Most research uses the term "pregnancy ambivalence;" however, we prefer and adopt the term "childbearing ambivalence" (see also Sheeder et al., 2010) because we theorize that "ambivalence" is more about becoming a parent or having a child and less about the state of pregnancy. Scholars have operationalized ambivalence about childbearing in several overlapping ways. Some have described childbearing ambivalence as the state in which a person expresses conflicting desires about having a baby, frequently measured as the intention to avoid or the importance of avoiding pregnancy combined with a respondent's affective response to a hypothetical pregnancy (Aiken et al., 2015; Frost et al., 2012; Higgins et al., 2012; Yoo et al., 2014). Other scholars have defined as ambivalent those whose childbearing preferences were fuzzy or flexible (e.g., "wouldn't mind getting pregnant" (Schwarz et al., 2007) or "I go back and forth" (Sheeder et al., 2010)). In addition, a number of studies have considered women ambivalent if they expressed indifference or uncertainty -that is, if they did not know their preference or did not care whether they became pregnant (Higgins et al., 2012; Layte et al., 2006; McQuillan et al., 2011; Mohllajee, Curtis, Morrow, & Marchbanks, 2007; Schwarz et al., 2007; Withers et al., 2011). Miller and colleagues (Miller et al., 2013, 2016, 2014), however, contend that ambivalence and indifference are distinct constructs, which fall on opposite ends of poles in a quadrant, where one pole reflects the simultaneous existence of strong pro- and antinatal desires (ambivalence); the other pole represents situations where both pro- and antinatal desires are weakly held (indifference).

In this study, we operationalize ambivalence using a common approach that captures a conflict in respondents' desired timing of the next birth and their affective response to a hypothetical future pregnancy (see also Campo et al., 2012; Santelli et al., 2003; Sheeder et

al., 2010; Speizer, 2006; Zabin, Huggins, Emerson, & Cullins, 2000), while also recognizing Miller and colleagues' (2013, 2016, 2014) position that indifference is conceptually distinct from ambivalence. This operationalization fits well with our longitudinal approach and conceptualization of ambivalence as situational and dynamic because it captures future desires or plans related to childbearing as well as respondents' hypothetical reactions to a pregnancy occurring on a timeline that is (or is not) aligned with their plans.

Testing Three Frameworks for Childbearing Ambivalence

In this paper, we test three explanations of childbearing ambivalence: the individual approach, the life course approach, and our new dynamic-situational approach. Although these three explanations are not mutually exclusive, each points to different root causes and carries different implications.

We will find evidence in support for a) an individualized approach if childbearing ambivalence is relatively stable within individuals over time and tied to sociodemographic and psychosocial characteristics. We will find evidence for b) a life course approach if ambivalence is patterned by markers of the life course. We will find evidence for c) a dynamic-situational approach if childbearing ambivalence is commonly experienced during the study and if these phases of ambivalence are characterized by changes in one's everyday circumstances. The situations one could envision in which ambivalence might arise or dissipate over time are virtually limitless. Therefore, we focus our inquiry on three realms (relationship, economic, and health) that research suggests are most likely to provoke ambivalence about childbearing and that are testable with the data at hand.

Relationship changes—Childbearing ambivalence may arise when the qualities of an intimate relationship (or lack thereof) conflict with the "vital impulse" (Dewey, 1939 as described in Whitford, 2002, pg. 339) to bear a child, or with the desire to avoid one. Research has shown that women's childbearing preferences and feelings about an existing pregnancy are shaped by the characteristics of their current relationship rather than simply by more abstract childbearing objectives, such as a preference for a certain family size (Evens et al., 2015; Zabin et al., 2000). In this respect, if individuals are dissatisfied with their current relationship, although they may ideally want to have a child in the near term, they may express ambivalence about the prospect of having a child because of not wanting one with their current partner. The corollary is that other women may want to postpone having children to stay in school, but are in a valued relationship and may therefore express happiness about a pregnancy that would solidify the relationship or demonstrate one's commitment, even if it did not occur at the "right" time.

Economic changes—Changes in economic circumstances are known to influence fertility desires and intentions (Sennott & Yeatman, 2012; Udry, 1983). Moreover, economic concern about the cost of children is a common reason people desire to limit or stop childbearing altogether (Agadjanian, 2005; Evens et al., 2015; Kodzi, Johnson, & Casterline, 2012). Providing financially for one's partner is both an important part of how masculinity is constructed in Malawi and part of the natural progression of romantic relationships in this setting (Poulin, 2007; Swidler & Watkins, 2007). Therefore, men, in particular, may be

concerned that they do not have the resources needed to maintain a relationship or support a family. Economic instability may thus lead to ambivalence if one wants to wait to have a child until reaching a certain economic milestone, but nonetheless would be happy if a pregnancy occurred because of the value placed on fertility and the desire to achieve adulthood (Evens et al., 2015; Fortes, 1978).

Health changes—Childbearing ambivalence might also arise in response to concerns about or changes in one's health, a particularly relevant concern for young people in Malawi where 9% of reproductive-age individuals are HIV positive (MDHS 2017). A recent study found that access to antiretroviral treatment for HIV may increase fertility desires in the community, suggesting that perceptions of health, and future health, could influence childbearing plans (Litwin et al., 2015). Additionally, a shock to one's health—HIV or otherwise—could provoke an intention to delay childbearing until one is healthy again, but at the same time not dampen the intrinsic desire for childbearing and thus the articulated happiness if a pregnancy occurred.

METHOD

Survey and Data

Our data come from Tsogolo la Thanzi (TLT), an 8-wave panel study conducted every four months between 2009 and 2011. TLT began as a simple random sample of 1,505 women and 574 men between the ages of 15 and 25 living within a seven-km radius of the southern Malawian town of Balaka. Women were also asked to recruit their sexual partners on an ongoing basis during the study, and these men are included in our analyses (N = 964). At their first interview, male partners were given the baseline questionnaire. All interviews were conducted in private rooms at the TLT research center.

Dependent Variable

The dependent variable is a dichotomous indicator of childbearing ambivalence constructed from responses to two survey items: 1) desired timing of first/next child, and 2) affective response to a hypothetical pregnancy in the near future. In regards to the former, at each wave respondents were asked, "How long would you like to wait before having your first/ next child?" Response options were read aloud and included: "as soon as possible", "less than two years", "two to three years", "three to four years", "four to five years", "five or more years", "don't want a(nother) child", "no preference/whenever", and "don't know". In regards to the latter, at each wave women were asked: "If you found out you were pregnant next month, would that news be" and men were asked: "If you found out your wife was pregnant next month, would that news be:" using the following response categories: "very bad", "fairly bad", "neither good nor bad", "fairly good", "very good", and "don't know". All men were asked this question regardless of whether they were currently married. The question specifies "wife" rather than "partner" because in this context men often call their regular sexual partners their "wives" even if they are not officially married. We define a respondent as ambivalent if: 1) s/he wants to have a child "as soon as possible" and reports that a pregnancy next month would be "fairly bad", "very bad", or "neither good nor bad" (negative ambivalence); or 2) s/he wants to delay having a child and reports that a pregnancy

next month would be "fairly good", "very good", or "neither good nor bad" (positive ambivalence). 99% of the periods of ambivalence identified were positive ambivalence. As a sensitivity analysis, we reran all models excluding person-waves where respondents expressed negative ambivalence (n=23) and results were consistent with those reported below. The reference group for the dependent variable combines respondents who have aligned intentions and affect, either towards or against having a child in the near future.

We limited our analysis to person-waves in which respondents indicated a clear preference in favor of or against childbearing (i.e., consistency in timing preference and affective response to a hypothetical pregnancy) or an ambivalent childbearing preference. Personwaves in which respondents answered "no preference/whenever" to the survey question about the desired timing of next birth (n=117) were dropped from the analysis because they represent indifference rather than ambivalence (Miller et al., 2013, 2016, 2014). Additionally, person-waves where respondents answered "don't know" (n=25) or were missing on either question above (n=23) were dropped. As a sensitivity analysis, we reran all models including person-waves that were dropped because of indifference (coding them as ambivalent) and results were consistent with those reported below.

After excluding person-waves during which respondents or their partners were pregnant (n=1,980), our total sample includes 9,434 and 8,313 person-waves of data from 1,501 and 1,518 women and men respectively. Men contribute an average of 5.5 waves, slightly lower than women's 6.3 waves, largely because partners were enrolled on an ongoing basis.

Independent Variables

Individual approach—To assess the individual approach to ambivalence, we analyze the relationship between individual sociodemographic and psychosocial factors and childbearing ambivalence as reported at the baseline interview. In relation to psychosocial factors, we include an additive index of six statements measuring impulsivity: "I do things without thinking"; "I make plans well ahead of time" (reverse coded); "I like to think about complex problems" (reverse coded); "I act on impulse"; "I can only think about one thing at a time"; and "I am more interested in the present then the future". These six items are captured through an interactive probabilistic technique in which respondents are asked to indicate their level of agreement with each statement with a number of beans ranging from 0 to 10 where 0 represents absolute disagreement with the statements and 10 represents absolute agreement (see Trinitapoli & Yeatman, 2011). These items are assessed at waves 4–8. We create an "impulse score" using each respondent's first set of responses, and use multiple imputation for scores for the 418 respondents (13.8% of sample) who are missing information on impulsivity, largely because they attrited before wave 4.

We also analyze several sociodemographic factors assessed at the baseline interview. We measure religion with two dichotomous variables: whether respondents are Muslim versus Christian (ref), and whether respondents identify as "born again" Christians (Y/N). We include a continuous measure of socioeconomic status that is created using principal component analysis of working household goods. The index measures household structure (roof, toilet, flooring, electricity, water source), household working items (bed with mattress, television, radio, land line or mobile phone, refrigerator, bicycle, motorcycle, animal-drawn

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cart, car/truck, Bible or Koran) and personal ownership (watch, mobile phone, pair of jeans, luggage, working bicycle, number of pairs of shoes). We also include a continuous measure of the respondent's years of education.

Life course approach—To assess the life course approach to ambivalence, we take two strategies. First, we analyze the relationship between the achievement of certain life course markers and childbearing ambivalence as measured at the baseline interview. We include several independent variables that align with standard markers of adulthood: being married, being a parent, age, and being enrolled in school (Elder, 1975; Settersten, 2003; Shanahan, 2000). We measure marital status using a three-category variable: currently married (ref), formerly married, and never-married. To capture whether a respondent has had children, we include a categorical indicator for the number of births a respondent (or a respondent's partner) has had: 0 (ref), 1, 2, or 3 or more. Age is measured continuously in years. We also include a dichotomous indicator for whether the respondent is currently enrolled in school (Y/N).

Second, we analyze the relationship between experiencing changes in life course transitions since the last survey (over the past four months) and the likelihood of experiencing changes in ambivalence. We measure three dichotomous variables associated with changes in life course transitions that are common in our sample's age range: getting married; having (or partner having) a new birth; and leaving school.

Dynamic-situational approach—To assess the dynamic-situational approach to childbearing ambivalence, we analyze whether changes in respondents' relationship, economic, and health circumstances are associated with changes in ambivalence. We distinguish these changes from life course experiences, which fall within a transition to adulthood framework (Elder, 1975, 1998; Settersten, 2003). Dynamic-situational variables measure circumstances that are likely to change over a relatively short period of time. We include three dichotomous variables that capture common and dynamic relationship changes respondents may have experienced over the last four months: 1) entering a new nonmarital partnership; 2) ending a relationship; and 3) hearing rumors that a partner has other partners. Changes in economic circumstances are measured through four dichotomous indicators in which respondents report whether they or their spouse: 1) found a good or better job; or 2) lost their job or moved to a worse job. We include three dichotomous variables that measure respondents' health changes since the previous survey: 1) self-reported health improvements; 2) health declines; and 3) the death of a child.

Statistical Analyses

We first describe the extent of childbearing ambivalence and changes in ambivalence across waves within respondents. Next, drawing on the dependent variable described above, we employ two regression models to test the three conceptualizations of childbearing ambivalence.

To mirror past studies, our first model uses cross-sectional logistic regression to analyze the relationship between individual sociodemographic and psychosocial factors, life course markers, and childbearing ambivalence at the baseline interview. As a sensitivity analysis,

we ran separate models examining (1) individual sociodemographic and psychosocial factors and (2) life course markers, and results were consistent with those reported below.

Our second model adopts a dynamic prospective approach examining within-person changes by employing fixed effects logistic regression to analyze the relationship between changes over time in life circumstances and childbearing ambivalence. We include the life course transitions that change over the course of our study as well as a series of events and circumstances that represent the dynamic-situational approach to childbearing. Variables are assessed at waves 2-8 and refer to changes that have occurred since the last interview (in the past four months). That is, changes in life course transitions; relationship, economic, and health circumstances; and ambivalence may occur up to seven times. We use fixed effects because Hausman tests showed that the data violate the assumption that individual level error is uncorrelated with observed covariates (Hausman, 1978). Fixed effects models examine within-person changes and control for all observed and unobserved time invariant variables, making them appropriate for analyzing changes in ambivalence over time while minimizing problems with omitted variable bias (Allison, 1994, 2009; Petersen, 2004). Based on past research that documented different patterns in ambivalence among men and women (Frost et al., 2012; Higgins et al., 2012; Yoo et al., 2014), we stratify all models by gender.

RESULTS

Table 1 shows that childbearing ambivalence was common in our sample of young men and women. Almost twice as many men (23%) reported ambivalence at the baseline interview as compared to women (12%). However, when broadening the view across all survey waves, 41% of women and nearly half (48%) of men reported childbearing ambivalence at some point during the survey. Relatively few respondents (<1% of women and 5% of men) consistently reported ambivalence at all interviews. These descriptive statistics support the view of ambivalence as dynamic and mutable rather than a fixed state.

Table 2 provides descriptive statistics for the individual and psychosocial factors, life course markers, and dynamic-situational experiences included in the analytic models. The patterns are broadly consistent across gender. Turning first to individual factors, the majority of respondents were Christian (83% of women and 89% of men) and nearly half of women (45%) and men (49%) identified as "born again". Women and men had similar mean scores on the impulsivity scale, and similar household socioeconomic status and education on average. With regards to markers of the life course, at the baseline interview half of women (50%) and men (51%) had never been married. Almost 40% of women were enrolled in school compared to 35% of men. Nearly half (49%) of women and men (42%) had had a child, though fewer than one in ten men (8%) and women (6%) had at least three children. Men in the sample were older than women by three years on average.

Table 2 also describes the changing situations and life course transitions that respondents experience over the study that might provoke or help resolve childbearing ambivalence. Some of these experiences were common in the sample (e.g., getting a new nonmarital

partner and losing a partner) while others were relatively rare (e.g., child deaths) or more common for one gender than the other (e.g., spouse getting a better job).

Table 3 presents results for logistic regression models analyzing whether individual sociodemographic and psychosocial factors and life course markers were associated with the likelihood of reporting childbearing ambivalence among women and men at the baseline interview. The results provide limited support for the argument that childbearing ambivalence is a trait held by particular types of people. For women, religion was the only individual factor significantly associated with ambivalence. Identifying as a born-again Christian increased the likelihood of ambivalence. Identifying as Muslim was also positively associated with ambivalence, though only marginally significant (p < 0.10). Individual factors were not significantly associated with men's childbearing ambivalence.

The cross-sectional results for both women and men do support the idea, however, that childbearing ambivalence is associated with particular life course markers. Turning first to women, being enrolled in school and having at least two children decreased the likelihood of ambivalence (having one child was marginally significant, p < 0.10), whereas age increased the likelihood of ambivalence. For men, age and being never-married were positively associated with ambivalence, though the latter association was only marginally significant (p < 0.10). As with women, school enrollment was negatively associated with ambivalence for men.

Table 4 presents the results from fixed effects logistic regression models analyzing the relationship between life course transitions, changes in relationship, economic, and health factors, and entry into childbearing ambivalence. Among life course transitions for women, getting married and leaving school increased the likelihood of ambivalence whereas having a new birth decreased the likelihood of ambivalence. For men, the birth of a child since the last survey was associated with a decrease in the odds of ambivalence.

For the dynamic-situational factors, gaining a new nonmarital partner, losing a partner, a spouse getting a good/better job, and experiencing a child death all increased the likelihood that a woman would express ambivalence. For men, experiencing a health improvement since the last survey reduced the odds of expressing ambivalence (p < 0.10). Additionally, entering a new nonmarital relationship was marginally associated (p < 0.10) with an increase in the likelihood of expressing ambivalence.

DISCUSSION

In this paper, we propose a theoretical framework for understanding childbearing ambivalence as a social and dynamic phenomenon and offer evidence in support of this view. Using prospective longitudinal data, we found that childbearing ambivalence is commonly experienced during the transition to adulthood in Malawi. More than 40% of respondents reported ambivalence about childbearing over the course of the study. Men and women frequently moved in and out of ambivalence, and many of these shifts were predictable based on both life course transitions and more common everyday changes in one's circumstances.

Our results provided limited evidence that ambivalence is an individualized characteristic tied to particular sociodemographic or psychosocial characteristics, aside from gender. Consistent with past research (Higgins et al., 2012; Yoo et al., 2014), we found that gender is an important characteristic patterning ambivalence. Compared to women, men in our study were more likely to express childbearing ambivalence at the baseline interview and to experience changes over time. The circumstances of men's lives during the transition to adulthood may lend themselves more readily to ambivalence about having a child. For example, the necessity of men serving as an economic provider for their partners and families (Meekers & Calvès, 1997; Poulin, 2007) combined with the importance of having children for masculinity, status, and the achievement of adulthood in sub-Saharan Africa (Fortes, 1978; Richter & Morrell, 2008; Smith & Mbakwem, 2010) may render men particularly likely to be ambivalent during this time. Additionally, the gendered nature of parenting and of contraceptive responsibility-both of which fall heavily on women (see also Fennell, 2011)-may implicitly push women to hold more consistent fertility intentions and feelings in contrast to men who may have more leeway to hold intentions and feelings that are in conflict.

We found consistent support for the idea that childbearing ambivalence is patterned by life course markers such as being a parent, age, and being enrolled in school. Having children might reduce ambivalence as one's life trajectory begins to take shape and many of its uncertainties are reduced. In contrast, age is associated with ambivalence net of childbearing experience; pressures to have children may thus increase with age regardless of the perceived appropriateness of one's current situation. In line with the idea that staying in school and having children are largely incompatible (Grant, 2012), we found that school enrollment reduces ambivalence.

Our results also support the idea that childbearing ambivalence is dynamic and triggered by evolving circumstances. The specific situations we found support for in our sample included beginning a new nonmarital relationship, a woman's spouse getting a good/better job, an improvement in one's health (for men), and a child death (for women). A new nonmarital relationship might increase ambivalence if one's life trajectory is moving more toward the ideal for childbearing, but uncertainty remains about a partner's appropriateness for a long-term relationship or parenthood. A woman's spouse getting a good/better job may increase ambivalence about childbearing because in the context of rural Malawi "better" employment often suggests migration for work in South Africa, highlighting the tension between improved financial resources—which could support childbearing—and challenges of separation and loyalty (Mtika, 2007). In a high HIV context, improved health may lead a man to express happiness about the prospect of a new child as an indication of his virility and to mitigate stigma (Smith & Mbakwem, 2010), even if he does not necessarily want a child. Finally, women who experience a child death may feel both a desire to replace the lost child and fear about doing so.

The majority of past research on childbearing ambivalence has focused on explaining the consequences for health outcomes rather than the reasons ambivalence might arise in the first place. In this paper, we took a new and different approach, documenting the dynamic nature of childbearing ambivalence as well as providing a framework for understanding the

reasons behind it. Drawing on pragmatist theory and theories of action, we argued that childbearing ambivalence is likely to arise out of the multiple competing socio-cultural frames that surround childbearing. Our argument has antecedents in the work of Johnson-Hanks (2002, 2006, 2007) and Bachrach and Morgan (2013), which emphasized the value of socio-cultural frames for understanding childbearing motivations, intentions, and behaviors. Our results build on this research and further show that as individuals adapt to new periods of the life course or to short-term changes in their life circumstances, they may draw on different and competing socio-cultural frames for making sense of their childbearing options and experiences, and therefore hold what appear to be conflicting desires.

Although the specific events that trigger childbearing ambivalence in Malawi are likely to differ from those in other settings, there is no reason to believe ambivalence will be any less dynamic in other settings. Additionally, it is likely that childbearing ambivalence in other settings will similarly arise from competing socio-cultural frames for childbearing that are specific to the particular context. For example, in Western countries such as the U.S. and U.K., women who delay childbearing until late in their reproductive years may desire to have a child soon due to concerns about infertility and social pressure related to the motherhood imperative, but still exhibit ambivalence if their life circumstances and partnership are not ideal for childbearing (Ashburn-Nardo, 2017; Budds, Locke, & Burr, 2016).

Our operationalization of childbearing ambivalence is supported by past research; yet, we are unable to determine if our measurement of ambivalence might be driving some of our results. Future longitudinal studies that incorporate multiple measures of fertility intentions, affective responses to hypothetical pregnancy, and items assessing desires both to conceive and to avoid conception would be valuable in disentangling how these different measurement strategies might affect our understanding of the causes and consequences of childbearing ambivalence. Additionally, qualitative research examining the reasons men and women give for expressing childbearing ambivalence would be beneficial for confirming the influence of competing socio-cultural frames on fertility preferences and childbearing ambivalence across diverse contexts.

Like fertility preferences themselves, childbearing ambivalence changes over time and in response to new life stages and evolving situations. Understanding the unique periods of time when young men and women are likely to express ambivalence, and the confluence of particular situations that are tied to ambivalence about childbearing, can aid health professionals in being responsive to young people's reproductive needs, which may differ during periods of ambivalence (Higgins et al., 2012; Huber et al., 2017; Yoo et al., 2014). Researchers interested in understanding the causes and consequences of childbearing ambivalence—such as those interested in identifying the circumstances in which young people are more/less likely to use effective contraception—should move beyond conceptualizations of ambivalence as a static trait that is tied to particular sociodemographic or psychosocial characteristics. We will learn more about the nature and implications of childbearing ambivalence when we think of it as dynamic and common throughout the reproductive life course.

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Table 1

Childbearing Ambivalence among Women and Men, TLT Data, Malawi

Characteristic	% Women	% Men
Report ambivalence at baseline interview ***	12.0	22.5
Report ambivalence at every interview ***	0.7	5.1
Ever report ambivalence ***	40.7	47.9
Ν	1,501	1,518

Chi Square test for significant difference by gender

*** p < 0.001

Table 2

Descriptive Statistics for Women and Men, TLT Data, Malawi

		Women	Men
Individual factors		Mean (SD) or %	Mean (SD) or %
Muslim			
	Yes	16.7	11.4
	No	83.3	88.6
Born again Christian			
	Yes	45.0	49.4
	No	55.0	50.6
Impulsivity		2.6 (0.8)	2.4 (0.7)
SES		-0.0 (2.5)	0.2 (2.3)
Years of education		7.7 (2.8)	8.4 (3.1)
N		1,501	1,518
		Women	Men
Life course factors		Mean (SD) or %	Mean (SD) or %
Marital status			
	Currently married	41.8	48.1
	Formerly married	8.1	1.1
	Never married	50.1	50.8
Enrolled in school		39.0	34.5
Number of children			
	0	50.7	57.6
	1	26.3	21.8
	2	16.8	12.3
	3+	6.2	8.3
Age		19.5 (3.3)	22.9 (5.5)
N		1,501	1,518
		Women	Men
Time-varying variables		% person waves	% person waves
Life course factors			
Got married		2.6	2.0
Had a new birth		6.3	3.8
Left school		2.6	3.3
Dynamic-situational factors			
New nonmarital partner		8.1	9.7
Lost a partner		13.7	19.1
Heard rumors about partner		3.9	3.0
Got a good/better job		0.9	4.2

	Women	Men
Individual factors	Mean (SD) or %	Mean (SD) or %
Spouse got a good/better job	4.6	0.7
Spouse lost job/got worse job	1.3	0.2
Health improved	60.7	64.9
Health declined	3.9	4.4
Child died	0.5	0.4
N	9,434	8,313

Table 3

Logistic Regression Examining Childbearing Ambivalence at Baseline (N= 1,501 women; 1,518 men)

			Women			Men	
Variable		Odds Ratio	<i>p</i> value	SE	Odds Ratio	<i>p</i> value	SE
Individual Approach							
Muslim		1.57	.073	0.39	1.03	.890	0.22
Born again Christian		1.77	.003	0.35	0.94	.661	0.13
Impulsivity		1.12	.256	0.11	1.08	.404	0.09
SES		0.99	.876	0.04	0.99	.878	0.03
Years of education		0.96	.303	0.03	1.00	.904	0.02
Life Course Approach							
Marital status							
Currently married		ref			ref		
Formerly married		0.71	.244	0.21	1.53	.404	0.78
Never married		1.09	.732	0.29	1.49	770.	0.34
Enrolled in school		0.19	000.	0.06	0.37	000.	0.08
Number of children							
	0	ref			ref		
	1	0.66	.082	0.16	1.40	.108	0.29
	7	0.52	.028	0.16	1.31	.287	0.33
	\tilde{s}^+	0.22	.001	0.10	1.05	.865	0.31
Age		1.14	.001	0.04	1.06	.002	0.02
Pseudo Chi2		0.098			0.058		

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ref = reference category.

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Table 4

Fixed Effects Logistic Regression Examining Childbearing Ambivalence Over Eight Survey Waves (N = 601 women; 649 men)

	•					
Variable	Odds Ratio	<i>p</i> value	SE	Odds Ratio	<i>p</i> value	SE
Life Course Approach						
Got married	2.22	000.	0.44	1.38	.168	0.33
Had a new birth	0.07	000.	0.02	0.11	000.	0.03
Left school	2.39	.001	0.60	0.69	.154	0.18
Dynamic-Situational Approach						
New nonmarital partner	1.63	.003	0.26	1.28	.087	0.19
Lost a partner	1.27	.040	0.15	0.98	.858	0.10
Heard rumors about partner	0.83	.382	0.18	0.81	.392	0.20
Got a good/better job	0.56	.132	0.21	1.18	.371	0.22
Lost job/got worse job	1.34	609.	0.76	1.13	.622	0.28
Spouse got a good/better job	1.57	.008	0.27	1.40	.410	0.57
Spouse lost job/got worse job	0.85	.601	0.26	1.80	.322	1.07
Health improved	0.92	.364	0.08	0.85	070.	0.07
Health declined	0.97	.870	0.20	0.78	.198	0.15
Child died	4.13	.003	1.97	1.14	.805	0.60
Person-waves	3,944			3,848		
Log likelihood	-1374.27			-1440.91		