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## Ideals as Anchors for Relationship Experiences

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### Abstract

Research on young-adult sexuality in sub-Saharan Africa typically conceptualizes sex as an individual-level risk behavior. We introduce a new approach that connects the conditions surrounding the initiation of sex with subsequent relationship well-being, examines relationships as sequences of interdependent events, and indexes relationship experiences to individually held ideals. New card-sort data from southern Malawi capture young women's relationship experiences and their ideals in a sequential framework. Using optimal matching, we measure the distance between ideal and experienced relationship sequences to (1) assess the associations between ideological congruence and perceived relationship well-being, (2) compare this ideal-based approach to other experience-based alternatives, and (3) identify individual- and couple-level correlates of congruence between ideals and experiences in the romantic realm. We show that congruence between ideals and experiences conveys relationship well-being along four dimensions: expressions of love and support, robust communication habits, perceived biological safety, and perceived relationship stability. We further show that congruence is patterned by socioeconomic status and supported by shared ideals within romantic dyads. We argue that conceiving of ideals as anchors for how sexual experiences are manifest advances current understandings of romantic relationships, and we suggest that this approach has applications for other domains of life.

### Keywords

ideals; sex; relationships; culture; Malawi

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For the past 30 years, social science research on sub-Saharan Africa has been colored by a scholarly preoccupation with HIV, known as “AIDS exceptionalism,” which has resulted in a relative neglect of other dimensions of social life (Dionne, Gerland, and Watkins 2013). In the domain of sexuality, this preoccupation has led scholars to conceptualize sex as an inherently risky event—primarily a vector for disease transmission—and to focus on identifying factors that are protective against sex or associated with its delayed onset (e.g., Cleland and Ali 2006; Dodoo, Zulu, and Ezeh 2007; Goldberg 2013; Kabiru and Ezeh 2007; Zaba et al. 2004). But sex is socially salient beyond its epidemiological implications. Even

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in settings characterized by high HIV prevalence, sex is not reducible to risk, but instead remains an indispensable part of the transition to adulthood that conveys intimacy and solidifies relationships. In this article, we move away from this emphasis on disease risk and link early sexual experiences to relationship well-being. We find that sex has negative consequences for relationship well-being when the conditions under which it occurs clash with women's individually held moral frameworks. Ideals, we argue, serve as *anchors* for how young women experience and interpret sex.

We identify and address three limitations that arise from the existing literature's preoccupation with the links between sex and disease transmission. First, by focusing on *individual-level consequences* of sexual activity for young adults (e.g., Biddlecom et al. 2008; Clark and Mathur 2012; Hallett et al. 2007; Madkour et al. 2010; Spriggs and Halpern 2008), this research largely disregards relational dynamics. Sex occurs between two people, and sexual partnerships are often vital sources of security, support, and companionship for young adults; conversely, sexual relationships can also be sources of anxiety and distress. Our study examines how the circumstances underpinning the initiation of sex within heterosexual partnerships shape how women subsequently assess the well-being of these relationships.

Second, most research on young-adult sexual behavior neglects the diversity of ideals and moral standards that individuals bring to their sexual experiences. Young people across the globe are exposed to a cacophony of conflicting messages about sex, which they filter, interpret, and meld to form their own ideas about the kinds of sexual experiences they want to have and those they want to avoid (Carpenter 2005; Harding 2010; Harrison 2008; Hunter 2010; Schalet 2011). Yet researchers assess young-adult sexual activity using uniform criteria and fail to take these subjectively held and constructed ideals into account. We index young women's sexual experiences on the relationship ideals they themselves hold. In so doing, we assert that it is not sexual acts themselves, but rather the failure to manifest one's ideals, that has negative consequences for relationships.

Third, extant research on young-adult sexuality in sub-Saharan Africa divorces sexual intercourse from the other events that surround it. While much is known about the patterned nature of a few landmark events (e.g., first sex, marriage, and first birth), little is known about how sexual relationships actually progress. We conceptualize experiences and ideals about sexual relationships as sequences of interdependent events (Abbott and Tsay 2000; Aisenbrey and Fasang 2010). This conforms to a narrative approach to studying social phenomena, where the significance of an event (here, sexual intercourse) is influenced both by its location in the overall trajectory and by the array of events surrounding it (Abbott 1992; Abell 2004). As such, in addition to landmark events, we also examine more subtle relationship steps that surround and give meaning to first sexual experiences, such as introducing each other to parents and friends, exchanging gifts, and spending time together in public.

We situate our study in southern Malawi, where sexual debut often occurs early and outside of marriage (Mensch, Grant, and Blanc 2006), sexual norms are changing rapidly (Cole and Thomas 2009; Smith 2000), and a generalized and mature AIDS epidemic imbues sex with a

heightened element of risk—even within established relationships (Trinitapoli and Yeatman 2011; Watkins 2004). We collected new survey data in which respondents sorted and ordered illustrated cards depicting common relationship events. Respondents used these cards to describe (1) experiences with their current partner and (2) views of how a relationship should unfold under ideal conditions. To identify variability in how sex is initiated within relationships, we focus on the *prelude to sex*—the sequence of events occurring before two people have sexual intercourse with each other for the first time. We use optimal matching to identify patterns in and consequences of discrepancies between relationship ideals and experiences during the prelude to sex.

Our argument unfolds as follows. We first posit that ideals about how the prelude to sex *should* unfold serve as *anchors* for how young women assess their ongoing relationships. Specifically, we examine how discrepancies between ideals and experiences contribute to perceived relationship well-being along four distinct dimensions: emotional support, communication habits, biological safety, and relationship stability. Our primary research question asks: *Does congruence between individually held relationship ideals and actual relationship experiences support perceived relationship well-being?*

We then compare this individualized, ideal-based measure of congruence to an array of alternatives that apply a uniform set of standards. We anticipate that this measure of congruence will be a more robust predictor of perceived relationship well-being than alternatives that do not account for heterogeneity of ideals—including three implicitly sequential measures frequently employed in the literature and two explicitly sequential measures of sexual norms and experiences developed inductively from our data. Our second research question asks: *Is congruence between ideals and experiences more strongly associated with perceived relationship well-being than these alternatives?*

Finally, after establishing the advantages of our ideal-based approach, we shift to identify the individual- and relationship-level characteristics associated with discrepancy (versus congruence) between ideals and experiences. Reflecting our desire to understand how ideals anchor women's sexual experiences, we assess the extent to which ideological concordance within couples supports individual-level congruence between ideals and experiences: *Which individual-level attributes are most salient in predicting congruence between ideals and lived experiences during the prelude to sex? Given that sex is a dyadic phenomenon, which couple-level attributes foster congruence?*

## BACKGROUND

Our approach addresses three distinct limitations of the current sociological literature on young-adult sexuality: (1) whereas most research focuses on the individual-level consequences of sex, we examine how sexual experiences influence perceived relationship well-being; (2) whereas existing scholarship fails to consider the diversity of ideals and standards that inform sexuality, we index sexual experiences on individually held ideals; and (3) whereas researchers typically examine first sex in isolation, we adopt a sequential approach, examining sex in light of other events that surround it.

## The Pursuit of Good Relationships

Across the globe, young adults pursue romantic relationships that carry possibilities of positive outcomes (e.g., intimacy, social esteem, and financial stability) as well as risks of negative outcomes (e.g., sexually transmitted infection, unwanted pregnancy, and emotional anguish). Since the onset of the AIDS epidemic, young people in sub-Saharan Africa are coming of age in a context of heightened risk that encompasses both the biological risk of HIV infection and the social risks accompanying high levels of relationship instability (Angotti et al. 2014; Esacove 2012). Despite these risks, the centrality of romantic relationships to the pursuit of a good life remains pronounced (Cole and Thomas 2009). Relationships (marriages in particular) are considered essential for companionship, emotional well-being, economic security, and social respectability (Clark, Poulin, and Kohler 2009; Frye 2012; Hunter 2010; Poulin 2007; Samuelsen 2006). Romantic love constitutes an “imperative motivating force” in the lives of young adults (Sølbeck 2010:415). Yet amid the vast literature on the individual-level consequences of sexual activity, sociologists devote little attention to understanding how early sexual experiences influence the perceived quality of the *relationships* within which these sexual encounters occur. Here, we focus on four dimensions of what is considered a “good” relationship in the sub-Saharan context: (1) expressions of love and support, (2) robust communication habits, (3) perceived biological safety, and (4) perceived relationship stability.

Research on subjective experiences of sexual relationships in sub-Saharan Africa is limited to small-sample qualitative studies, and survey researchers have not yet adequately engaged such questions. Yet qualitative findings from contexts as varied as Burkina Faso (Samuelsen 2006), Mali (Sølbeck 2010), Uganda (Bell 2012), Kenya (Spronk 2009), and South Africa (Lesch and Furphy 2013; Pettifor et al. 2012) are consistent; they identify expressions of support and open communication between partners as key components of relationship satisfaction and well-being. When asked what they look for in a partner, African women describe expressions of love and emotional support—loosely translated as “care” in multiple languages (Lesch and Furphy 2013; Pettifor et al. 2012; Sølbeck 2010). Material support is central to showing love and support, but this notion of care is not reducible to the economic sphere (Sølbeck 2010; Verheijen 2013). Women also value partners who communicate openly and who “listen when [they] are talking” (Pettifor et al. 2012:481). Being able to “talk freely” (Lesch and Furphy 2013:632) and “confide in someone” (Bell 2012:288) are among the most salient benefits women report receiving from relationships. Building on these insights, we focus on women’s assessments of their current relationships along two dimensions—expressions of care and open communication—as indicators of relationship *quality*.

We also examine two dimensions of relationship *security* that correspond to the biological and social domains: perceived likelihood of future HIV infection and marital dissolution. For young adults in Malawi, HIV infection and divorce are formidable concerns, but these are less contemporaneous than impending. Relatively few Malawians under age 25 have HIV right now,<sup>1</sup> but the rate of new infections for women peaks between ages 25 and 29 and for

<sup>1</sup>In 2010, HIV prevalence among Malawians age 15 to 25 was 5.2 percent for women and 1.9 percent for men (NSO-Macro 2011).

men between 30 and 34 (Watkins 2011), making this coming stage of the lifecourse particularly precarious. Similarly, although less than 3 percent of married women under age 25 have experienced divorce (NSO-Macro 2011), the risk of relationship dissolution looms for young women: over a quarter of first marriages end in divorce within five years (Reniers 2003).

Such imminent risks structure the broader epidemiological and relational milieu, yet the extent to which young people *perceive* these negative events as likely or remote has relevance beyond the risk landscape itself. Perceived vulnerability to HIV and relationship stability proxies the psychosocial experience of relationships along a spectrum from anxiety to security, independent of the accuracy of these assessments (Anglewicz and Kohler 2009; Trinitapoli and Yeatman 2011). Burgeoning literatures in cognitive psychology and behavioral economics further demonstrate that subjective expectations underpin and motivate observable actions and choices (Attanasio 2009; Delavande, Giné, and McKenzie 2011; Manski 2004).

In sub-Saharan Africa, subjective perceptions of HIV risk are intimately tied to relationships—specifically to trust between partners and concerns about extramarital partnerships (Conroy 2014; Lupton, McCarthy, and Chapman 1995; Schatz 2005). Among a host of individual- and contextual-level factors, suspected spousal infidelity is the strongest predictor of worry about HIV in Malawi (Smith 2003). Other research suggests that men and women use different heuristics to assess their likelihood of infection: men primarily consider their own sexual behavior, whereas women primarily consider the (known and suspected) behavior of their current partners (Anglewicz and Kohler 2009).

Although we know of no study examining perceived risk of marital dissolution in any African setting, research from Malawi demonstrates that divorce has negative consequences for women and families: in the wake of divorce, women experience short- and long-term economic hardship (Verheijen 2013) and their children complete fewer years of schooling (Chae 2013). In the United States and other industrialized contexts, perceived risk of divorce is a common proxy for relationship quality (e.g., Amato and Booth 1995; Day and Acock 2013; Kalmijn 1999; Webster, Orbuch, and House 1995) and is associated with a host of adverse outcomes, including social isolation (Lehmiller and Agnew 2007), marital dissatisfaction (Day and Acock 2013; Kalmijn 1999), and negative interactions between partners (Webster et al. 1995).

Together, these four outcomes—the indicators of relationship quality and security—encapsulate the degree to which women experience their relationships as sources of social and emotional support or, conversely, as sources of worry and concern. Our study relates relationship beginnings to these subjective assessments of relationship well-being later on. In so doing, we extend beyond the analysis of sex as a discrete event and instead focus on its relevance to women's evaluations of long-term partnerships in a context where relationships are at once treacherous and indispensable.

## Ideals as Anchors for Relationship Experiences

In both industrialized and developing contexts, young adults' aspirations, perceptions, and decisions about romantic relationships are conditioned by shared cultural models, which vary by social class (Cole and Thomas 2009; Hamilton and Armstrong 2009; Hunter 2010), political climate (Esacove 2012; Schalet 2011; Swidler 2001), religious affiliation (Regnerus 2007; Trinitapoli and Weinreb 2012), and the micro-level normative environment of schools, peer groups, and neighborhoods (Harding 2007; Meier 2007; Poulin 2007). In the United States, short- and long-term emotional consequences of sex are conditional on people's cultural beliefs and moral or religious standards. Some adolescents consider virginity a sacred gift to preserve, others see it as a source of stigma to conceal, and still others view virginity loss as a natural rite of passage; adolescents who hold the latter view experience heightened physical, emotional, and sexual well-being and feel less shame and emotional distress about their sexual experiences years later (Carpenter 2005). Similarly, although Evangelical Christians are no less likely than others to engage in premarital sex, because they idealize sex as sacred within marriage, they are more likely to regret their early sexual experiences (Regnerus 2007).

As in the West, sexual norms are contested in sub-Saharan Africa; young adults grapple with competing cultural models about what is safe versus dangerous, what is pious versus profane, and what is reputable versus wanton (Hunter 2010; Karlyn 2005). Traditional norms valorizing women's respectability and male authority and religious teachings on appropriate sexual behavior persist, but individuals differ in adhering to these norms (Cole 2004; Smith 2000). For example, despite an overarching ideology that characterizes premarital sex as inappropriate or wrong, many Zulu adolescents draw on ideals of romantic love and describe sex within "serious" non-marital relationships as safe and desirable (Harrison 2008). And a subset of Mozambican adolescents condones one-night stands if they conform to standards of anonymity, discretion, and condom use (Karlyn 2005).

To summarize, understandings of "appropriate" sexual behavior are not uniformly shared among populations but are variably distributed throughout them. Young people reflexively and reflectively sort through an array of cultural models to arrive at unique moral standards about sex and relationships. Within specific cultural, epidemiological, and relational milieus, young adults form their own ideals and forge partnerships with individuals who possess *their* own set of relationship ideals. These variable ideals, in turn, influence people's long-term emotional responses to and reflections about earlier sexual experiences.

Extending these points to conceive of *ideals as anchors* for how individuals experience and understand their relationships, we posit (1) that young people desire durable, safe, and emotionally fulfilling relationships; (2) that early interactions between partners inform the future of these relationships; and (3) that congruence between ideals and experiences, rather than conformity to particular normative behaviors or religious proscriptions, supports perceived relationship well-being into the future.



## Sequential Perspectives on Sex

Research on adolescent sexual behavior tends to implicitly consider the sequential nature of sexual experiences by focusing on the timing of first sex—whether it occurs before or after a specific age (early sex), before or after marriage (premarital sex), and before or after a committed relationship has been solidified (casual sex). For all three, the consequences of sex are estimated in light of the events that do or do not precede it. Yet these categorizations are crude summaries of the heterogeneous bundle of experiences that precede sex; we argue that an *explicitly sequential* approach to studying sexuality is paramount to advancing better understandings of how individuals interpret and assess their sexual experiences.

Across contexts, having sexual intercourse at an early age is negatively associated with physical health (Hallett et al. 2007), emotional well-being (Meier 2007), and social development (Madkour et al. 2010). Here, a sequential perspective is clear if implicit: early sex is detrimental because it *precedes* critical developmental events: puberty and menarche (Shew et al. 1994), the capacity for abstract thinking (Cook and Dickens 2000), and acquisition of the requisite knowledge and resources for avoiding pregnancy and sexually transmitted infections (Bankole et al. 2007).

A similar example of implicitly sequential thinking can be found in the conventional assumption that marriage offers a safer context for sexual experiences (Clark 2004). Few scholars identify premarital sex as their dependent variable, but the reigning methodological strategies include removing ever-married individuals from a sample to assess the consequences of sexual activity among never-married persons (e.g., Clark and Mathur 2012; Cleland and Ali 2006; Kabiru and Ezeh 2007; Trinitapoli 2009) and using a hazard framework, censoring at first marriage (e.g., Baumer and South 2001; McGrath et al. 2009; Zaba et al. 2004).

Recent sociological interest in the difference between committed relationships and casual partnerships further illustrates an implicit concern with the sequential position of sex. Not all casual partnerships progress to committed relationships, but sex between casual partners is sequentially distinctive in that it occurs *before* nebulous standards of commitment, trust, and familiarity have been solidified. In the United States, sex between casual partners often has negative social and emotional consequences for young adults—particularly women (Hamilton and Armstrong 2009; McCarthy and Grodsky 2011). Across Africa’s “AIDS belt,” casual sex is typically studied in relation to its physical health consequences (Green et al. 2006); casual partnerships elevate a person’s number of lifetime partners—an established correlate of unintended pregnancy and a variety of STIs—and alter one’s position within a sexual network (Helleringer and Kohler 2007; Wilson 2004).

While these three categories (early, premarital, and casual sex) tacitly acknowledge that the events surrounding sex shape its emotional and relational significance, they insufficiently engage its sequential nature. Explicitly sequential approaches to the study of sexual behavior are rare in the literature but have been empirically and theoretically generative. Two examples from African contexts illustrate the feasibility and utility of using explicitly sequential approaches to augment understandings of young-adult romantic relationships. First, by examining marital transitions in conjunction with early relationship experiences in

Malawi, Boileau and colleagues (2009:132) demonstrate that HIV risk is embedded in marriage in “trajectory dependent” ways: combinations of sexual debut and marriage transitions are associated with unique levels of HIV prevalence that are not reducible to those discrete events alone. Second, Luke, Clark, and Zulu (2011a) used relationship history calendars in Kenya to track month-to-month changes in sexual and romantic relationships and estimate the timing of sexual intercourse *within* relationships, establishing, for example, that receiving gifts from male partners during the first month of a relationship accelerates first intercourse (Luke et al. 2011b).

These innovative studies hold promise for studying sexual and romantic encounters (however short or long, tenuous or stable) as the dynamic processes they are, further motivating our endeavor to analyze the prelude to sex in explicitly sequential terms. To advance this approach, we conceive of relationships—and ideals about them—as comprising a diverse array of events, ranging from routine interactions to major life transitions, which allows us to analyze events in terms of their relationship to sex and their relative position to one another.

## DATA AND METHODS

### Setting and Sample

Data for our analyses come from Tsogolo la Thanzi (TLT, meaning “Healthy Futures” in Chichewa)—a longitudinal survey designed to study how young people navigate the transition to adulthood in an AIDS epidemic.<sup>2</sup> TLT is set in Balaka, a trading center located in Malawi’s southern region. Southern Malawi has lower levels of educational attainment and higher levels of poverty than the northern and central regions (World Health Organization 2012). It also features a more severe AIDS epidemic; in 2010, 15 percent of the population age 15 to 49 in the southern region were infected with HIV, compared with 8 percent in the central and 7 percent in the northern regions (NSO-Macro 2011).

Scholarship on the historical context of southern Malawi and its current social, political, and epidemiological conditions is widely available (e.g., Dionne 2011; Mitchell 1956; Watkins 2004). However, three salient features of Balaka’s epidemiological and relational milieu are worth mentioning here. First, the transition to adulthood tends to unfold quickly: on average, women become sexually active at age 17, marry at 18, and have a child by 19 (Boileau et al. 2009; Clark et al. 2009; Poulin 2007). Second, divorce is common in Balaka; 40 percent of first marriages end within 9 years and 65 percent end within 25 years (Reniers 2003). Third, although the HIV infection rate has declined and access to HIV testing and treatment has rapidly expanded since 2006 (Angotti et al. 2009; NSO-Macro 2011), the epidemic’s consequences cannot be summarized by prevalence, transmission, and mortality statistics alone. The epidemic engenders widespread situational uncertainty: a sizable proportion of the population is unsure of their current HIV status, and worry about future infection is

<sup>2</sup>Tsogolo la Thanzi is a research project designed by Jenny Trinitapoli and Sara Yeatman and funded by grant (R01-HD058366) from the National Institute of Child Health and Human Development. See <http://sites.psu.edu/tltc/> for more information about the project and to request data access.



omnipresent for the vast majority of young adults (Kaler and Watkins 2010; Trinitapoli and Yeatman 2011).

It would be unwise to generalize about a large and heterogeneous region like sub-Saharan Africa from any single country, region, or town. Yet several pieces of information are helpful for situating Balaka within a pan-African context. Rather than featuring a concentrated population of a single tribe, Balaka is ethnically and religiously diverse. In terms of economic development, most residents survive as subsistence farmers; there is one paved road, and only 12 percent of households have electricity. In terms of its AIDS epidemic, Balaka can be described as severe but improving: estimated at 17 percent in 2004, HIV prevalence in Malawi's southern region was in the 90th percentile of 188 regions in 28 sub-Saharan African countries.<sup>3</sup> Recent causes for optimism include declines in new infections, expanded access to anti-retroviral treatment, and falling AIDS-related mortality (NSO-Macro 2011).

In 2009, TLT randomly selected 1,500 female respondents from a sampling frame of 15- to 25-year-olds living within seven kilometers of Balaka and began interviewing these women at four-month intervals over a period of three years. Interviews took place at a centrally located research center, in private rooms where responses could not be overheard by family or neighbors. The relationship scripts instrument, the centerpiece of our analyses, was administered as part of the fifth wave of TLT, fielded between October 1, 2010 and January 31st, 2011. On basic sociodemographic and sexual behavior measures, the TLT sample conforms closely to 2010 Demographic and Health Survey estimates for women age 15 to 24 living in urbanizing areas of Malawi's southern region, with the exception that secondary school attendance is higher in the TLT sample.

The romantic and sexual partners of the core female sample were enrolled in the study on an ongoing basis, generating a longitudinal, couple-based dataset. During every survey wave, interviewers asked respondents a series of questions about their romantic partners.<sup>4</sup> For each sexual or romantic partner a woman reported, she was given a token and asked to give it to her partner and invite him to take part in the TLT study. Male partners who reported to the research center were enrolled in the study and followed for the remainder of the observation period.<sup>5</sup> The enrollment of male partners at Wave 1 (late 2009) led to a matched-couples sample of  $N = 434$ ; with ongoing enrollment of new partners and attrition, TLT had collected data from 494 couples by Wave 5.

### The Relationship Scripts Instrument

To learn about how relationships are idealized and experienced by young Malawians, we adapted the relationship scripts instrument, pioneered by Bearman, Jones, and Udry (1997). The instrument is a card-sort technique in which each card depicts a typical relationship event (Harding 2007; O'Sullivan et al. 2007). Through an iterative process including

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<sup>3</sup>Based on estimates generated from Demographic and Health Surveys collected at the peak of the epidemic.

<sup>4</sup>All relationships reported here were heterosexual. Homosexuality is illegal and highly stigmatized in Malawi, and the data collection coincided with a widely publicized criminal trial of a same-sex couple (Biruk 2014).

<sup>5</sup>To preserve the anonymity of male partners attending the research center, a random sample of 600 men was also followed for the full survey period.

qualitative interviews and focus group discussions with 17 young adults living in Balaka, ongoing discussions with local research assistants, and a pilot study of 89 respondents in a neighboring district, we developed a set of relationship steps that are familiar and significant to young adults in this context (Frye, Trinitapoli, and Namadingo 2011). A local artist illustrated the relationship steps with cartoon drawings, facilitating the exercise for illiterate and semiliterate respondents (see Figure 1).

The relationship scripts instrument proceeds as follows. First, the interviewer hands the cards to the respondent and asks her to sort them into two piles with regard to her current or most recent relationship: the steps she has experienced and those she has not. Second, the interviewer asks the respondent to order the “experienced” cards to tell the story of her relationship with this specific partner; we refer to this ordered script as her *experienced sequence*. After answering additional questions about this relationship, the respondent is asked to imagine that she is giving advice to a same-sex friend or relative who is around her age and is not yet in a relationship. With this person in mind, she returns to the full set of cards and orders them (as she did with her own relationship) to reflect what she would wish for this person to experience in a new relationship “if everything worked out exactly as she would want it to.” We refer to this script as her *ideal sequence*.

The sequences examined here include 16 cards. To simplify the complexity of the sequences for optimal matching analyses, we combined substantively similar cards into categories,<sup>6</sup> leaving us with 11 different types of events (see Figure 1). Descriptive statistics for the relationship sequences, along with all variables used in the analyses, are provided in Table 1.

### Individual-Level Variables

**Four dimensions of relationship well-being**—We focus on four dimensions of perceived relationship well-being: whether women report receiving expressions of love and support from their partners, whether they report open communication with their partners, and their perceived risk of experiencing two distinct negative relationship-related outcomes—HIV infection and relationship dissolution. Correlations between these measures are provided in Table S1 in the online supplement (<http://asr.sagepub.com/supplemental>).

To measure the extent to which women report receiving expressions of love and support from their partners, we use the statement “My partner shows that he/she cares about me.” To examine communication between partners, we use the statement “My partner and I sit down and discuss important matters together.” For both statements, responses range from “strongly agree” to “strongly disagree.” Because of the skewed distribution of responses (only 3 percent of respondents chose “disagree” or “strongly disagree” for the first statement; 5 percent for the second), we use binary measures to distinguish respondents who “strongly agree” with these statements (83 and 79 percent, respectively) from those who communicate some degree of doubt (“agree,” “disagree,” or “strongly disagree”). Ancillary analyses using ordered logit models to analyze all responses as unique categories produced substantively identical results.

<sup>6</sup>We combined three cards depicting different types of weddings, two cards showing introductions to parents, two cards showing the couple exchanging gifts, and two cards involving spending time together in public.

To measure women's perceived risk of negative relationship outcomes, we leverage data collected using an interactive method, in which respondents are given a pile of 10 beans and asked to shift from one plate to another the number of beans representing the likelihood that a given event will occur within a specified timeframe. Ten beans indicate absolute certainty the event will occur, zero beans absolute certainty it will not, and five beans a 50–50 chance. Although Malawians tend to overestimate the likelihood of negative events, this technique has generated assessments of child mortality, HIV prevalence, and food shortages that vary meaningfully with observable characteristics and reported experiences (Anglewicz and Kohler 2009; Delavande et al. 2011; Delavande and Kohler 2009; Kohler, Behrman, and Watkins 2007). In other words, despite limited literacy and numeracy skills, rural Malawians are cognizant of the differential distribution of risk and can express subjective likelihoods in terms of probabilities.<sup>7</sup>

We measure the perceived likelihood of imminent HIV infection using the prompt: “Pick the number of beans that reflects how likely it is that you will become infected with HIV during the next 12 months.” We measure perceived likelihood of marital dissolution by asking: “Pick the number of beans that reflects how likely it is that you will still be married/with your main partner one year from now.” To ease comparison with the models predicting perceived HIV risk, this item is reverse coded so that zero indicates no probability of relationship dissolution and 10 indicates certainty of it.

**Discrepancies between Ideals and Experiences**—To measure the degree of discrepancy/congruence between relationship ideals and experiences, we use optimal matching to generate a measure that summarizes the distance between ideal and experienced sequences for each respondent. Optimal matching algorithms estimate the distance between pairs of sequences in terms of the changes necessary to convert one sequence into the other (Abbott and Hrycak 1990; Abbott and Tsay 2000; Aisenbrey and Fasang 2010; Lesnard 2010). There are two fundamental types of changes: indel (i.e., inserting and deleting cards) and substitution (i.e., exchanging one card for another). Each change is assigned a cost; the algorithm tries all possible combinations of these two types of changes and selects the combination with the minimum total cost (see Part B of the online supplement for more information about the specifications of our optimal matching algorithm). This total cost is the distance between ideals and experiences. Along this spectrum, respondents with high distance scores are “discrepant,” and those with low distance scores are “congruent.” We normalize the distance scores to account for differences in sequence length.

To make this measure more tangible, Table 2 provides a comparison of two TLT respondents. Janet<sup>8</sup> (age 21) and Mary (age 22) have similar sociodemographic profiles: both are married, have one child, completed primary school, and attend religious services weekly. Mary and Janet also experienced similar trajectories leading to first sex with their respective partners. Both started by “deciding to get married,”<sup>9</sup> followed by a series of

<sup>7</sup>Before asking about the probability of sensitive or personal outcomes, interviewers led respondents through a set of exercises to familiarize them with the method, beginning with more trivial topics, such as respondents' likelihood of going to the market. Respondents use the beans measure during every survey round, so by Wave 5 (used here) most are familiar and comfortable with this technique.

<sup>8</sup>All names are pseudonyms.

introductions between the partner and their broader social network. But Mary and Janet diverge in how they think the prelude to sex *should* unfold under ideal conditions. Mary's ideal sequence is highly *congruent* with her experienced sequence: the events preceding sex relate primarily to the social embeddedness of the partnership. In contrast, Janet's reported relationship experience is decidedly *discrepant* from her ideal sequence: her experience unfolded in light of a set of ideals emphasizing marriage, cohabitation, and HIV testing. Accordingly, Mary's distance score falls within the bottom 5 percent of the sample, whereas Janet's distance score places her in the 85th percentile.

**Alternative Measures for Comparison**—To test the subjective component of our theoretical model—that women's ideals anchor their experiences—we compare our measure of the distance between ideals and experiences to a set of alternatives, each of which assesses sexual experiences according to a uniform (i.e., not individualized) criterion. Three of these measures are standard in the literature on young-adult sexual experiences and correspond to the implicitly sequential classifications described earlier—early versus on-time sexual debut, premarital versus marital sex, and casual versus committed partnerships. These measures are respondent's age at first sex, whether she had sex before getting married, and her total number of lifetime partners.

We also leverage a second distance measure, which captures the distance between each respondent's own experience and the normative ideal sequence. This distance-from-norm measure incorporates the sequential component of our theoretical model but retains the conventional approach of assessing sexual experiences using a common standard. To establish a measurable norm for this community, we (1) identified the events placed before sex in ideal sequences by a majority of women in the sample, (2) calculated the mean sequential order for each event in this subset, and (3) arranged the events according to where they most typically occurred in women's ideal sequences. We use optimal matching to generate a measure of the *distance between norm and experiences*, comparing each woman's experienced sequence to this normative ideal.

Because distinct sets of relationship experiences during the prelude to sex may relate both to respondents' distance scores and to their assessments of relationship well-being, we directly test the salience of congruent ideals net of experiential differences. After using optimal matching to generate a distance matrix comparing each woman's experienced sequence to those of all other women in the sample, we used Ward's clustering algorithm to group women into five empirically distinct clusters.<sup>10</sup> We leverage these experiential distinctions in our multivariate analyses by converting these clusters of substantively similar sequences into a set of categorical variables.

<sup>9</sup>This card was placed as the first step in about 45 percent of experienced and ideal sequences. During the pilot study, we learned that because Malawi lacks a cultural norm of "getting engaged," and because many young adults embark on relationships with the clear goal of finding a spouse, "deciding to get married" is often synonymous with "deciding to become a couple."

<sup>10</sup>We selected Ward's hierarchical clustering algorithm over two plausible alternatives (weighted average and partitioning around the medoid) because it tends to produce equal-sized groups (Everitt et al. 2011). To determine the optimal number of clusters, we used the ratio of mean within-cluster distances to mean between-cluster distances, which is particularly well-suited to comparing clusters of sequences produced through optimal matching analyses (Aisenbrey and Fasang 2010).

**Individual-Level Controls**—All models include controls for known correlates of sexual behavior: age (measured in years), educational attainment (completed years of schooling), household wealth (a score constructed using principal components analysis of 20 household goods, personal possessions, and housing attributes),<sup>11</sup> religious involvement (a binary indicator of at-least-weekly attendance at religious services), and rurality (the distance to Balaka's main market, standardized to aid interpretation). We also include two relationship-specific measures in all models: a binary variable identifying currently married respondents and relationship duration (measured in years).

### Couple-Level Variables

**Discordance in ideals**—We expect discrepancies between ideals and experiences to be influenced not only by individual-level characteristics but also by relationship attributes. To this end, we address our third research question by leveraging the couple-level dataset that links female respondents to their current male partners to identify the relationship characteristics associated with women's ideal/experience distance score. We use optimal matching to construct a third distance score, which estimates the distance between the ideal script of each woman and that of her current male partner. High scores indicate discordance and low scores relative concordance between the two sets of ideals.

Table 3 provides an illustration of two specific couples from the TLT data. Ruth and Evelyn indicate similar ideals for the prelude to sex; both ideal sequences begin with exchanging gifts, introducing each other to friends, and deciding to get married and proceed to introductions to parents and relatives, followed by a series of wedding ceremonies and moving in together. Their partners, on the other hand, report markedly different ideal sequences. Thandizo's ideal sequence is quite similar to Ruth's, making the couple *concordant*; their couple-level ideal/ideal distance score falls in the lower 10 percent of the distribution. In contrast, Evelyn's partner Simon reports a different set of ideals; his sequence includes a unique set of elements and different ordering when compared to the other three. Simon's ideal relationship involves getting tested for HIV early in the relationship, and although he sees sex as ideally predicated on a joint decision to get married, it should precede family introductions and formal marriage. Accordingly, Simon and Evelyn have *discordant* ideals, with their ideal/ideal distance score falling around the 90th percentile.

**Other Couple-Level Variables.** We include four additional variables to capture relationship-level dynamics in our couple-level models: a binary variable indicating whether a significant age gap exists between the woman and her partner (10 years or greater); a categorical variable capturing differences in educational attainment (i.e., the male partner has completed more school, the female partner has completed more, or similar attainment [within two years of each other]); a categorical variable measuring the relative wealth of their families based on the female respondent's subjective assessment of whether her partner's family is

<sup>11</sup>Household goods used in the index include a mattress, television, radio, phone, refrigerator, bicycle, motorcycle, animal-drawn cart, automobile, and Bible. Personal possessions include a mobile phone, watch, pair of jeans, luggage, and extra pair of shoes. Housing characteristics include whether the household has electricity and its type of water supply, toilet, flooring material, and roof.

wealthier, her family is wealthier, or they are about the same; and a binary variable indicating that the two practice different religions.<sup>12</sup>

### Modeling Strategy

To investigate (1) the extent to which discrepancies between ideal and experienced relationship sequences are associated with perceived relationship well-being and (2) how this measure compares to the set of alternative measures described earlier, we estimate a series of regression models predicting relationship *quality* (care and communication) and *security* (perceived risk of future HIV infection and relationship dissolution). We use logistic regression to accommodate the binary relationship quality outcomes, and negative binomial regression to account for overdispersion within our probabilistic measures of the risk of negative relationship events.<sup>13</sup> After establishing that discrepancies are negatively associated with women's subjective perceptions of relationship well-being across all four measures, we turn to the task of identifying the individual- and couple-level correlates of discrepancies between ideals and experiences. Because the ideal/experience distance score is normally distributed, we use OLS regression for this portion of our analysis.

### Sample and Data Restrictions

Effectively using optimal matching approaches to estimate the distance between pairs of sequences requires that the same relationship interval be captured in both sequences. When a sequence in a pair is right censored, that observation window is shorter, making it difficult to distinguish substantive distance from distance that is merely an artifact of timing of data collection (Aisenbrey and Fasang 2010; Wu 2000). To avoid the biases that right censoring produces, we impose the restriction that all relationship sequences share a common endpoint: initiation of sexual intercourse within that relationship. This ensures that ideals and experiences are not classified as discrepant simply because a woman's stated ideals continue beyond the point of the relationship she is in at the time of her interview. This restriction also allows us to maintain an empirical focus on the *prelude to sex*—the events that occur between two partners before they have sex with each other for the first time.

To achieve this common endpoint, we apply restrictions on both the analytic sample and the relationship scripts data itself. For the sample, we restrict our analyses to the 834 women who report ever having sex with their current partner, and we exclude 17 respondents who were missing data on the dependent variables, leaving us with a total of 817 women. Table S2 in the online supplement provides descriptive statistics of the full sample and our analytic sample and demonstrates how the sexually active subsample we analyze differs from the full sample of female respondents at Wave 5. For the scripts data, we truncate all sequences after the card denoting sexual intercourse.

<sup>12</sup>Couple-level analyses are rare in the literature generally and even more rare in literature from sub-Saharan Africa; therefore, no standard set of controls exists for couple-based analyses. Concerns about the relationship of age, educational, and wealth inequalities to actual and perceived HIV risk are well-documented (Dodoo and Frost 2008; Luke et al. 2011b). Similarly, research on the salience of religion to risk behavior (actual and perceived, especially in marriage) supports examining differences by religious affiliation (Trinitapoli and Weinreb 2012).

<sup>13</sup>We also estimated these equations using zero-inflated negative binomial regressions. Vuong tests, however, confirmed that the zero-inflated negative binomial models do not fit our data better than a standard negative binomial model.



We apply additional restrictions to specific analyses; these, too, are described in more detail in Table S2 of the online supplement. First, when examining perceived likelihood of HIV infection, we remove 46 respondents known to be HIV positive. Second, when examining perceived likelihood of marital dissolution, we limit our analyses to currently married respondents ( $N=655$ ). Finally, when assessing how relationship and partner characteristics are associated with discrepancies between relationship ideals and experiences, we rely exclusively on the subsample of women whose partners also completed the Wave 5 questionnaire ( $N=405$ ).

## RESULTS

### Examining Ideal and Experienced Relationship Sequences

We begin by comparing the ideal and experiential sequences of women in our sample. Figure 2 shows the difference between the percent of respondents placing each card as part of the prelude to sex in their ideal sequence versus their experienced sequence, highlighting aggregate differences in which events are included across the two types of sequences. The difference is positive, meaning that more respondents placed the card before sex in their *ideal* script than in their experienced script, for all but three events (meeting to chat in private, deciding to get married, and going out holding hands). This underscores a general trend: ideal sequences describing the prelude to sex are, on average, about two cards longer than experienced sequences (mean length of 9.67 versus 7.60, see Table 1).

The two most common discrepancies between experienced and ideal sequences are getting tested for HIV together and having a religious wedding. 80 percent of women placed the HIV-testing card before sex in their ideal sequence, compared to 33 percent in their experienced sequence. This may reflect the fact that although government media campaigns and NGO efforts have encouraged rural Malawians to “know their status” since the mid-1990s (Kaler and Watkins 2010), barriers of time, money, and distance continue to prevent many from getting tested (Weinreb and Stecklov 2009). The second most common discrepancy is having a religious wedding, with 56 percent of respondents placing this card before sex in their ideal sequences versus 10 percent in their experienced sequences. The prevalence of this particular discrepancy may, in part, be driven by the recent surge in religious messages about abstinence before marriage in Malawi (Trinitapoli and Weinreb 2012), and the fact that religious weddings have become increasingly lavish, making them unattainably expensive for many couples (Cole 2004).

Figure 3 depicts the typical ordering of events in women’s ideal sequences. The vertical axis displays the sequential order of the cards, and events are ordered on the horizontal axis by the average value for this measure, from those that typically occur first to those that tend to be placed immediately before the sex card. Ideal sequences typically begin with deciding to get married, going for HIV testing, and introducing each other to friends and family. These initial steps are followed by two cards depicting partners exchanging gifts, three wedding events, and moving in together. Events shaded in gray were placed before sex in the ideal sequence by a minority of women in our sample; these include three events depicting partners informally spending time together (meeting somewhere to chat in private, walking around in public holding hands, and attending a community event together) and

conversations about contraception. We exclude these four events from the normative ideal sequence.

Table 4 provides an overview of the five distinct clusters of experienced sequences we identified using optimal matching and Ward's hierarchical clustering. This table illustrates differences between clusters in terms of *length* of experienced sequences and *ordering* of events. For each cluster, we began with the average length of the experienced sequences ( $n$ ), selected the  $n$  most commonly occurring relationship events for each cluster, and then arranged those  $n$  steps according to their average sequential order—where in the sequence they most typically occur.

As Table 4 demonstrates, these five clusters comprise substantively distinct sequences that characterize women's experienced prelude to sex. Clusters A, B, and D are similar in that the constitutive sequences tend to exclude marriage, but distinct in the number of steps that precede sex and whether the relationship was first shared with friends, family, and the broader community. The sequences found in Cluster D include more events representing social embeddedness than those in Cluster A, with Cluster B sequences falling in-between. Cluster D is also unique in being the only group to include HIV testing before sex in a typical sequence. Clusters C and E are similar in that marriage tends to precede sex in these sequences but distinct in the sequential position of the marriage events: weddings appear later in the Cluster E sequences, after introducing partners to friends and the broader community and after exchanging gifts.

### Discrepant Ideals and Perceived Relationship Well-Being

Our first research question asks whether discrepancy (versus congruence) between ideals and experiences during the prelude to sex is negatively associated with perceived relationship well-being. Table 5 presents results from a set of regression models predicting the four dimensions of relationship well-being described earlier. In Models 1 and 2, we use logistic regression to predict “strongly agree” responses to statements about partners showing they care and communicating openly. The discrepancy score is negatively associated with both outcomes. Specifically, a one-unit increase in the discrepancy score is associated with a .27 factor reduction in the odds of a woman responding affirmatively that her partner shows he cares about her ( $p < .01$ ), and a .31 factor reduction in the odds that a woman strongly agrees with the statement about discussing important matters together ( $p < .01$ ). Married women are more likely to strongly agree with both statements, suggesting that net of age and education, stable relationships are perceived as more supportive and open.

Models 3 and 4 feature results from binomial logistic regression models predicting our two measures of relationship security: perceived risk of HIV infection and relationship dissolution. Model 3 demonstrates that the distance between ideals and experiences is strongly and significantly associated with the perceived likelihood of becoming infected with HIV in the next year. Specifically, a one-unit increase in the discrepancy score is associated with about a 1.67 factor increase in the perceived likelihood of future HIV infection ( $p < .01$ ). Finally, Model 4 shows that a one-unit increase in the discrepancy score is associated with a 1.87 factor increase in the perceived likelihood of relationship dissolution ( $p < .05$ ). Model 4 also reveals that relationship dissolution is associated with

socioeconomic disadvantage: more educated women report a lower likelihood of relationship dissolution, and women living in more rural areas perceive their relationships as less stable.<sup>14</sup>

### Comparing the Ideal/Experience Distance Score to Alternative Measures

Moving to our second research question, we compare the predictive power of our subjective measure of distance between ideals and experiences to an array of alternatives. Figures 4 and 5 provide a visual comparison of these measures. Figure 4 presents odds ratios (for logistic regression) and Figure 5 presents incidence-rate ratios (IRRs, for negative binomial regression) for models that include the ideal/experience distance score and each set of alternative measures described earlier: (1) the three standard, implicitly sequential measures (age at first sex, premarital sex, and lifetime number of partners), (2) the normative ideal distance score, and (3) the experiential sequence clusters. All models rely on the same sample and controls included in Table 4, and the full results for each model can be found in Tables S3, S4, S5, and S6 in the online supplement.<sup>15</sup> To facilitate comparisons across measures, we present standardized results in the figures and plot the ratios on a log scale.

Across all four dimensions of relationship well-being, the discrepancy between individual ideals and experiences remains significant with the addition of each set of alternative measures, and the magnitude of the association is fundamentally unchanged. None of the conventional measures (age at first sex, premarital sex, or lifetime number of partners) significantly predict relationship well-being when examined in conjunction with the ideal/experience discrepancy score.<sup>16</sup>

Comparing our discrepancy score to an alternative distance score that uniformly compares each woman's experienced sequence to the normative ideal sequence, experiential distance from norms is marginally significant in predicting perceived likelihood of HIV infection; a standard-deviation increase is associated with an 8 percent increase in perceived risk (Figure 5 Panel A,  $p < .10$ ). Adherence to norms is not, however, associated with the other three dimensions of relationship well-being (Figures 4, 5). In contrast, the discrepancy between individual-level ideals and experiences is robust to inclusion of this normative distance score across all four measures of relationship well-being, suggesting it is the specific ideals that individual women hold—and not the normative ideals present in the broader community—that anchor women's early sexual experiences. This is consistent with theories positing that individuals construct unique systems of meaning from the multiple, and often conflicting, cultural models to which they are exposed (Harding 2007; Swidler 2001).

<sup>14</sup>An anonymous reviewer wondered if women's perceived ability to leave their marriage may confound these results. We conducted supplementary analyses with a variable indicating agreement (strongly agree/agree, 60 percent of sample) versus disagreement (strongly disagree/disagree, 40 percent) with the statement "If things were really bad with my partner, I would leave the relationship" included as a covariate in all models predicting perceived risk of relationship dissolution. This measure was negatively associated with the outcome ( $p < .01$ ), but the discrepancy score remained significant, and the magnitude of the coefficient did not diminish with the addition of this measure of perceived agency.

<sup>15</sup>See Table S7 in the online supplement for models including all alternative measures; results for the ideal/experience distance score do not change.

<sup>16</sup>In ancillary analyses, we modeled these three measures separately and found lifetime number of partners to be positively associated with perceived risk of HIV infection ( $p < .05$ ). Because this was the only result that changed with inclusion of all three measures in the same model, we present the more parsimonious version.

We test the robustness of our discrepancy score against distinctive experiential sequences by including a set of categorical variables distinguishing among the five clusters of experienced sequences described earlier. We find important differences in relationship well-being across the sequence types. As Figure 4, Panel B. shows, women in Cluster A (the shortest sequences) and Cluster B (the second shortest) have marginally lower odds of agreeing strongly with the statement about discussing important matters with their partners, relative to women in Cluster E, who marry and experience several social embeddedness events before having sex with their partners ( $p < .10$ ; standardized odds ratios: .83 Cluster A and .84 Cluster B). Turning to the models predicting perceived risk of negative relationship events (Figure 5), compared to women in Cluster E, women in Cluster A perceive heightened risk of becoming infected with HIV (Panel A, standardized IRR = 1.09,  $p < .05$ ) and ending their marriage in the next year (Panel B, standardized IRR = 1.16,  $p < .01$ ). Women in Cluster C, who tend to marry early in their relationships, also report a higher perceived likelihood of relationship dissolution in the next year ( $p < .05$ ). Importantly, the discrepancy score comparing ideals and experiences is robust to this measured variability in experienced sequences.

Taken together, these results indicate that distance between a woman's relationship experiences and ideals is a more reliable predictor of perceived relationship well-being than any of the alternative measures examined and is robust to the inclusion of all these variables. Across all four outcomes, this is true in terms of the significance levels and magnitude of the standardized coefficients. While women vary according to the types of experienced sequences they report, the discrepancy score significantly and positively predicts all four dimensions of well-being, independent of these experiential differences. In short, women's ideas about how the prelude to sex *should* unfold anchor how their early relationship experiences are manifest.

### Correlates of Congruence: Aligned Experiences and Ideals

Having demonstrated that congruence between ideals and experiences is strongly associated with perceived relationship well-being, we turn to the task of identifying the characteristics of women who come closest to manifesting their relationship ideals. Table 6 contains results from a series of OLS regression models predicting the ideal/experience distance score. Model 1 addresses our third research question: which individual-level variables predict the distance between women's experiences and their stated ideals? These results suggest three ways in which socioeconomically advantaged women are more likely to have relationship experiences that are congruent with their ideals. First, the household wealth index is negatively associated with ideal/experience discrepancy; this result is highly significant, although small in magnitude (a one-unit increase corresponds to a 3 percent reduction in the distance score;  $p < .001$ ). Second, educational attainment is negatively associated with the ideal/experience distance score ( $p < .01$ ). Third, respondents who live in the more remote areas of the TLT catchment area experience higher levels of discrepancy from their ideals than do their centrally located counterparts ( $p < .05$ ). In addition to these socioeconomic patterns, married women report higher levels of congruence than do women in non-marital relationships ( $p < .001$ ).

Because discrepancies between ideals and experiences in the sexual domain are dyadic phenomena, we move from examining women's individual-level characteristics to considering the attributes of their relationships. Importantly, the outcome remains the level of congruence (versus discrepancy) for *individual women*, but the key predictors are attributes of *couples*, net of individual-level covariates. This portion of our analysis is restricted to the subset of women whose partners enrolled in the study. We first tested for sample composition differences using the same individual-level predictors from Model 1 with the restricted subsample (Model 2). These results are consistent with two exceptions: educational attainment is not significant for the partner-enrolled subsample, and rurality factors more strongly.

Examining the distance between women's experiences and their own ideals in a dyadic framework (Model 3), we find that women in relationships characterized by substantial age and education gaps are more likely to report experiences that diverge from their ideals ( $p < .05$ ). Differences between partners in religion and family wealth, however, are not significant. Net of all individual- and couple-level predictors, the most significant relationship characteristic predicting discrepant ideals and experiences for women is *discordant ideals* within the partnership ( $p < .01$ ).

To address the possibility that couple-level alignment of ideals benefits only women, we present Model 4, which is identical to Model 3 but models ideal-experience discrepancies for *male* partners. Because these men were enrolled through their randomly selected female partners, they do not constitute a random sample; we make no claims about Malawian men from this model but merely aim to gauge the extent to which couple-level alignment in ideals is gendered. Model 4 suggests that although many individual- and couple-level characteristics operate differently for female and male partners, ideological concordance is unique in being similar in magnitude and significance for both analytic samples. Not only does alignment of ideals between partners improve a woman's own odds of having congruent experiences, but shared ideals within the romantic dyad seem to facilitate congruent experiences for men as well.

## DISCUSSION AND CONCLUSIONS

Scholarship about sexual behavior frequently references ideals as salient but rarely engages them empirically. Our analyses highlight the conceptual and analytic utility of engaging ideals in empirical research on sexual behavior and experiences. Even within relatively homogeneous cultural settings, sexual norms and mores are often contested and conflicting, and deviations abound. In arguing that ideals matter, we sought to anchor relationship experiences to individually held perspectives on how relationships *ought* to unfold. Our results demonstrate that women experience and assess their relationships from particular vantage points that may or may not conform to external standards. Furthermore, it is this experiential congruence with ideals—not the events themselves nor conformity to normative ideals—that conditions how sexual experiences are manifest in relationship well-being. In addition to the magnitude and consistency of the associations documented here, four specific empirical insights support our assertion that ideals should be central, rather than peripheral, to the study of sexual relationships.

First, we identified two major discrepancies between how the prelude to sex unfolds in ideal terms and in actual relationship experiences in one Malawian community. In ideal sequences, respondents tend to place sexual intercourse *after* HIV testing and *after* modern wedding ceremonies, but in reality, sex often precedes these events. These distinctions between ideals and experiences map neatly onto two of the most salient micro-level concerns for young Malawians at the beginning of their marital and childbearing trajectories: divorce and HIV infection.

Second, congruence between sexual ideals and experiences is strongly associated with the degree to which young people source support and security from their relationships: respondents whose experiences align with their stated ideals perceive a lower probability of HIV infection and marital dissolution. This holds true for relationship quality broadly defined, operationalized here as care and open communication.

Third, across all four indicators of relationship well-being, the predictive power of the ideal/experience distance score surpasses the measures of sexual behavior that dominate the literature, suggesting that simple empirical levers on when sex occurs relative to marriage or across an age distribution are of limited utility—at least in this setting. Examined in relation to each other, relationship events constitute distinguishable trajectories during the prelude to sex. These qualitatively distinct experiential trajectories (represented by clusters of experienced sequences) are significantly associated with relationship well-being across three of the four dimensions. However, when experiences are indexed according to individually held relationship ideals, it is the distance between the two that most strongly and consistently informs how individuals perceive their relationships.

Fourth, congruence between romantic ideals and relationship experiences is patterned. At the individual level, congruence is positively associated with marital status and social class (educational attainment, household wealth, and rurality). A dyadic perspective reveals that partnership characteristics inform how people subjectively experience their relationships. Most notably, shared ideals facilitate the manifestation of personal ideals for female and male partners, suggesting that ideological concordance insulates relationships on both sides of the relationship dyad.

Given that most people live the majority of their adult lives within relationships, we see relationship well-being as a worthy subject of inquiry, independent of its epidemiological consequences. But we also see the two as linked and offer three remarks about the practical applications of our findings. First, rather than promoting prescriptive benchmarks or uniform criteria (e.g., “abstain until marriage” and “be faithful” from the ubiquitous ABC campaign), efforts to strengthen relationships might instead focus on improving women’s capacity to agentically pursue their own relationship ideals. Second, given the salience of ideal concordance between partners, young adults could be encouraged to reflect on their own ideals before entering into relationships and to discuss their ideals with new partners early in a relationship. Third, two epidemiologically and socially salient relationship issues—sexual concurrency and extramarital partnerships—are beyond the scope of this article, but future research should explore whether individuals who feel secure and supported in their



relationships are less likely to engage in sexual behaviors that put themselves, and their partners, at risk of contracting HIV.

On the methodological front, our analyses demonstrate that the challenges inherent in carrying out complex survey modules in developing contexts are surmountable. Working with the relationship scripts cards is a cognitively complex task, but despite low levels of education and literacy, the young adults in our sample effectively used the card-sort approach to tell us both about the history of their own relationships and about how they envision relationships generally. All were able to complete the card-sort exercise, and our data contained only a handful of illogical orderings (e.g., placing pregnancy before sex). Explaining the card-sort task to respondents and guiding them through ordering the cards required effort by our interviewers;<sup>17</sup> even so, interviewers concurred that this method generated animated participation and even enjoyment. As one experienced interviewer remarked, “Respondents were much more flexible to share their feelings and experiences using this method.” It is our view that nonverbal, respondent-driven data collection techniques offer advantages over the conventional question-and-answer format—especially for research addressing sensitive topics.

Despite these empirical and methodological contributions, our study has some limitations. First, our data are drawn from a small geographic area around Balaka. We can think of no reason why these patterns would apply only to this small corner of the world, but we acknowledge that further research is needed to determine whether these findings extend beyond southern Malawi. It may be the case, for example, that ideals are particularly salient in settings undergoing rapid sociocultural change. Only future research along these lines will tell.

Second, despite being embedded in a longitudinal survey, the sequence data were collected at a single point in time.<sup>18</sup> We had this limitation in mind when we designed the prompt for the ideal sequences. Rather than asking respondents to imagine what their own relationships might look like under ideal conditions, a format that fertility surveys have shown is subject to revision and *ex-post* rationalization (Casterline and El-Zeini 2007), we asked respondents to imagine they were offering advice to a close friend or relative who is about their age but not presently in a relationship. We did this specifically to measure ideal sequences as distinct and independent from lived experiences. Still, we cannot rule out the possibility that high levels of relationship well-being lead respondents to provide revisionist accounts of either their ideal or experienced scripts, making these artificially congruent in our optimal matching algorithm.

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<sup>17</sup>A recent study documents the methodological challenges of collecting sequences in poor sub-Saharan African settings (Mensch et al. 2014). Our interviewers had already collected four rounds of survey data from these respondents and were thus unusually well-equipped to administer a complex module like this. Nonetheless, the instrument required extensive piloting and training to prepare our interviewers to assist respondents with the tasks of choosing and ordering the cards.

<sup>18</sup>In Add Health, respondents were asked about their relationship ideals during Wave 1 and then about their relationship experiences during Wave 2. Our decision to not mimic this design was intentional. While a one- to two-year lag in Add Health ensured that relationship experiences occurred subsequent to the collection of ideal sequences among U.S. high school students (for whom relationships tend to be fleeting), in Malawi (where most respondents are married and average relationship duration approaches five years) such a staggered design would only have increased recall bias for experienced sequences.

Third, we imposed non-negligible sample restrictions to conduct these analyses. Although we had few cases of missing data, limiting our analytic sample to women who had sex with their current or most recent partners raises questions about the possible impact of sample biases on our findings. Fundamentally, this is untestable. However, relative to women in our analytic sample, women who are not yet in relationships or have not yet had sex with their partners place slightly *more* events before sex in their ideal sequences (average 9.10 versus 8.57), making it unlikely that these women want to be having sex and are not doing so. Furthermore, women excluded for this reason are less concerned about HIV infection. Our estimates should therefore, if anything, underestimate the level of security that alignment between ideals and experiences conveys.

Our decision to focus on relationship well-being vis-à-vis perceptions stemmed from our desire to capture how people experience their relationships as sources of anxiety or security, stress or support. A natural next step would be to connect these perceptions prospectively to actual relationship outcomes. In the domain of HIV and mortality in particular, subjective probabilities tend to be meaningful assessments of the present and future (Delavande and Kohler 2009). Still, future research should explore whether and to what extent perceived relationship stability, support, and communication are associated with domestic violence, marital dissolution, and other salient relationship outcomes.

Although an important relationship step, sexual intercourse is just one of many things young adults do together in romantic relationships, and its position in relation to these other events —“the phenomena surrounding a case” (Abbott 1995:94)—matters both for the relationship dyad and for the individuals involved. The mandate to apply sequential analysis to sequential phenomena has a long history in sociology but is more frequently used to analyze concrete events than imagined or cognitive phenomena. In leveraging sequence comparisons to better understand the salience of romantic ideals to young adults’ lives, we have linked two powerful, but independent, sociological tools to shed light on how relationships are experienced and reflected upon in a generalized AIDS epidemic. Beyond the romantic realm, research should examine how subjective ideals anchor experiences for other ordered life transitions, such as career trajectories, family formation, and end-of-life events. As with sex, the distance between what “is” and what “ought to be” in these other domains of life may have important implications.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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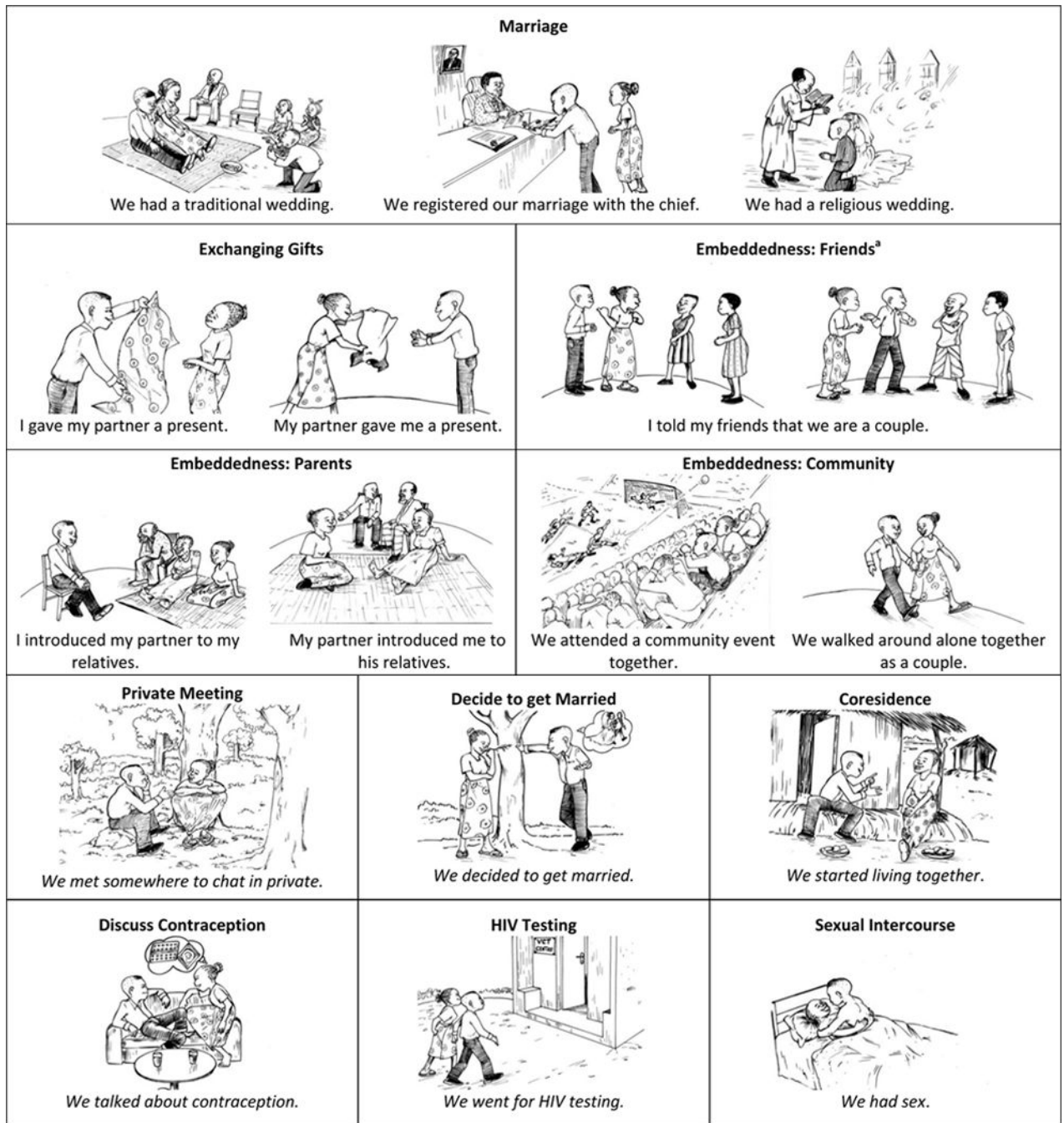
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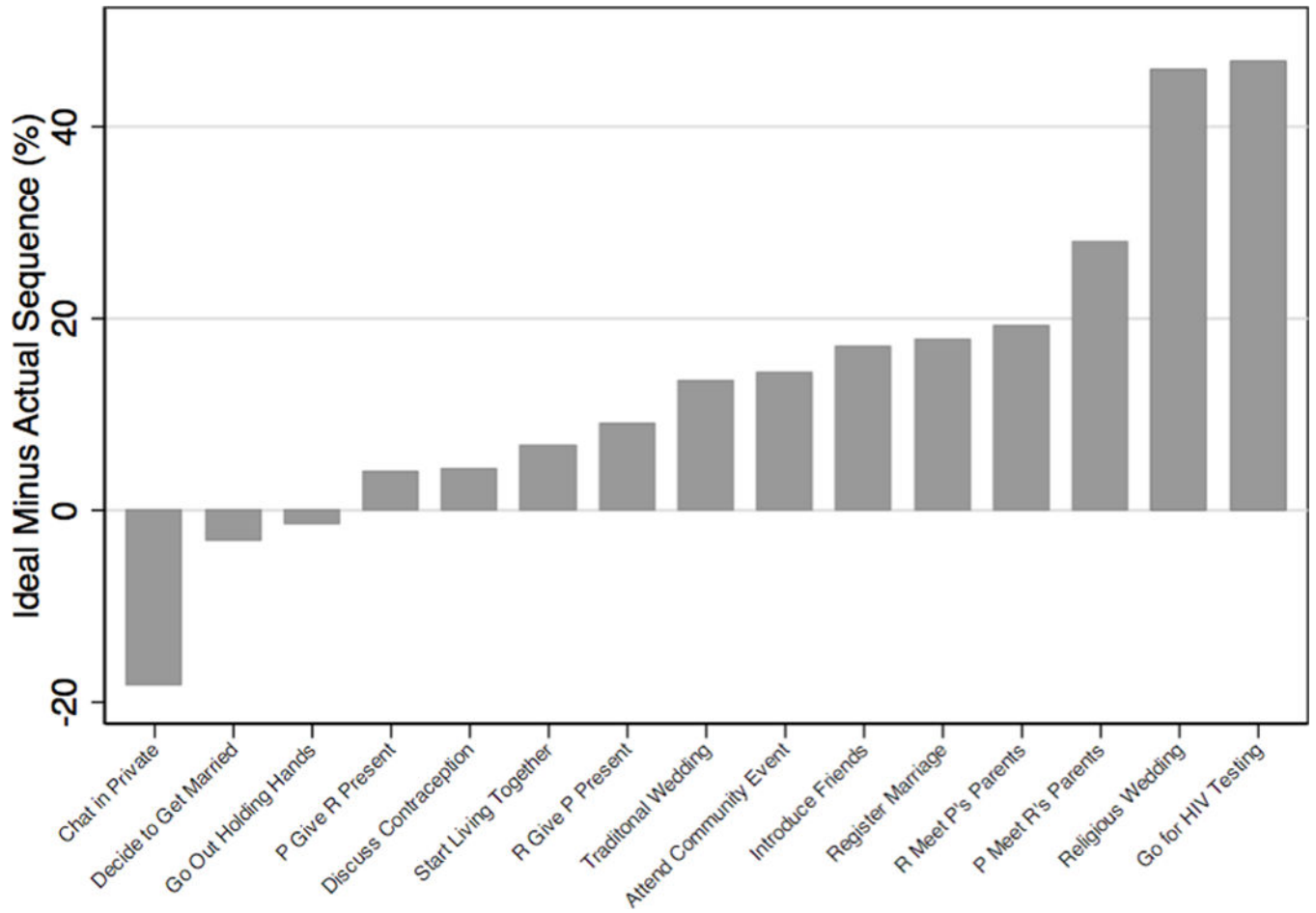
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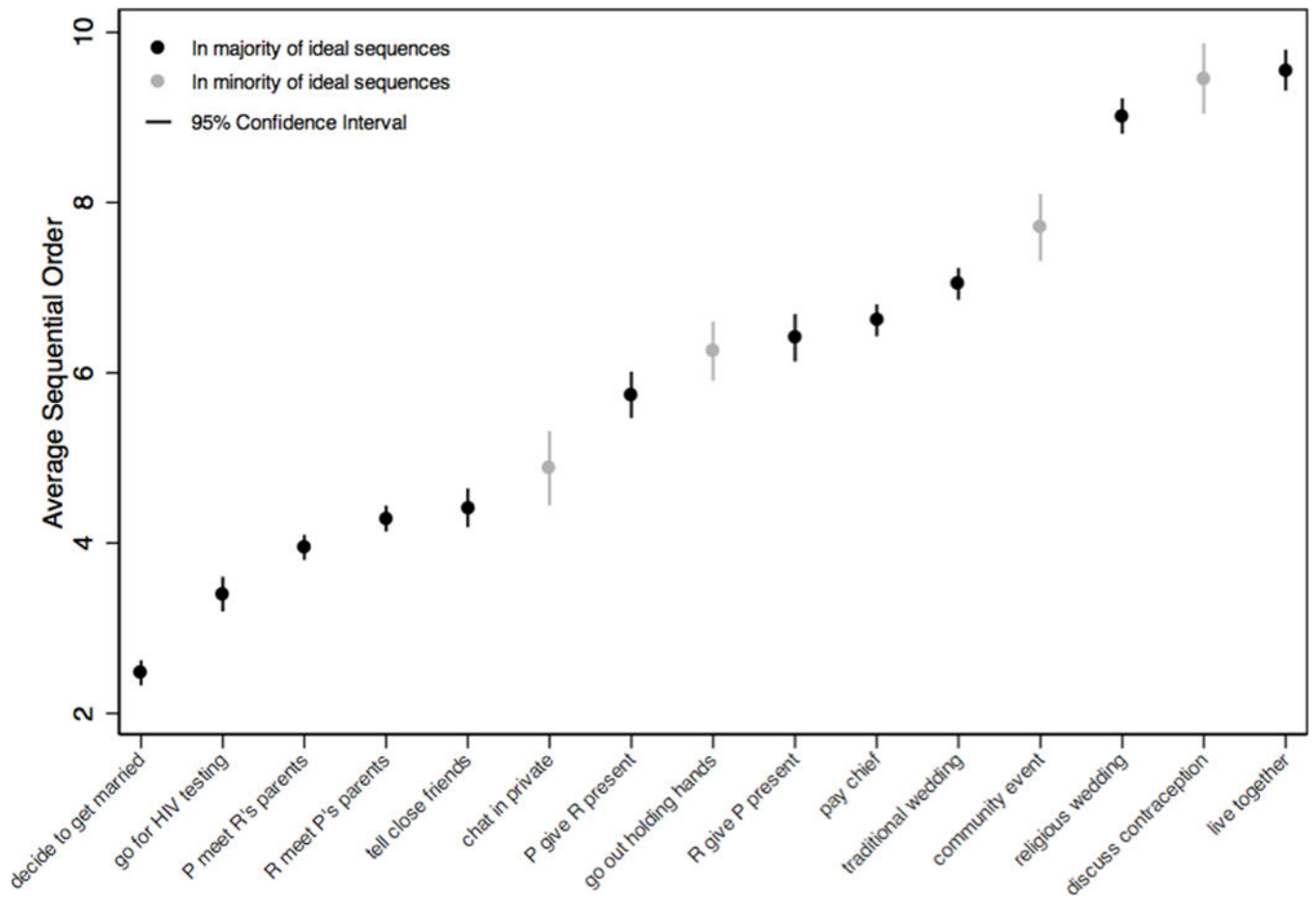
**Figure 1.**

Relationship Scripts Cards: Illustrations and Categories

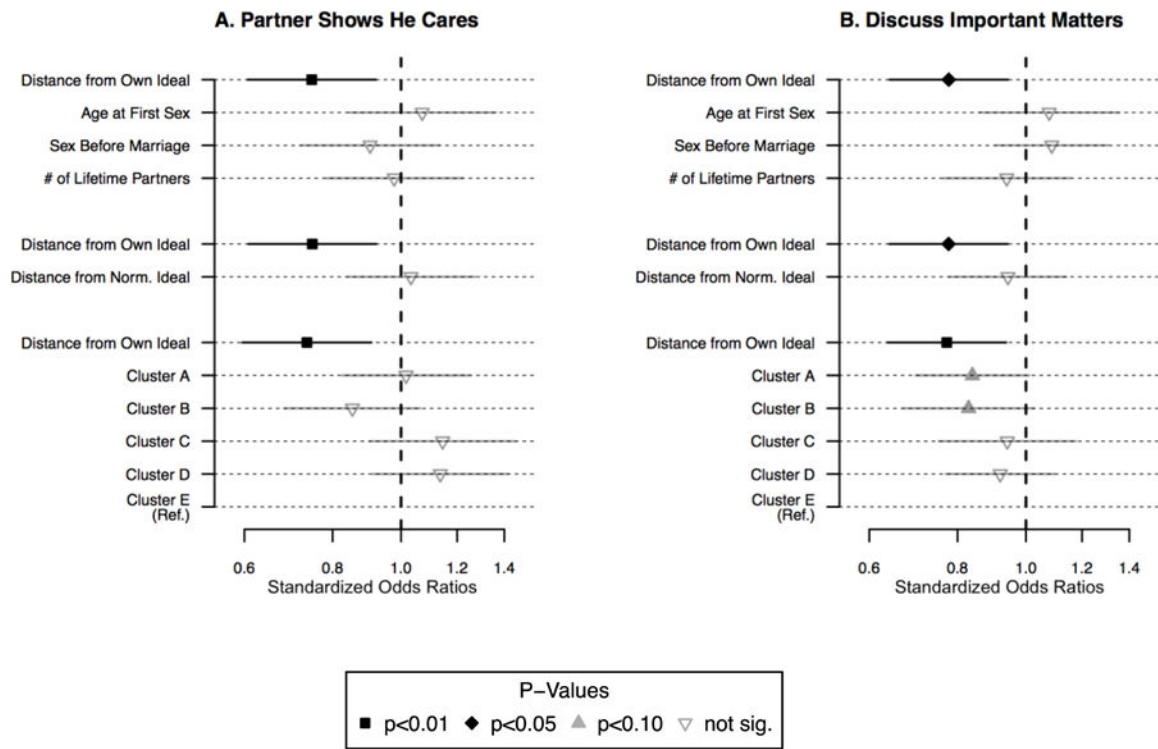
<sup>a</sup>Only one of these cards was used in the relationship scripts module, depending on the respondent's gender.



**Figure 2.** Differences in the Proportion of Women Placing Each Card before Sex in Ideal and Experienced Sequences, ( $N = 817$ )

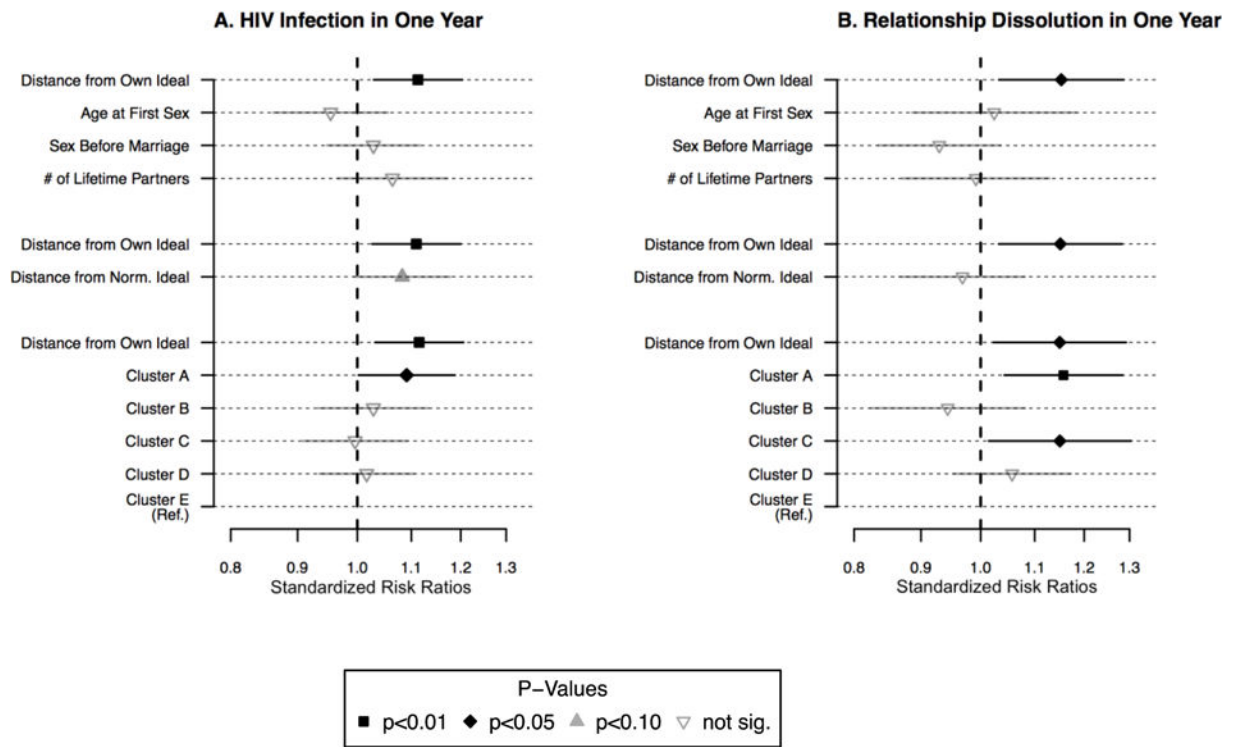


**Figure 3.** Normative Ideal Sequence for the Prelude to Sex, Women Sexual Relationship Sample ( $N=817$ )  
*Note:* Events placed before sex in a minority of ideal sequences are depicted in gray and are not included in the normative ideal sequence.



**Figure 4.** Comparison of Standardized Odds Ratios for Logistic Regression Models Predicting Relationship Quality Measures.

*Note:* Horizontal lines depict the 95% confidence intervals around each point. The *x*-axis is logged to accommodate the visual comparison of ratio values. For full results, see Tables S2 through S5 in the online supplement.



**Figure 5.** Comparison of Standardized Relative Risk Ratios for Negative Binomial Regression Models Predicting Relationship Security Measures.

*Note:* Horizontal lines depict the 95% confidence intervals around each point. The *x*-axis is logged to accommodate the visual comparison of ratio values. For full results, see Tables S2 through S5 in the online supplement.



**Table 1**

## Descriptive Overview of the Primary Analytic Samples

Variables	Sexual Relationship Sample (Women)		Matched-Couple Sample (Women)
	Range	Mean/Proportion (standard deviation)	Mean/Proportion (standard deviation)
Sociodemographic Background			
Age	15 to 25	21.50 (2.99)	21.87 (2.76)
SES Score (standardized)	-3.37 to 8.27	-.36 (2.19)	-.62 (1.85)
Years of Education	0 to 12	7.48 (2.89)	6.77 (2.72)
Attends Religious Services at Least Weekly	Binary	64.3%	61.8%
Distance from Town (standardized)	-1.27 to 4.33	.12 (.99)	.27 (.98)
Relationship Background			
Currently Married	Binary	78.0%	91.6%
In a Non-marital Relationship	Binary	22.0%	8.4%
Relationship Duration (in Years)	.25 to 12.12	4.78 (3.24)	5.51 (3.04)
Lifetime Number of Partners	1 to 10	1.91 (1.29)	1.81 (1.13)
Respondent Had Premarital Sex	Binary	87.9%	87.2%
Age at First Sex	8 to 24	15.84 (2.29)	15.64 (2.16)
Relationship Sequence Measures			
Experienced Sequence Length	1 to 16	7.60 (3.39)	7.85 (3.38)
Ideal Sequence Length	3 to 16	9.67 (3.75)	10.21 (3.40)
Distance between Experience and Own Ideal	.65 to 1.96	1.48 (.22)	1.50 (.22)
Distance between Experience and Normative Ideal	.29 to 1.94	1.37 (.29)	1.33 (.30)
Measures of Relationship Well-Being			
Strongly Agree: "My Partner Shows Me that He Cares about Me"	Binary	82.7%	84.3%
Strongly Agree: "My Partner and I Discuss Important Matters Together"	Binary	79.1%	81.9%
Likelihood of Infection within 1 Year <sup>a</sup>	0 to 10	3.62 (3.25)	3.64 (3.20)
Likelihood of Union Dissolution within 1 Year <sup>b</sup>	0 to 10	1.73 (2.28)	1.83 (2.28)
<i>N</i>		817	405

<sup>a</sup>*N* = 788 (respondents with positive HIV tests excluded).

<sup>b</sup>*N* = 655 (married respondents only).

**Table 2**

Illustration of Distance between Experiences and Ideals for Two Women in the Sample

Experienced Relationship Script	Ideal Relationship Script
CONGRUENT: MARY	
We decided to get married.	We decided to get married.
We told close friends that we were a couple.	My partner met my parents.
My partner met my parents.	We told close friends that we were a couple.
I met my partner's parents.	I met my partner's parents.
We attended a community event together.	We attended a community event together.
We had sex.	My partner gave me a present.
	We had sex.
DISCREPANT: JANET	
We decided to get married.	My partner gave me a present.
My partner met my parents.	My partner met my parents.
I met my partner's parents.	We decided to get married.
We walked around alone together as a couple.	I met my partner's parents.
We attended a community event together.	We had a traditional wedding.
We had sex.	We had a religious wedding.
	We got tested for HIV/AIDs.
	We started living together.
	We had sex.

*Note:* The relationship sequences read in descending order, starting with the top and ending with "We had sex."

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**Table 3**

Illustration of Distance between Women’s and Men’s Ideals within Two Couples in the Sample

Ideal Relationship Script: Female	Ideal Relationship Script: Male
CONCORDANT: RUTH AND THANDIZO	
We told close friends that we were a couple.	I gave my partner a present.
My partner gave me a present.	We decided to get married.
We decided to get married.	We told close friends that we were a couple.
I gave my partner a present.	I gave my partner a present.
My partner met my parents.	I met my partner’s parents.
I met my partner’s parents.	My partner met my parents.
We had a traditional wedding.	We had a traditional wedding.
We had a civil wedding.	We started living together.
We started living together.	We had a religious wedding.
We had sex.	We had a civil wedding.
	We had sex.
DISCORDANT: EVELYN AND SIMON	
We decided to get married.	We met somewhere to chat in private.
My partner gave me a present.	We got tested for HIV/AIDS.
We told close friends that we were a couple.	We told close friends that we were a couple.
I gave my partner a present.	We walked around alone together as a couple.
My partner met my parents.	We attended a community event together.
I met my partner’s parents.	I gave my partner a present.
We had a civil wedding.	My partner gave me a present
We had a traditional wedding.	We decided to get married.
We had a religious wedding.	We had sex.
We started living together.	
We had sex.	

*Note:* The relationship sequences read in descending order, starting with the top and ending with “We had sex.”

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**Table 4**

Descriptive Overview of Clusters of Experienced Sequences during the Prelude to Sex, Generated through Optimal Matching and Ward's Clustering Algorithm

	Cluster A	Cluster B	Cluster C	Cluster D	Cluster E
Mean Number of events	4	6	7	8	10
N (Respondents)	96	179	244	63	235
Order of most frequently occurring events, up to mean					
1	Chat in private	P give R present	Decide to get married	Tell close friends	Decide to get married
2	Decide to get married	Tell close friends	P meet R's parents	Go for HIV testing	Tell close friends
3	Tell close friends	Chat in private	R meet P's parents	Decide to get married	Go out holding hands
4	Have sex	Decide to get married	Pay chief	Go out holding hands	P give R present
5		R give P present	Traditional wedding	P give R present	P meet R's parents
6		Have sex	Live together	Attend community event	R meet P's parents
7			Have sex	P meet R's parents	Pay chief
8				Have sex	Traditional wedding
9					Live together
10					Have sex

**Table 5**  
 Results of Logistic and Negative Binomial Regression Models Predicting Four Measures of Relationship Well-Being

	Logistic Regression				Negative Binomial Regression			
	(1)		(2)		(3)		(4)	
	Partner Shows He Cares	Discuss Important Matters	HIV Infection in One Year	Relationship Dissolution in One Year	Coef.	(se)	OR	OR
Distance Between Experience and Own Ideal	-1.325 <sup>***</sup> (.488)	.266	-1.165 <sup>***</sup> (.453)	.312	.510 <sup>***</sup> (.306)	1.665	.625 <sup>*</sup> (.249)	1.867
Age	-.031 (.038)	.969	.034 (.036)	1.034	.030 <sup>+</sup> (.017)	1.030	.003 (.022)	1.003
Socioeconomic Status	.072 (.057)	1.075	-.049 (.052)	.953	.005 (.025)	1.005	-.01225 (.037)	.988
Years of Education	-.016 (.041)	.984	.076 <sup>+</sup> (.037)	1.079	-.024 (.017)	.977	-.04911 <sup>*</sup> (.023)	.952
Religious Services: Attend 1 <sup>+</sup> Times per Week	.336 <sup>+</sup> (.195)	1.400	-.043 (.178)	.958	.012 (.081)	1.012	-.00494 (.106)	.995
Distance from Town Center (Standardized)	.182 (.111)	1.200	-.055 (.095)	.947	-.017 (.044)	.983	.14095 <sup>*</sup> (.056)	1.151
Relationship Duration	-.057 (.037)	.944	-.022 (.035)	.978	-.024 (.015)	.977	-.00304 (.021)	.997
Ever Married	1.239 <sup>***</sup> (.246)	3.451	1.106 <sup>***</sup> (.229)	3.023	-.061 (.102)	.940		
Constant	3.600 <sup>***</sup> (1.1325)		1.097 (1.032)		1.200 (.546)		-.164 (.613)	
N	817		817		788		655	
BIC'	23.292		8.398		38.087		31.131	

\*  $p < .05$   
 \*\*  $p < .01$   
 \*\*\*  $p < .001$

$t < .1$   
 $p < .001$   
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**Table 6**

Coefficients from OLS Regression Models Predicting Distance between Experience and Ideal

	(1)	(2)	(3)	(4)
	All Women	Female Partner Subsample	Female Partner Subsample	Male Partner Subsample
	Coef. (se)	Coef. (se)	Coef. (se)	Coef. (se)
<i>Control Variables</i>				
Age	-.001 (.003)	-.001 (.005)	-.001 (.005)	-.003 (.005)
Socioeconomic Status	-.026*** (.004)	-.032*** (.008)	-.031*** (.008)	-.026* (.011)
Years of Education	-.008** (.003)	.001 (.004)	.003 (.005)	.008 (.006)
Distance from Town Center (Standardized)	.015* (.008)	.030** (.011)	.031** (.011)	-.030+ (.016)
Religious Services: Attend 1+ Times per Week	.005 (.014)	.008 (.021)	.011 (.021)	-.072* (.031)
Relationship Duration (Years)	-.000 (.003)	.002 (.004)	.002 (.004)	.004 (.006)
Ever Married	-.077*** (.021)			
<i>Sexual and Relationship Risk Variables</i>				
Couple Distance Score			.128** (.049)	.143* (.072)
Age gap			.067* (.032)	-.038 (.064)
Difference in Educational Attainment				
No Difference				
Male Partner Attained More			.053* (.025)	-.004 (.034)
Female Partner Attained More			.080* (.036)	-.022 (.060)
Different Religion			-.002 (.023)	.040 (.034)
Difference in Family Income				
No Difference				
Male Partner's Family Richer			.023	.022

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	(1)	(2)	(3)	(4)
	All Women	Female Partner Subsample	Female Partner Subsample	Male Partner Subsample
	Coef. (se)	Coef. (se)	Coef. (se)	Coef. (se)
			(.024)	(.035)
Female Partner's Family Richer			.039	.009
			(.028)	(.041)
Constant	1.615 <sup>***</sup> (.066)	1.454 <sup>***</sup> (.096)	1.159 <sup>***</sup> (.127)	1.163 <sup>***</sup> (.190)
Observations	817	405	405	405
R-squared	.132	.094	.142	.061

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

<sup>+</sup>  $p < .1$

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