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Bridewealth Marriage in the 21st Century: A Case Study from **Rural Mozambique**

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Abstract

Objective: This study examines trends over several decades in bridewealth marriage and analyzes the association of bridewealth with women's experiences in marriage in a rural sub-Saharan setting.

Background: Bridewealth – payments from the groom's to the bride's family as part of the marriage process - has long been a central element of kinship and marriage systems in patrilineal sub-Saharan Africa. This payment, which symbolizes the transfer of sexual and reproductive rights from the wife's to the husband's family, is grounded in a collectivist-oriented family system that closely ties women's status and value to their reproductive capacity.

Method: The study draws on population-based longitudinal survey data collected in 2006, 2009, and 2011 from 1,552 women in rural Mozambique. We use multivariable regression to investigate whether year of marriage predicts being in a bridewealth marriage and whether bridewealth status predicts marital dissolution, women's decision-making autonomy, women's work outside of subsistence agriculture, or modern contraceptive use.

Results: The proportion of marriages involving bridewealth payment has declined over time. While no difference by bridewealth status exists in women's autonomy levels or modern contraceptive use, women in bridewealth marriages are less likely to divorce over a five-year period and less likely to work outside of subsistence agriculture, net of other factors.

Conclusion: These findings reflect the complexity of a modernizing marriage system. With the decline of bridewealth marriage, its meaning has evolved, becoming increasingly indicative of individual wealth and status rather than family control.

Keywords

bridewealth; divorce; employment; gender; marriage; sub-Saharan Africa				

Over the past few decades, in western contexts, cohabitation has become more prevalent (Lesthaeghe, 2010; Lundberg, Pollak, & Stearns, 2016), divorce rates have increased (Amato, 2010; Goode, 1993), childbearing outside of marriage has become common (Lesthaeghe, 2010; Lundberg et al., 2016), and acceptance and legalization of same-sex marriage have grown (Chamie & Mirkin, 2011). These changes have been interpreted as a "deinstitutionalization" of marriage (Cherlin, 2004; Treas, Lui, & Gubernskaya, 2014), that is, an evolution of marriage from a uniform social institution governed by rigid cultural norms and corresponding legal regulation to a gamut of relationships formed through individual choice. As marriage becomes less common and less stable, it is also becoming increasingly concentrated among more educated and wealthier segments of the population (Heard, 2011; Lesthaeghe, 2010; Lundberg et al., 2016), although this association varies across national contexts (Kalmijn, 2013; Perelli-Harris & Lyons-Amos, 2016). Outside of the western world, many less developed countries have also experienced profound transformations in marriage, albeit not to the same degree or in the same manner. For example, the average age at first marriage has increased virtually everywhere in the world, especially for women, even though there still exists substantial regional variation in marriage timing (Mensch, 2005). In parts of the world where arranged marriage was common, individuals are increasingly choosing their own spouse (Ahearn, 2001; Allendorf & Pandian, 2016; Ghimire, Axinn, Yabiku, & Thornton, 2006; Loforte, 2000; Meekers, 1995a; Smith, 2001).

Across both developed and developing contexts, various theories, such as the Western "conjugal" family (Goode, 1963), developmental idealism (Thornton, 2013), and Second Demographic Transition theory (Lesthaeghe, 2010), have linked marital and family changes to larger patterns of economic development and cultural change. These theories describe and explain the shift from marriage as a component in a broader kinship and family system to an individualized couple relationship. Some of these theories focus on economic systems as the primary driver of change (e.g., Goode, 1963), while others focus on socio-cultural change (e.g., Lesthaeghe, 2010); they all recognize that these aspects are closely intertwined and mutually influential. In general, these theories argue that the increased importance of the individual, reduced dependency on the extended family for economic support, and increased support for "modern" (i.e., western) values lead to later marriage, less marriage, more choice marriage, and less stable marriage.

In dialogue with these theoretical perspectives, we seek to contribute to the understanding of evolving marriage and family systems via a case study of a relatively understudied but highly salient aspect of African marriage, the payment of bridewealth. Bridewealth, or brideprice – monetary and/or in-kind transfers from the groom's family to the bride's family as part of the marriage process – has historically been an important element of marriage systems in patrilineal societies in sub-Saharan Africa, as well as in other parts of the world (Anderson, 2007; Ansell, 2001). Bridewealth serves as a tangible representation of the transfer of sexual and reproductive rights – including children produced in the union – from the wife's to the husband's family. Its meaning is rooted in a collectivist-oriented family system where women's status and value are linked to their reproductive capacity and their contributions to agricultural labor. The historical record indicates that in many societies where marriage payments were once prevalent, e.g., in Europe and Latin America, such

payments declined and then eventually disappeared (Anderson, 2007; Goody, 1983; Lavrin & Couturier, 1979; Metcalfe, 1993). There is some evidence to suggest that this trend is also occurring in parts of sub-Saharan Africa (Anderson, 2007; Bishai & Grossbard, 2010), as bridewealth payments are extended over long periods of time or even forgone altogether (Casale & Posel, 2010). However, systematic analyses of contemporary bridewealth systems and their transformation over time are rare due to data limitations. Moreover, we have little knowledge of the changing social meaning of bridewealth and the implications of these changes for marital partnerships, especially given the increasing individualization of family relationships.

In this study, we use data from a population-based survey of ever-married women in rural southern Mozambique, a setting that shares many characteristics with other parts of rural sub-Saharan Africa, to examine trends in the prevalence of bridewealth across marriage cohorts from the late 1970s to the early 21st century and to investigate the association of bridewealth with selected outcomes measuring various dimensions of women's marital experiences—namely marital dissolution, interpersonal relationships, economic activity, and reproduction. Analyzing data collected in retrospective marriage histories, we demonstrate that the practice of bridewealth has declined over time. We also find that the payment of bridewealth is associated with lower levels of marital dissolution, and that women in bridewealth marriages are less likely to work for pay compared to their counterparts in non-bridewealth marriages. However, women in bridewealth and non-bridewealth marriages do not differ in their levels of autonomy or use of modern contraception. Drawing on theories of family change, we interpret these results as evidence of the evolving nature of bridewealth — from a traditional symbol of a contract between two families to a contemporary marker of individual status and economic privilege.

BACKGROUND

Bridewealth Marriage in Sub-Saharan Africa

Across sub-Saharan Africa, as elsewhere in the world, marriage has traditionally been viewed as the union of two families, rather than the joining of two individuals (Abdul-Korah, 2014; Caldwell & Caldwell, 1987; Dekker & Hoogeveen, 2002). In many traditional African societies, parents (and/or other family members) arranged their children's marriages, and in some cases, did so when their children were young or even before they were born (Meekers, 1992; Murdock, 1959; Phillips, 2018). Provision of bridewealth - the transfer of cash and/or goods (typically livestock) from the husband's to the wife's family – is part of the traditional marriage process in most African societies, particularly in patrilineal ones (Goody, 1973; Murdock, 1967). This payment solidifies the alliance between the husband's and the wife's kinship groups and creates financial transfer systems that families use to lend or give money and/or food to each other during periods of financial difficulty or low agricultural output (Abdul-Korah, 2014; Dekker & Hoogeveen, 2002). Because bridewealth payments position marriage as a contract between two extended families, they also de-emphasize the importance of the couple relationship. Bridewealth payment compensates the wife's family for the loss of her labor, both domestic and agricultural, and formalizes the transfer of sexual and reproductive rights to the husband's family – any

children from the marriage become part of the husband's lineage. Bridewealth thus symbolizes reproductive control of the wife by the husband and his family, as well as the dependence of husbands on older men in the family who negotiate the marriage and control young men's access to resources (Anderson, 2007). This practice can also be seen as part of a community system because payment received for a woman may then be used to pay her brother's bridewealth (Kuper, 1950).

Despite the universality of marriage, marital dissolution, mainly through divorce, is quite common across the subcontinent: Approximately one-third of first marriages in sub-Saharan Africa end in divorce within 20 years of marriage (Clark & Brauner-Otto, 2015). Because bridewealth is expected to be returned upon divorce, it puts a monetary price on women's compliance with marital norms and may deter them from leaving unhappy or abusive marriages (Ansell, 2001). Bridewealth can also limit a woman's decision-making power and autonomy by legitimizing a mindset of control and ownership by her husband that reinforces traditional gender roles and women's subservience to men (Abdul-Korah, 2014; Dodoo & Frost, 2008; Dodoo, Horne, & Biney, 2014).

The institution of bridewealth changed substantially over the 20th and early 21st century in much of the subcontinent. Traditionally, bridewealth payment was made in livestock or other valuable goods; however, with the development of cash economies since the colonial era, bridewealth payments have been increasingly made in cash (Abdul-Korah, 2014; Casale & Posel, 2010; Jensen, 2015; Posel & Rudwick, 2014). Payments have also become more individualized. Evidence from several African countries, such as Ghana, Kenya, and Zimbabwe, indicates that the expectations of payment increasingly fall on the groom himself rather than his family (Abdul-Korah, 2014; Ansell, 2001; Ferraro, 1983; Jensen, 2015; Posel & Rudwick, 2014). Although the amount of bridewealth varies both across and within societies, this amount can be substantial and as high as several times annual household income (Anderson, 2007; Casale & Posel, 2010; Dekker & Hoogeveen, 2002). As a result, the payment of bridewealth is often made in installments and over a long period of time (Casale & Posel, 2010; Dekker & Hoogeveen, 2002).

Bridewealth in Changing Marriage and Family Systems

The described changes in bridewealth have been part of a broader transformation of marriage in sub-Saharan Africa. Although marriage remains nearly universal in most parts of the region, individuals are marrying at later ages (Bongaarts, Mensch, & Blanc, 2017) and more individuals are selecting their own spouse (Loforte, 2000; Meekers, 1995a; Smith, 2001). Moreover, young men and women are increasingly dating and marrying for 'love' rather than as part of family obligations (Clark, Poulin, & Kohler, 2009; Luke, 2005; Poulin, 2007). Rising ages at first marriage and the changes in how men and women relate to each other before marriage may carry over into husband-wife power dynamics within marriage.

The increasing individualization of marriage and family relationships reflects both social and economic change in sub-Saharan societies. The spread of western-style education in much of the sub-continent, development programs aimed at reducing birth rates and raising age at first marriage, and increasing integration into the global economy and culture have introduced new images of individualized family relationships and companionate marriage

(Frye, 2012; Hendi, 2017; Thornton, Pierotti, Young-DeMarco, & Watkins, 2014). At the same time, rapid educational expansion, coupled with rapidly growing populations, has also meant a growth in the number of educated young people seeking jobs outside of family-based agricultural production (Al-Samarrai & Bennell, 2007; Filmer & Fox, 2014). Because labor markets have not kept up with these changes, levels of youth unemployment and under-employment are high (Al-Samarrai & Bennell, 2007; Filmer & Fox, 2014). Many young men, therefore, have difficulty raising money for bridewealth, leading to both delays in marriage and the substitution of informal partnerships for formalized unions (Clark & Brauner-Otto, 2015; Posel & Rudwick, 2014; Shadle, 2003; Shapiro & Gebreselassie, 2014; Silberschmidt, 2001). The ability to pay bridewealth is therefore increasingly a marker of a man's (and of his family's) economic success and status.

In the context of these complex and multidimensional transformations, the social meaning of bridewealth payments and their implications for women's well-being are unclear. Some recent studies suggest that the practice continues to constrain women's choices. For instance, using data from a vignette experiment in Ghana, Horne, Dodoo, and Dodoo (2013) showed that participants expressed greater disapproval of women's use of contraception when vignettes described women in bridewealth marriages. They concluded that bridewealth payments make the social expectations of men's control over women's reproductive life more salient. In a qualitative study of women in KwaZulu-Natal, South Africa, one theme that frequently emerged is the expectation that women in bridewealth marriages acquiesce to their husband's authority because any decisions made by their husband were considered final (Rudwick & Posel, 2015).

At the same time, other research hints that the new social meanings of bridewealth payments are increasingly consistent with a more individualized interpretation of marriage. For instance, in-depth interviews with secondary school students in rural areas of Lesotho and Zimbabwe demonstrated that some girls interpreted bridewealth payments as evidence of a husband's love for his wife and the value he places on the couple relationship, as well as a guarantee of marital stability (Ansell, 2001). In a study conducted in South Africa, men and women described the importance of bridewealth for their own pride and respect (Posel & Rudwick, 2014). Whereas women perceived the payment of bridewealth as proof of their value and worth, men viewed the payment as a manifestation of their manhood and ability to provide for their family. Yet, studies have argued that women see both positive and negative implications of bridewealth, believing that it enhances their economic security and social status while also acknowledging that it restricts their power and autonomy (Parker, 2015; Shope, 2006).

In this study, we build on the limited body of research on contemporary bridewealth marriage to consider changes in the prevalence of bridewealth and its current meaning in the context of a broader shift toward a more individualized marriage and family system. We present new evidence on trends over time in bridewealth drawn from a typical patrilineal rural setting. We then investigate how bridewealth is associated with different dimensions of women's experiences in marriage, including marital dissolution, employment outside subsistence agriculture, decision-making autonomy, and contraceptive behavior.

Hypotheses

Our overarching theoretical presumption is that bridewealth marriage is an institutionalized component of an extended family system rather than an individualized couple relationship. Based on this presumption, we develop specific hypotheses about several dimensions of this marital relationship in rural Mozambique.

As described above, a complex combination of economic and social factors have transformed marital and family systems in sub-Saharan Africa. This transformation may be contributing to declines in the centrality of bridewealth in the study area. We therefore expect to find a decrease in the overall prevalence of bridewealth marriage across marriage cohorts even after adjusting for other characteristics of marriage, such as parental involvement in choice of spouse or spousal age differences.

Hypothesis 1. Married women's likelihood of being in a bridewealth marriage has declined over time.

Because bridewealth is traditionally seen as a contract between families, we expect that marriages contracted through bridewealth payments will be more stable than marriages that did not involve such payments, regardless of other factors.

Hypothesis 2. Marriages that involve bridewealth payments are less likely to dissolve than non-bridewealth marriages.

Bridewealth marriages are characteristic of extended-family systems. These extended-family systems prioritize collective over individual decision-making. In particular, they tend to constrain wives' choices and preferences. Therefore, we propose that women in bridewealth marriages will be more likely to depend on husbands and family members in decision-making.

Hypothesis 3. Women in bridewealth marriages have lower levels of decision-making autonomy than women in non-bridewealth marriages.

The extended family systems that are typically associated with bridewealth marriage also tend to depend on family-based agricultural production. They provide financial transfers and food support that families may need in times of poor agricultural yields or other economic difficulties. Accordingly, women in bridewealth marriages should be more involved in subsistence agriculture, with more limited opportunities to engage in non-agricultural employment.

Hypothesis 4. Women in bridewealth marriages are less likely to work for pay than women in non-bridewealth marriages.

Finally, given the symbolic importance of bridewealth in representing the transfer of sexual and reproductive rights from the bride's to the husband's family, we expect that bridewealth will be associated with more traditional views of reproduction and the corresponding practice of fertility regulation.

Hypothesis 5. Women in bridewealth marriages are less likely to use modern contraception than women in non-bridewealth marriages.

The Study Setting: Rural Mozambique

Our data come from Mozambique, an impoverished nation in Southeast Africa with a population of almost 30 million and a gross national income per capita of \$480 (World Bank, 2019). Though Mozambique is poorer and less developed than most sub-Saharan countries, it is typical of the sub-continent with respect to its marriage patterns and customs and women's experiences in marriage. Our study uses data collected in rural parts of Gaza province in the south of the country, an area that is largely monoethnic and Changanaspeaking, predominantly Christian, and with a patrilineal traditional kinship system. Similar to much of rural sub-Saharan Africa, the study is characterized by nearly universal marriage, early onset of childbearing, and high fertility, with the total fertility rate in Gaza around 5.3 children per woman (Ministry of Health, National Institute of Statistics, & ICF International, 2013). As is typical for much of Mozambique and other parts of the subcontinent, the local rural economy is based on subsistence farming with few alternative income-generating opportunities. Low and unpredictable agricultural yields, scarcity of non-agricultural employment options, and the proximity of South Africa have led to massive male labor migration directed toward Mozambique's more prosperous neighbor. Labor migration started in the colonial era and mainly involved workers contracted by the Southern African mining industry (First, 1981). In more recent times, this migration has become more occupationally diverse and less formalized (de Vletter, 2007). Labor migration and the diversification of its outcomes have impacted not only the area's economy but also its social fabric, including marriage market and marital stability (Agadjanian & Hayford, 2018).

As in other patrilineal societies of the subcontinent, bridewealth, or lobolo (from the Changana word ku-lovola, literally "to take a bride through marital payment"), has been the anchor of traditional marriage in southern Mozambique (Bagnol, 2008; Junod, 1912), and has persisted despite attempts by the socialist government that came to power after Mozambique's independence from Portugal in 1975 to rid the country of this practice and other relics of the "backward" past (Sheldon, 2020). Bridewealth payments have shifted away from livestock and toward cash payments, reflecting the socioeconomic transformation of rural society, and in particular increases in cash-generating employment for men. While the amount expected or asked for a first-time bride may vary, a community survey conducted in the villages included in our project suggested that it typically hovers around the local currency equivalent of approximately \$300, a substantial amount for rural households. In addition to cash payments, gifts to the bride's parents—typically a suit for the father and capulanas (traditional wrap skirt) for the mother—as well as food and beverages for the wedding party are also expected. Marriage ceremonies also involve a transfer of gifts from the bride's family to the groom's family, but the scale and monetary value of such a transfer is nowhere near the value of the lobolo.

While lobolo traditionally functioned as a contract between two extended families, in the current context, as elsewhere in the subcontinent, lobolo is increasingly individualized on the groom's side, as men are expected to negotiate lobolo with their brides' parents directly and raise the cash on their own. In fact, the need to raise money for lobolo in rural areas with very limited cash-earning opportunities contributes to the large scale of male labor outmigration. Labor migration and the income it generates, in turn, are said to inflate lobolo

amounts. At the same time, men's massive outmigration and excess mortality increase the female-to-male ratio in marriageable ages, decreasing marriage opportunities for women. As a result, while payment of lobolo remains a standard general expectation and a marker of social status for both marital partners as well as for their natal families, our field observations suggest that full payment of lobolo is often postponed or forgone altogether. It is increasingly common that partners start coresiding and having children before lobolo payment is completed. Women and/or their families are, in theory, expected to repay bridewealth in the event of a divorce if it is initiated by the wife or if she is considered to be at 'fault' (e.g., she does not bear any children or is construed as 'failing' in other marital duties), but in practice lobolo payments, especially their cash component, may not be returned.

Partnerships that do not include bridewealth payments or the expectation of payments take a variety of forms. Men (especially married ones) and women may form temporary romantic and/or transactional relationships without the expectation of stability, and often without coresidence. These partnerships, according to our observations, are typically not referred to or understood as 'marriages'. Therefore, we do not consider such partnerships as marital unions in our analysis. Longer-term and more established marital relationships may include a public 'presentation' ceremony similar to the one that is typically followed (or, is expected to be followed) by a bridewealth marriage. Partnerships established following a presentation, but without subsequent lobolo payments, are usually co-residential, and partners consider each other—and are seen in the community—as a wife and a husband. There is no evidence that legal or religious marriages are replacing lobolo marriages in our study setting — only about 3% of married women in our sample reported a civil marriage (which usually also involves a church wedding). Notably, all of the civil marriages also involved at least some lobolo paid.

METHOD

Data

This study used data from a longitudinal survey conducted in southern Mozambique by the Center for African Studies of Eduardo Mondlane University (Mozambique). The survey design and implementation were approved by the Institutional Review Board of Arizona State University (USA) and Mozambique's National Bioethics Committee for Health. The first survey wave, conducted in 2006, collected data from 1,678 married women aged 18–40 in four contiguous districts in Gaza Province. By design, all the women in the sample were in marital unions, defined broadly as formalized marriages or informal yet socially legitimized marital partnerships. In each district, 14 villages were selected with probability proportional to size. Households were randomly selected with stratified sampling in each village to produce equal numbers of women married to migrants and non-migrants. Eligible women were randomly sampled within households, and approximately 30 women in each village were interviewed. For the second survey wave, in 2009, the survey team attempted to locate and re-interview all women from the original sample. Follow-up data collection efforts were carried out to maximize retention later in 2009 and in 2010. In total, the survey team successfully re-interviewed 85% of surviving women from the original sample. In

2011, a third wave of data was collected, with additional efforts to locate and interview the original respondents in the following two years. In total, the study team successfully located and re-interviewed 82% of the surviving women from the Wave 1 sample of women. In both Wave 2 and Wave 3, proxy interviews were carried out for women who moved or died since the previous wave. The present analysis primarily used data collected from the first wave of data collection (2006), with data from subsequent waves, including the proxy interviews, used to measure marital dissolution. After excluding women with missing data on one or more dependent and independent variables (n = 126), the final analytic sample consisted of 1,552 women. That our analysis is based on a sample of women is a limitation. However, while men's perspective is undoubtedly relevant, due to a high level of male labor outmigration from the study area, a sample of only currently present husbands would be very biased.

Measures

Bridewealth Marriage—Lobolo payment was included in this study as both a dependent and independent variable. In the first part of the analysis, which focused on prevalence of lobolo marriage over time (Hypothesis 1), lobolo payment is the dependent variable: we examined whether year of marriage predicts being in a lobolo marriage. We constructed this variable based on responses to the question 'Has your husband already paid lobolo completely, partly, or has he not yet paid lobolo at all?' Women whose husbands made complete or partial payments were coded as being in a lobolo marriage while women whose husbands did not make any payments were coded as not being in a lobolo marriage. To minimize recall bias (Sudman, Bradburn, & Schwarz, 1996), our measure of lobolo payment was taken from the Wave 1 survey, which occurred closer in time to the start of marriage.

Women's Experiences in Marriage—In its second part, our study investigated whether lobolo payment is associated with various dimensions of women's experiences in marriage, including marital dissolution (H2), decision-making autonomy (H3), work outside of subsistence agriculture (H4), and modern contraceptive use (H5).

Our marital dissolution outcome measured whether the respondent divorced the spouse reported in Wave 1 by Wave 3 (approximately 5 years later). We constructed this measure using data from marriage histories in Waves 2 and 3 as well as the proxy interviews. Because we were unable to ascertain the status of the Wave 1 marriages of all women in our study sample, we restricted this part of the analysis to a subsample of women (N = 1,342, or 80% of the Wave 1 sample) whose marriage status was known and who either remained married or divorced between survey rounds. Women who were widowed or who died during this period were excluded.

We operationalized women's interpersonal relationships via a measure that captures women's decision-making autonomy in the Wave 1 survey. A measure of women's autonomy was constructed from six questions asking women whether they needed to seek permission from their husband or husband's family to engage in certain activities. Respondents were asked the following question: 'Now I would like to ask you about things that you sometimes may want or need to do. About every one of these things, tell me

whether you (i) would need to ask your husband's or his family's permission to do them, (ii) would just need to inform them, or (iii) whether even informing them would not be necessary.' These activities were: to visit your parents or other relatives who live outside of this community; to visit a friend or neighbor who lives in this community; to go to the city or a district capital to buy or sell something or take care of some other business; to spend money on family needs (such as food, school materials, clothes for children); to spend money on your personal needs (such as *capulanas*, other clothes, shoes or earrings for you); and to get a job or to engage in commerce. Two additional activities about women's autonomy were asked but were not included in our autonomy scale. We excluded 'to take a sick child to a health center, hospital, or a traditional healer' because this question was only asked of women who had living children. We also excluded 'to do an HIV test' because a substantial proportion of women reported 'don't know'. Rather than exclude these women from the analysis or recode 'don't know' responses into one of the other categories, we dropped this question from the autonomy scale. Responses were scored 0 (have to ask), 1 (have to inform), and 2 (do not have to inform). The autonomy measure was coded as the sum of a woman's responses to these questions. Higher values reflect greater levels of autonomy. If a woman responded 'don't know' or had missing data for one or more activities, we averaged her responses for the activities for which she provided a response and then rescaled the average to match the possible range (0 to 12). In total, 111 women did not provide a response for one activity and 10 women for two activities.

The measure of women's employment outside of subsistence agriculture was constructed from responses to the question 'In the past month did you do any activity with the intention to make money or get products or things?' We coded this variable 1 if she engaged in paid work in the past month, and 0 otherwise. In this rural context, such work does not mean women's complete disengagement from subsistence agriculture: in fact, 99% of the Wave 1 sample reported at least some involvement in subsistence farming activities.

Finally, modern contraceptive use, measuring whether a woman is currently using modern contraception, was taken from the Wave 1 survey and was limited to non-pregnant women (N=1,218). We constructed this measure from responses to two questions, 'Are you now doing anything to avoid getting pregnant?' and (if the response to this question was affirmative) 'What do you do in order not to get pregnant?' If a woman responded yes to the former question and reported using a modern method (barrier or hormonal methods; excluding the very few cases of natural or traditional contraceptive method use), then she was coded as using modern contraception. Otherwise, she was coded as not using modern contraception.

Covariates—In the first part of our analyses we examined the relationship between year of marriage and bridewealth status. We grouped year of marriage into the following categories: 1977–1990, 1991–1995, 1996–2000, and 2001–2006. We present descriptive statistics showing unadjusted trends as well as multivariable regression models incorporating other characteristics of women and their marriages that may be associated with bridewealth payments. In the second part of the analyses, we tested for the hypothesized associations of being in a lobolo marriage with marital dissolution, women's decision-making autonomy, women's work outside of subsistence agriculture, and modern contraceptive use. These

analyses also included control variables that may be associated with lobolo payment as well as with our outcomes of interest.

In models predicting the lobolo status of marriage, we controlled for age at marriage because women who marry at older ages may enter into unions where lobolo payment may not be expected. We also controlled for spousal age difference (two years or less, 3–5 years, 6–10 years, 11+ years, don't know) because older men may be more likely to afford lobolo payment. Likewise, we controlled for women's age and spousal age difference in models predicting the other outcomes of interest because these outcomes may change as women get older and may differ according to the age difference with their spouse. In analyses of modern contraceptive use, we also controlled for fertility intentions. This measure was based on responses to the question 'Would you like to have (more) children in the future, even if not now?' If a woman responded yes, then she was coded 1 as desiring more children. Otherwise, she was coded as 0.

In all analyses, we included controls for educational attainment (none, 1–4 grades, 5+ grades) and religious affiliation (affiliated with organized religion or not). To control for household material conditions, we used information on household assets to construct a household wealth index (low, middle, high) employing principal components analysis (Filmer & Pritchett, 1999). We also controlled for husband's characteristics, such as educational attainment (none, 1–4 grades, 5+ grades, unknown) and whether the husband was a labor migrant. Finally, we controlled for marriage characteristics that may be related to being in a lobolo marriage and one or more of the other outcome variables. These variables included marriage duration (in years), polygynous or monogamous marriage, order of marriage (first vs. non-first), and respondent's role in marriage decision (involved in decision vs. not involved in decision). It is important to note that some of the control variables, such as household wealth, were measured at the time of data collection and may not reflect conditions at the start of marriage. Thus, they may be construed as mechanisms connecting lobolo status and current outcomes.

Analytic Strategy

We used logistic regression to investigate whether year of marriage predicts being in a lobolo marriage (H1) and whether lobolo status predicts divorce between Wave 1 and Wave 3 (H2); women's work outside of subsistence agriculture (H4); and modern contraceptive use (H5). We used linear regression to test whether lobolo status is associated with women's decision-making autonomy (H3). Because the survey used a clustered sampling design, whereby clustering occurs at the village-level, we included a village-specific random intercept in all models to account for this non-independence of individual observations.

RESULTS

Sample Characteristics by Lobolo Status

Table 1 presents descriptive statistics of our study sample by lobolo status. Women in lobolo marriages were, on average, older than women in non-lobolo marriages. Household wealth was strongly linked to lobolo status: women in lobolo marriages were significantly more

likely to reside in wealthier households. Women in non-lobolo marriages reported desiring more children, 78% compared to 66% in lobolo marriages; however, this difference was likely due to women in lobolo marriages being older and being, on average, more advanced in their childbearing careers. Women's educational attainment and religious affiliation did not vary by lobolo status. Differences were observed in husband and marriage characteristics. Specifically, women in lobolo marriages were significantly more likely to have older husbands and to have a greater age difference with them. They were less likely to be previously married and to have been involved in the marriage decision but were significantly more likely to have married at a younger age and to have been married to their current partner longer than their counterparts in non-lobolo marriages. Husband's educational attainment and the percentage of respondents with a migrant husband were similar by lobolo status.

Trends in Lobolo Marriages

The percentage of marriages with lobolo payment in the study sample declined markedly over time (Figure 1). Among first marriages that began between 1977 and 1990, 72% involved lobolo payment. In contrast, only 26% of first marriages that began in the 2001–2006 period were lobolo-based. The difference in the proportion of marriages that were lobolo-based between the earliest and most recent cohorts of marriages was statistically significant.

Table 2 presents the results of multilevel logistic regression models predicting lobolo marriage. Consistent with the descriptive results, year of marriage was strongly associated with being in a lobolo marriage in an unconditional model (Model 1). Marriages with earlier start dates had significantly higher log-odds of involving lobolo payment. The coefficients increased in magnitude as year of marriage declined, which supports H1 that lobolo marriages are becoming less common. In Model 2, we controlled for respondent's, husband's, and marriage characteristics. The coefficients for year of marriage remained large and statistically significant – in fact, coefficients are slightly larger in Model 2. Thus, changes in the prevalence of bridewealth marriage are not only the result of changing characteristics of marriage, but appear to be a generally shared trend. Because in some cases the first lobolo payment may not be made until after the start of marriage, we conducted sensitivity analyses to test whether dropping recent marriages (2004–2006) altered this association. Results showed that the association persisted even after excluding recent marriages from the analysis (the results of the sensitivity tests are available upon request).

Several control variables were also found to be associated with being in a lobolo marriage. Women who were older at the time of marriage, who lived in better-off households, had a large spousal age difference (6+ years) or did not know the age difference, or had a more educated husband (5+ years) were significantly more likely to be in a lobolo marriage. We also observed that women who were involved in the marriage decision or who had been previously married were significantly less likely to be in a lobolo marriage.

The observed downward trend in lobolo marriages might reflect the greater stability of lobolo marriages rather than a true decline in their prevalence (if non-lobolo marriages from earlier time periods were more likely to dissolve and therefore were not observed in the

survey). To test this possibility, we looked at earlier, dissolved marriages reported by women in the sample and pooled them with current marriages. While we have data on the lobolo status of current marriages, we lack this information for terminated marriages. Thus, we estimated lower and upper-bounds of the prevalence of lobolo marriages. To calculate the lower-bound, we assumed that all marriages with unknown lobolo status did not involve lobolo. To calculate the upper-bound, we assumed that all marriages with unknown lobolo status were lobolo-based. After calculating the lower- and upper-bounds, we still observed a declining trend in the prevalence of lobolo marriages (Figure 2).

Lobolo Status and Women's Experiences in Marriage

Figure 3 presents the distribution of the four outcome variables by lobolo status. In line with our expectations (H2), we found that the proportion of current marriages at Wave 1 that ended in divorce by Wave 3 was significantly greater among women in non-lobolo marriages, 22% versus 10%. The mean autonomy score, approximately five (out of 12 points), was similar by lobolo status. The percentage of women who engaged in paid work in the past month, however, differed. As we hypothesized (H4), a significantly higher proportion of women in non-lobolo marriages, 23%, engaged in paid work compared to 17% of women in lobolo marriages. In contrast, levels of modern contraceptive use among non-pregnant women did not vary by lobolo status: approximately 17% of non-pregnant women in lobolo marriages and 15% in non-lobolo marriages reported using modern contraception.

The results of the regression-based tests of these associations are shown in Table 3 and are largely consistent with the bivariate statistics. We examined whether lobolo status is associated with various dimensions of women's experiences in marriage after controlling for sociodemographic, husband's, and marriage characteristics. As predicted by H2, women in lobolo marriages were significantly less likely to divorce between Waves 1 and 3 compared to their counterparts in non-lobolo marriages, net of other factors. With respect to women's autonomy, we observed no association with lobolo status; H3 is therefore not supported. In contrast, supporting H4, regression models revealed that women in lobolo marriages were significantly less likely to have worked outside of subsistence agriculture in the past month than women in non-lobolo marriages, regardless of other characteristics. Finally, we observed no net association between lobolo payment and modern contraception use among non-pregnant women (H5 not supported).

DISCUSSION

The present study draws on population-based survey data from rural Mozambique to examine trends in the prevalence of bridewealth marriage and analyze the association of bridewealth with various dimensions of women's experiences in marriage in a context of changing marriage and family systems. Our study showed that the share of bridewealth marriages has been declining over time, though bridewealth payment still remains more prevalent among the better-off. Bridewealth marriage is strongly associated with marital stability. It is negatively associated with women engaging in employment outside subsistence farming, but not with their decision-making autonomy or modern contraceptive use. These findings illustrate the intertwined complexities of social and economic

transformations occurring in marital and family systems in this sub-Saharan context. Not only are changing bridewealth patterns reflective of a modernizing marriage system, but they are also a marker of economic status in an increasingly unequal society.

Our finding of the declining practice of bridewealth in rural southern Mozambique is the first, to our knowledge, to demonstrate such a trend in sub-Saharan Africa while controlling for sociodemographic and marital characteristics. Our results show that couples are increasingly entering marital unions without bridewealth payment. The changing nature of marriage formation, from being arranged by families to individuals selecting their own spouses (Loforte, 2000; Meekers, 1995b; Smith, 2001), is likely one of several factors contributing to the decline of bridewealth marriage: In fact, as our results indicate, women who were involved in their marriage decisions were significantly less likely to be in bridewealth unions. Furthermore, additional, even if indirect, evidence for the decline in family involvement in marriage processes is supported by our finding that bridewealth marriage is associated with greater spousal age gaps. Previous research has suggested that larger spousal age gaps are more common in arranged marriages compared to 'choice' marriages (Carmichael, 2011; Ghimire et al., 2006). However, the decline in bridewealth marriage over time is statistically significant even after accounting for arranged marriage and spousal age gaps. Moreover, we observed that bridewealth marriages were concentrated among the better-off in rural southern Mozambique. This finding parallels, with appropriate qualifications, the patterns observed in the United States, where marriage is increasingly perceived as a privilege and an accomplishment, mainly achieved by couples with higher socioeconomic status (Cherlin, 2004; Lundberg et al., 2016). The declining practice of bridewealth, along with evidence that bridewealth marriages are associated with less involvement of spouses in marital decisions and greater spousal age gaps, lends support for marital and family change theories that predict a shift from family-centered to couplefocused and individualized marriage as societies modernize (Goode, 1963; Lesthaeghe, 2010; Thornton, 2013). At the same time, our finding that bridewealth marriage is still practiced among the rural elite suggests that bridewealth may not go away with modernization and instead may become part of it, by retaining importance as a symbol of (individual and family) wealth and status (Sennott, Madhavan, & Nam, Forthcoming).

While the proportion of marriages that involve bridewealth payments has declined, the salience of bridewealth for marital stability is evident. Women in bridewealth marriages were significantly less likely to divorce over a five-year period than women in non-bridewealth marriages, even after controlling for characteristics associated with both bridewealth payments and marriage outcomes, such as age at marriage and polygyny status. This finding illustrates the fact that in the context of very low prevalence of civil marriage, which characterizes our study area and much of the rest of sub-Saharan Africa, bridewealth remains a primary, if not the only, mechanism of marriage formalization, and as such, an important factor in its stability. And although numbers are small, our data show that civil marriage (and religious ceremony that typically accompanies it) is not replacing bridewealth marriage – instead, it goes alongside bridewealth.

In line with our expectations, we found that women in bridewealth marriages are less likely to work outside of subsistence agriculture, and that this association persists when controlling

for potential confounders such as education and household wealth. Thus, differences in women's non-farming employment do not appear to reflect only a difference in socioeconomic characteristics across marriages with and without bridewealth. We suggest that payment of bridewealth retains its traditional connection with subsistence farming and family economies. African societies that have bridewealth as part of marriage customs tend to be societies where women hold central roles in agriculture (Boserup, Tan, & Toulmin, 2013). Not only does bridewealth payment afford the husband's family rights to his wife's sexual and reproductive capacity, but it also compensates her natal family for the loss of her productive capacity, especially her agricultural labor. At the same time, women in nonbridewealth marriages may be more likely to work outside of subsistence farming because they are not expected to meet the agricultural production needs of the husband's family. Compared to their peers in bridewealth marriages, they may have more opportunities to work in other occupations to meet their family's financial needs. Furthermore, women in non-bridewealth marriages may lack the extended family ties and material and nutritional safety that bridewealth marriage is expected to provide and therefore may be pressured into paid work to secure themselves (and their families) financially.

Contrary to our expectations, we observed no association of bridewealth payment with women's decision-making autonomy or with modern contraceptive use. Our null findings for these outcomes also differ from other studies of bridewealth marriage in the subcontinent that do find lower contraceptive use and reproductive autonomy for women in bridewealth vs. non-bridewealth marriages. For example, a study using hypothetical data from a vignette experiment in Ghana found that bridewealth marriage has strong, consistent negative effects on reproductive autonomy (Horne et al., 2013), and survey data from Uganda showed that bridewealth marriage was associated with lower contraceptive use when women wanted to stop childbearing but their husbands did not (Dodoo & Dodoo, 2017). Qualitative interviews of Ghanaian adolescent boys regarding their expectations of authority in bridewealth marriages found that boys anticipated that bridewealth payments would give them more marital authority (Frost & Dodoo, 2010).

Multiple elements of research design and measurement may explain these differences. For example, data from vignette experiments and qualitative interviews effectively capture norms and expectations, while our survey data on behavior and practices may better measure current realities. In addition, although we control for women's fertility desires, we do not account for husband's fertility desires, which also have a strong influence on contraceptive uptake (DeRose & Ezeh, 2005; Prata et al., 2017), or other factors influencing contraceptive attitudes and uptake. Thus, our measure of contraceptive use does not fully account for reproductive autonomy. Furthermore, our autonomy measure integrates multiple physical, social, and economic aspects of women's autonomy, while prior studies treated reproductive and business autonomy as separate domains.

Our study is not without limitations. Our measure of bridewealth payment is constructed from information collected from women about whether their husband has paid bridewealth in full, partially, or not at all. Because bridewealth negotiations are conducted primarily between the groom and wife's family, the wife is not always fully informed of decisions (Meekers, 1992). This limitation is relatively minor, however, as the clauses of bridewealth

transfers are typically well established (often in writing) and agreed upon. Our study may also be affected by selection. Women entering bridewealth marriages may be inherently different from women in non-bridewealth marriages on some characteristics that we cannot account for with our data. Unobserved heterogeneity could affect selection into bridewealth marriage as well our outcome variables. However, we do control for some key predictors of marital stability and women's activities, including age at marriage, woman's education, and household characteristics. Further, to the extent that these selection processes reflect current meanings of bridewealth marriage, they do not detract from our primary goal of understanding the role of bridewealth payments in contemporary marriage systems. In analyses of divorce, we could not include all women who were part of the Wave 1 sample because some women died or migrated out of the study area and could not be located. While we tried to ascertain the marital trajectories of those women through proxy interviews with their neighbors or any remaining family members, we could not obtain this information for all women who were lost to followup. These women may be different from women included in these analyses.

These limitations notwithstanding, this study's findings contribute to our understanding of the role and meaning of bridewealth and, more broadly, of the changing nature of marriage in rural sub-Saharan Africa. The decline in the practice of bridewealth reflects a shift from marriage that is embedded in a broader kinship and family system to couple- and individual-focused unions. This shift in the nature of marriage stems from both socio-cultural change and the economic transformation of rural society and its growing heterogeneity. As income inequality rises, bridewealth marriages are becoming less common but are also increasingly confined to the rural socioeconomic elite, further reasserting their privileged status. At the same time, the declining prevalence of bridewealth marriages, along with the persistently low levels of civil registration, may lead to a further rise in marital dissolution, with negative implications for rural women, particularly as it relates to their access to economic resources. Future research on marriage and family in sub-Saharan Africa should focus on the specific meanings and practices of family behavior in local social and cultural contexts, but also situate these meanings in global systems of family change.

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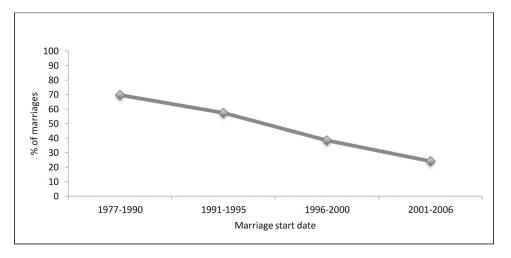


Figure 1. Prevalence of lobolo marriages

Note: The prevalence of lobolo is significantly different (p<0.001) between the earliest and most recent marriage cohorts.

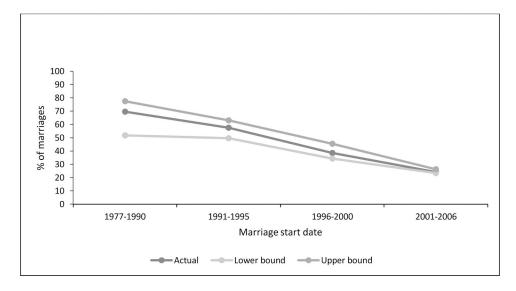


Figure 2. Prevalence of lobolo marriages under different scenarios

Notes: The lower bound estimate is based on the assumption that all marriages with unknown lobolo status did not involve lobolo payment. The upper bound estimate is based on the assumption that all marriages with unknown lobolo status involved lobolo payment.



Figure 3.
Outcomes by lobolo status
Notes: ‡ Autonomy score ranges from 0 to 12.
§ Among non-pregnant women.

: p<0.01; *: p<0.001.

Table 1.Descriptive statistics (means or percentages) of respondents in study sample, rural Mozambique (measured at Wave 1)

	Non-lobolo marriage	Lobolo marriage	
Age (years)	25.7	28.9	***
Educational attainment (%)			
None	27.2	22.6	
0–4 grades	43.8	49.2	
5+ grades	29.1	28.2	
Affiliated with organized religion (%)	87.3	85.3	
Wealth (%)			***
Low	19.2	8.6	
Middle	72.2	67.3	
High	8.6	24.2	
Desires more children (%)	77.5	66.2	***
Husband's age (%)			***
18–29	41.1	19.0	
30–39	27.4	33.9	
40+	9.7	25.7	
Don't know	21.9	21.5	
Spousal age difference (%)			***
Two years or less	22.6	14.2	
3–5 years	27.2	22.9	
6–10 years	18.7	24.4	
11+ years	9.7	17.1	
Don't know	21.9	21.5	
Husband's educational attainment (%)			
None	15.6	11.8	
0–4 grades	34.1	35.3	
5+ grades	34.0	35.2	
Unknown	16.3	17.7	
Migrant husband (%)	40.7	45.3	
Polygynous marriage	16.1	25.8	***
Previously married (%)	17.1	8.4	***
Year of marriage (%)			***
2001–2007	48.3	23.1	
1996–2000	33.3	31.3	
1991–1995	12.7	25.7	
1977–1990	5.8	20.0	
Age at marriage (years)	19.3	18.7	**
Marriage duration (years)	6.3	10.2	***
Involved in marriage decision (%)	71.8	57.4	***

Non-lobolo marriage Lobolo marriage

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	Non-lobolo marriage	Lobolo marriage	
N	932	620	

^{*}Significant at p<.05;

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^{**} p<.01;

^{***} p<.001.

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Table 2.

Multilevel logistic regression models predicting lobolo marriage, rural Mozambique

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VARIABLES	Model 1	Model 2
Year of marriage (ref. 2001–2006)		
1996–2000	0.69***	0.83 ***
	(0.14)	(0.15)
1991–1995	1.52***	1.63 ***
	(0.16)	(0.18)
1977–1990	2.06***	2.18***
	(0.20)	(0.22)
Age at marriage		0.05*
		(0.02)
Educational attainment (ref. None)		
1–4 grades		0.19
		(0.16)
5+ grades		0.20
		(0.19)
Affiliated with organized religion		0.20
		(0.18)
Household wealth (ref. Low)		
Middle		0.73 ***
		(0.19)
High		1.76***
		(0.24)
Spousal age difference (ref. Two years or less)		
3–5 years		0.19
		(0.19)
6–10 years		0.64 **
		(0.19)
11+ years		0.77***
		(0.23)
Don't know		0.49*
		(0.21)
Husband's educational attainment (ref. None)		
1–4 grades		0.33
		(0.20)
5+ grades		0.51*
		(0.21)
Unknown		0.54*

VARIABLES	Model 1	Model 2
Migrant husband		0.18
		(0.12)
Polygynous marriage		0.30+
		(0.16)
Respondent involved in marriage decision		-0.57***
		(0.13)
Previously married		-0.88***
		(0.23)
Constant	-1.19***	-3.55 ***
	(0.12)	(0.51)
Village-level variance	0.44***	0.47***
	(0.08)	(0.09)
N	1,552	1,552

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Note: Coefficients with standard errors in parentheses

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^{***} p<0.001,

p<0.00

^{**} p<0.01,

^{*}p<0.05.

Table 3.

Multilevel regression models predicting marital dissolution, women's autonomy, women's paid work, and modern contraception use, rural Mozambique

	Divorced by Wave 3	Autonomy score	Paid work in past month	Modern contraception use
Lobolo marriage	-0.52**	-0.18	-0.50**	-0.05
	(0.19)	(0.14)	(0.16)	(0.20)
Age	-0.26*	0.31 **	0.30**	0.31*
	(0.13)	(0.10)	(0.11)	(0.15)
Age squared	0.00*	-0.00 **	-0.00*	-0.01*
	(0.00)	(0.00)	(0.00)	(0.00)
Educational attainment (ref. None)				
1–4 grades	0.01	-0.21	0.35*	0.48
	(0.20)	(0.15)	(0.17)	(0.26)
5+ grades	-0.14	-0.17	0.53*	0.90**
	(0.24)	(0.19)	(0.22)	(0.29)
Affiliated with organized religion	0.04	-0.21	-0.08	-0.36
	(0.24)	(0.18)	(0.20)	(0.30)
Household wealth (ref. Low)				
Middle	-0.62**	-0.01	-0.08	0.13
	(0.21)	(0.17)	(0.19)	(0.27)
High	-0.54	0.24	-0.56*	0.80*
	(0.30)	(0.23)	(0.27)	(0.33)
Desires more children				-1.08 ***
				(0.20)
Husband's age (ref. 18–29 yrs)				
30–39	0.05	-0.29	0.23	-0.51*
	(0.22)	(0.18)	(0.20)	(0.25)
40+	-0.61	-0.26	0.49	-1.08**
	(0.38)	(0.25)	(0.28)	(0.38)
Don't know	-0.23	-0.03	0.70**	-0.49
	(0.24)	(0.20)	(0.22)	(0.31)
Husband's educational attainment (ref. None)				
1–4 grades	-0.23	-0.07	0.08	0.50
	(0.25)	(0.19)	(0.21)	(0.30)
5+ grades	0.00	-0.05	0.26	0.50
	(0.26)	(0.21)	(0.23)	(0.32)
Don't know	0.12	0.14	-0.12	-0.13
	(0.28)	(0.22)	(0.25)	(0.39)
Migrant husband	-0.07	1.16***	-0.07	-0.30

		,		
	Divorced by Wave 3	Autonomy score	Paid work in past month	Modern contraception use
	(0.16)	(0.12)	(0.14)	(0.18)
Marriage duration	-0.10***	0.04*	-0.01	0.07*
	(0.03)	(0.02)	(0.02)	(0.03)
Polygynous marriage	0.62**	0.10	-0.09	-0.22
	(0.20)	(0.16)	(0.18)	(0.24)
Previously married	0.15	0.08	-0.17	0.20
	(0.27)	(0.21)	(0.23)	(0.33)
Involved in marriage decision	-0.19	0.28*	0.02	0.09
	(0.17)	(0.13)	(0.15)	(0.19)
Constant	3.54*	-0.65	-6.28***	-6.03 **
	(1.75)	(1.36)	(1.59)	(2.08)
Village-level variance	0.09	0.45 ***	0.30 ***	0.31 ***
	(0.08)	(0.13)	(0.12)	(0.15)
N	1,342	1,552	1,552	1,219

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Note: Coefficients with standard errors in parentheses. Linear regression is used to predict women's autonomy. All other outcomes are predicted using logistic regression.

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p<0.001,

^{*}p<0.01,

p<0.05.