Terms of marriage and time-use patterns of young wives – Evidence from rural Bangladesh

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Abstract

This paper explores the relationship between marriage arrangements and daily activities of young married women, using detailed time-use data from an adolescent study in rural Bangladesh. Measures of marriage arrangement are payment of dowry and the relative wealth status of natal and marital families. The data were collected in three rural districts in 2001 and 2003. Using multivariate regression analysis, the results show that women's time spent in domestic work, socializing, and self-care is significantly associated with marriage arrangement variables. Those who paid dowry spent more time in domestic work and less time in self-care relative to those who did not pay dowry. These patterns of association are similar to those the authors found in an earlier study between marriage arrangements and domestic violence, where paying dowry and marrying up are associated with greater violence. This paper contributes evidence regarding the non-market determinants of women's time use patterns and highlights the contribution of marriage-related decisions to women's well-being.

JEL-Codes: D1, J22, J16, J12

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1   Introduction

Families in rural Bangladesh invest heavily in the marriages of daughters as a way of ensuring their daughters' well-being. Making a good match often receives priority over a good education or investments in human capital that would lead to success in the labour market (Mahmud and Amin, 2006). A good marriage is the outcome of many factors besides education – family wealth, good reputation, good connections, and the availability of suitable grooms and funds for dowry (Amin and Cain, 1997). This paper follows on earlier work by the authors to explore how well these marriage investments deliver on the promise of a good life for young women after marriage.

Contrary to expectations of the bride's family that dowry (marriage payment made to the groom and his family by the bride's family) will ensure better treatment of girls in marriage, Suran et al. (2004) found that the payment of dowry is associated with an increased likelihood of domestic violence in the early years of marriage. They found the relationship to be non-linear: while it is true that among those who pay dowry, more dowry is associated with less violence, marriages that take place with no dowry are associated with less violence than those that involved the highest dowries.

By exploring a detailed data source on young women's time-use patterns in conjunction with detailed data collected on their marriage arrangements, we shed light on the more general relationship between marriage arrangements and marital well-being. We analyse time-use data based on 24-hour recall to determine the amount of time spent in domestic work, self-care, productive work and social time in relation to marriage variables and other background variables. Our objective is to understand the implications of marriage decisions for the day-to-day lives of young married women. If dowry is indeed a way to ensure a daughter's well-being in her marital home, as many families assume (Amin and Huq, 2008), then more dowry should be associated with more social time, less work, and more rest. Hypergamy, or marrying a groom from a wealthier family, would produce similar outcomes. Because a groom from a better-off family is more desirable, all else being equal, hypergamy is associated with greater dowry paid (Rao, 1993).

2   Theoretical background

There are relatively few examples of detailed analysis of time-use data in developing-country settings. One comprehensive review of available time-use studies (Ilahi, 2000) concludes that such data are particularly important for understanding dynamics when nonmarket economic activities are significant determinants of well-being. In many parts of the world women's childrearing and domestic activities fall into this category. Studies of time use that focus on

the length of the workday find substantial differences in time-use patterns by age, gender and socioeconomic status (Cain, 1977; Cain et al. 1979). Time-use studies have been crucial in understanding gender differences in work patterns and women's domestic responsibilities and in explaining gender differences in labour market participation across societies. For example, comparisons across four rural communities in South Asia documented significant variation in women's involvement in agricultural work and showed substantial domestic work burdens for women in all communities (Jain, 1985).

Much of this analysis of time use focuses on productive work, with all forms of leisure as a residual category. Larson and Verma's (1999) review of time-use literature points to the importance of studying patterns of leisure time as it relates to more productive outcomes – for example, the consequences of time spent in organized sports and with friends for outcomes such as school performance. These issues primarily pertain to unmarried adolescents. While this literature suggests that it is important to explore the finer points of leisure time and its nature, it offers little by way of understanding leisure as an indicator of quality of life per se or what the implications may be for married adolescents.

Examining variations in the nature of time use as a reflection of status is a major preoccupation of leisure studies (Katz-Gerro, 2002, 2004). Gender differences in leisure time are also analysed to understand differences between men's and women's patterns of cultural consumption and time spent in sports in addition to status attainment generally (Jackson and Henderson, 1994).

The promise of comparing time use among women with different life experiences as a quality-of-life measure, specifically as an indicator of empowerment, finds support in the women's status literature (Basu and Koolwal, 2005). Analysts increasingly recognize that status has multiple dimensions. Although it is common to measure status using knowledge and attitude variables related to contributions to the household and other forms of altruistic behaviour or behaviours that make women more productive or functionally useful, it is not widely recognized that taking care of women's own needs may have important implications for women's status as well. It has been argued to be particularly important as a determinant of their health (Agarwal, 1997). Basu and Koolwal (2005) argue that self-indulgence, the ability to act in ways that serve women's own needs, has particular benefits for women's well-being. Using activity prompts that indicate such leisure activities as reading the paper, listening to the radio and watching television, they find these variables to be associated with better health outcomes. They find that self-indulgent variables – which they also label 'unproductive freedoms' – stand in sharp contrast in their association with women's own health status to variables that indicated women's responsible behaviour towards others. They interpret these associations not as causal but rather as related to factors such as good status in the household and control over resources that lead to more self-indulgent behaviours on the one hand and better health on the other.

We explore correlates of time spent in two types of self-indulgence – social time and self-care – in addition to productive and domestic work, as measures of the post-marriage domestic

environment. Our measure of social time includes visiting friends and relatives and captures some aspects of social networking and freedom of movement. Our experience in rural Bangladesh, particularly our observations of the severely circumscribed lives of young, married women, does not lead us to expect much variability in this measure across a sample of recently married women. Rather we focus on activities that we label self-care, including time spent resting (whether sick or otherwise, but not sleeping), bathing and grooming. In the way we categorize our data, self-care is leisure time that is spent alone and some aspects of it such as personal grooming may be interpreted as culturally sanctioned leisure activity that has connotations of self-indulgence.

When a young bride first enters her marital home, the restrictions on her social interactions increase even as her social networks shrink to little more than her immediate family members. She is expected to spend her time learning her new roles in running the household and doing her share of domestic activities. It is generally considered inappropriate for a young bride to talk, play or socialize with neighbors. However, a caring husband or mother-in-law might indulge a young bride by allowing her extra time to rest or groom herself. These indulgences are indicated by family members buying her hair oil and fragrant soap or cosmetics. Even among women who are thus indulged by family members, however, whether a new bride actually spends time grooming herself, we hypothesize, depends on the extent to which she is confident about her status in the marital household and reasonably assured that such behaviours will not reflect poorly on her upbringing and be frowned upon.

3 Methods and material

As part of a project on adolescent livelihoods[1], survey data were collected in 2001 and 2003 from female adolescents aged 13-21 who were chosen randomly from 90 villages in three districts of rural Bangladesh. In 2001, 2,386 female adolescents were contacted successfully and completed the initial interviews. During a follow-up survey conducted from January to June 2003, 2,214 of the original female respondents were contacted and re-interviewed. .[2]

Detailed time-use data were collected as part of the questionnaire, which included information on individual and family variables. Time-use diaries were constructed for the day prior to the

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[1] The project, entitled Kishori Abhijan (Adolescent Girls' Adventure), was a UNICEF-funded initiative on adolescent livelihoods implemented by two development NGOs, the Bangladesh Rural Advancement Committee (BRAC) and the Centre for Mass Education in Science (CMES), in three districts of rural Bangladesh. The Bangladesh Institute of Development Studies, in collaboration with the Population Council, conducted a two-and-a-half-year investigation to document the implementation and results of the project. Kishori Abhijan enrolled fewer than 20 per cent of the survey respondents because the survey was meant to be a representative sample of adolescents generally and not just of adolescents in the livelihood program. The majority of married respondents did not participate in Kishori Abhijan.

[2] 584 of the 2,386 respondents with whom follow-up interviews were attempted had migrated, mostly owing to marriage. Interviewers were able to re-interview 476 of these respondents because they had relocated elsewhere within the same district.

interview using a sequential recall of activities. Beginning by recording the time at which the respondent woke up, the interviewer marked off and recorded activities in an open-ended manner on a time grid. The interviewer asked and recorded whether the activity was conducted while taking care of a child. If a respondent reported doing two or more activity at the same time, a follow-up question determined how much effort was devoted to each and time was allocated proportionately. Sixty-eight types of activity were later classified into productive work, domestic work, self-care, social time and sleep. Interviewers recorded the starting and ending time of each activity, and this information was later converted into hours and minutes.

We limited our sample to currently married women (N = 1,278). Time-use data were taken from the 2003 survey, while data on background characteristics such as marriage, education and parental characteristics were first collected in 2001 and updated, when relevant, in 2003. The questionnaire also included detailed information concerning the circumstances surrounding marriage, including dowry, marriage timing and the characteristics of husbands' and natal families.

The regression results are interpreted only in associational rather than causal terms. We present regression results from models in which the proportion of time spent in different time-use categories is represented. We compared these results with those of Tobit models where the total amount of time rather than the proportion of time was estimated. The two methods yielded identical results in terms of the signs and significance of coefficients.

We realize that factors unobserved in the data may determine both marriage arrangements and time-use patterns. Qualitative data from a study in northern Rajshahi suggest that factors such as a compromised family situation, bad reputation, volatile temper or disability may result in a deleterious marriage arrangement with negative consequences for women's well-being after marriage (Amin and Huq, 2008). To test for the existence of such a selection effect, we estimated a Heckman selection model. The selection equation reflected whether dowry was paid and the explanatory variables were age at marriage, wealth of bride's household and bride's education. The likelihood ratio test for independence of the two equations (selection equation and time use) revealed that the two equations were independent.

In light of this result, we are justified in estimating only the time-use equation and including dowry payments as an explanatory variable. It is nevertheless important to understand differences between dowry payers and non-payers to better interpret the results on dowry. These are discussed in the following section.

4   Results

Table 1 contains data on the variables used in the analysis. Since the original sample was adolescents aged 13 – 21 in 2001, the study is limited to young married women. The mean age of the respondents was 20.4 years in 2003. The mean age at marriage of these married

respondents is 15.3 years (data not shown), and more than 75% of respondents had ever attended school, for an average of 4.7 years of schooling. Three-fourths of marriages involved a dowry payment, which averaged about 9,849 taka[3]. On average, the respondents have 1.2 children. The regional distribution of this sample of married women is influenced by the age patterns of marriage. Since age at marriage is generally later in Chittagong district, a lower proportion of the sample is from that district compared to the two other districts. The districts differ in other ways and these differences are discussed later in the paper.

Poverty status and relative wealth of natal and marital families are of interest in this analysis. Wealth status of natal and marital families is a composite measure calculated from a list of possessions. These are dummy indicators for whether the household owns a radio, television, bed, quilt/ blanket, chairs/ table, power tiller, shallow machine (pump), rice mill, rickshaw /van, bicycle, motor bike, dhenki (manual rice thresher), cattle, goats and electricity in the house. All households in the sample are ranked by where they fall in terms of this possessions index. Wealth inequality between natal and marital families of the respondent is a variable of interest in the analysis and is constructed by comparing the relative ranking of natal and marital family. While this measure allows us to rank households, because the distribution of the score is not smooth but lumped on certain numbers, it does not capture the degree of difference between households well. The majority (40%) of marriages were between families of similar status and approximately 34% and 26% of respondents married up and down respectively.

Dowry is also introduced as a relative rather than an absolute measure and is adjusted for inflation using the price of rice as a deflator (for justification of the choice of deflator see Amin and Cain (1997)). Five categories of dowry payments have been defined, with no dowry used as the reference category. Among those who paid dowry, respondents were categorized into relative dowry quartiles within their district. Dowry is measured as a district-specific variable because marriage markets and practices are local and the overall level of dowry varied considerably from district to district.

Table 2 shows some salient characteristics of dowry payers and non-payers. There are no apparent differences in terms of age, number of children and relative wealth status between dowry payers and non-payers. However, in general those who do not pay dowry appear to be from a higher economic status and they are also more likely to be married into households of high economic status. Those who do not pay dowry are also more likely to be married to men in high status non-agricultural occupations. Dowry payers are less likely to be educated whether education is measured in terms of the respondent's own education or her mother's, her husband's or her father's education. Our hypothesis is that not paying dowry has come to symbolize a stronger bargaining position for women in the marriage market. Their status may derive from education, wealth or from other characteristics not captured in the data such as religiosity or family name.

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[3]   1 US$ = 59 Bangladeshi taka in 2005

Table 1
Distribution of dependent variables, married adolescent women,
Kishori Abhijan Survey, Bangladesh, 2001 and 2003

Variables	Variable type	Mean
Age (years)	Continuous	20.4
Years of education	Continuous	4.7
% paid dowry at marriage	Binary*	74.4
Mean inflation-adjusted dowry (Taka)	Continuous	9,849
% with children	Binary*	75.9
Number of children	Continuous	1.2
Husband is in Business or Salaried Employment		35.6
% randomly sampled[a]	Binary	87
District	Categorical	
% from Chapainawabganj		44.9
% from Chittagong		15.7
% from Sherpur		39.4
Relative wealth of wife's and husband's family (%)		
Wife = husband		40.5
Wife <husband		33.8
Wife > husband		25.7
Natal Family's Relative Wealth Ranking		
Highest Quartile		22.0
3rd Quartile		24.6
2nd Quartile		33.0
Lowest Quartile		20.5
Husband's Family's Relative Wealth Ranking		
Highest Quartile		26.7
3rd Quartile		24.6
2nd Quartile		31.6
Lowest Quartile		17.1

* Not included in model – shown for descriptive purposes only; To ensure that enough respondents would join a program, researchers purposively sampled girls who were thought to be more likely to join (i.e., younger girls with parents who had a history of involvement in NGOs), representing 13% of the current sample after allowing for missing information. To control for bias associated with this nonrandom selection in a subset of the sample, a binary variable equaling 1 if the respondent was randomly sampled and 0 otherwise was entered in all models.

Source: Authors' calculation, Kishori Abhijan Surveys, 2001 and 2003.

Such status may translate into assumptions that grooms will benefit from a marriage alliance in kind rather than cash and therefore grooms and their families are likely to demand and receive less "up front" at marriage. These supportive factors may not allow women to do many radically liberated things but may allow them to indulge in taking care of themselves better. In addition, paying a dowry may also have direct implications for quality of life in the initial years of marriage. Paying a dowry may compromise a woman's bargaining position

after marriage. It is likely that the fact of paying a dowry is interpreted as a measure of her inferior qualities so that the groom requires compensation for marrying her. This may then set wives on a path of poor treatment in the husband's family, leading to a heavy work burden and less time for self-care. From our conversations with parents we got the sense that for most poor households not paying or marrying for choice were not in their realm of possibilities. They appeared to operate under the assumption that paying dowry and more of it to the extent they could afford it, would be a marginally better decision. The possibility that the motives of grooms who demand dowry and drive a hard bargain may be suspect is not a common perspective for the poor. However, it is also clear that these choices are only one of the many inferior choices that are forced upon women by poverty.

Table 2
The characteristics of dowry payers and non-payers

Variables	Mean/Proportion Dowry Payers	Mean/Proportion Dowry Non-payers
Age of respondent in years	20.33	20.50
Average number of children borne by woman	1.21	1.21
Proportion of marriages where		
Wife and husband equal status	0.41	0.39
Wife is wealthier	0.25	0.29
Husband is wealthier	0.34	0.32
Husband has a high status nonagricultural occupation	0.32	0.45
Average proportion of marriages with dowry in division		
Chapainawabganj	0.40	0.63
Sherpur	0.41	0.27
Chittagong	0.19	0.11
Natal family's wealth quartile		
Highest quartile	0.19	0.29
Third quartile	0.23	0.29
Second quartile	0.33	0.32
Lowest quartile	0.24	0.10
Husband's family wealth quartile		
Highest quartile	0.25	0.33
Third quartile	0.23	0.28
Second quartile	0.32	0.30
Lowest quartile	0.20	0.09
Average years of education of respondent	4.30	5.71
Father has more than primary education	0.27	0.33
Mother has more than primary education	0.13	0.19
Husband has more than primary education	0.43	0.58

Source: Authors' calculation, Kishori Abhijan Surveys, 2001 and 2003.

We ran multivariate regressions using per cent of time spent in the various activity categories as the dependent variable. Measuring childcare is difficult particularly when it is not exclusive or for pay and is provided by a caregiver who looks after a child while doing other activities throughout the day. Most women do not report childcare as a simultaneous activity with cooking or cleaning, which might take precedence in reporting. Our measure is more likely to identify episodes such as bathing and feeding a child when it is being done as an exclusive or a primary activity. Aspects of childcare that are underreported are watching the child or supervising schoolwork or play.

Before presenting our results, we mention several caveats. Most importantly, although we use causal models, we acknowledge that many of the behaviours we consider are determined by common factors. The same factors that determine marriage arrangements may also determine time use. Our purpose is not to suggest causal models but to demonstrate how variables are grouped together to form patterns. Second, although the sample is drawn from a cohort of women twenty-three years or younger, we expect this to be a relatively small bias given the very early age at marriage in Bangladesh and the high proportions of girls who are married by the age of nineteen. The five categories of time use examined are domestic work, productive work, self-care, social time and sleep[4]. The list of activities included in the first four categories appears in Appendix 1. All respondents reported some time spent in sleep, self-care and domestic work. Only 72% reported activities that we classify as socializing, and 40% reported activities that we classify as productive work (data not shown)[5].

Table 3 shows the distribution of the dependent variable. On average women in the sample spent 7% of their time in productive work, 21% in self-care, 28% in domestic chores and 6% in social time/ leisure. The remaining 38% was spent sleeping. Since few women work outside the home and many households are engaged in subsistence farming in the study areas, the category of productive work comprises mostly home-based agricultural processing activities and animal care. As a result the lines of distinction between domestic work and productive work are somewhat blurred. Cash-earning opportunities in high-status jobs are rare in the study population since it is unusual for young married women to engage in such work.

Table 4 shows coefficients associated with covariates of time spent in four activity categories from multivariate regression analysis. The dependent variables are the percentage of total time in spent in domestic work, productive work, self-care and social time/ leisure activities during

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[4] The respondent was asked to report all activities she engaged in within the twenty-four hours preceding the interview beginning with time of waking and ending with time the respondent went to sleep. Sleep time was derived as the remainder. After this listing was completed, she was asked whether a child was in her care during the activities reported. For example, a woman could report childcare during sleep. In fact, a substantial percentage of respondents reported performing childcare during sleep in both 2001 (40 per cent) and 2003 (48 per cent). Another possibility is that mothers who did not report childcare during sleep may have had relatives or other persons living in the household who also take care of children.

[5] Given that many activities in a woman's life are related to subsistence, we used our knowledge of the local economy and previous analyses of time use in rural Bangladesh conducted by Cain (1977), Amin (1997), and others to classify particular tasks around the house as productive. Tasks that are not directly remunerative may nevertheless be classified as such, if they represent a cost-saving activity.

the twenty-four hours prior to the survey. The independent variables included are district of residence, age of respondent at the time of the survey, husband's occupation in a high-status non-agricultural sector, relative status of natal and marital households compared, husband's household status ranking, dowry quartile, number of children borne by the woman and a control for sample type.

Table 3
Distribution of time spent in broad activity categories during the twenty-four hours prior to interview, 2003, married women only

Variables	% of time spent
Social time/leisure	6
Productive work	7
Self-care	21
Domestic work	28
Other, including sleep	38

Source: Authors' calculation, Kishori Abhijan Surveys, 2001 and 2003.

4.1 Domestic Work

Domestic work varied significantly by district, with women in Chittagong and Sherpur spending more time in this category than women in Chapainawabganj. Age is positively associated with domestic work, suggesting that this type of work burden increases quite substantially as women get older. Women whose husbands are in a non-agricultural occupation spend less time proportionately in this type of work. The amount of domestic work increases with number of children. Relative to women who paid no dowry, those who did so spent significantly more time in domestic work but only for the two lowest quartiles. Those who paid higher amounts were not significantly different from those who paid no dowry. To the extent that even small dowry amounts are associated with wealth status, this result is consistent with time-use patterns reported in other studies in rural Bangladesh where women in wealthier families have longer work hours, particularly in agricultural households. This is usually because it is uncommon for wealthy landowners to hire help for domestic work even though they might do so for agricultural work (Cain et al., 1979; Amin, 1997). Rather, when wealthy families hire agricultural workers, the domestic work burden for women in the household increases because they are responsible for preparing food for hired hands compensated in cash and meals.

4.2 Productive Work

The next column shows regression coefficients associated with covariates of productive work. Only 7% of total time reported was spent in productive work (Table 3). Our data confirm that productive work is not a major preoccupation for young married women in rural Bangladesh. Only 40% of respondents reported some productive work, of which approximately half was in combination with childcare (data not shown). Productive work increases significantly with

age and decreases significantly with education and the number of children, by far the most important factor associated with productive work. Productive work is also significantly higher among women in the two poorest quartiles. Relative wealth is also significantly related. Women whose husbands are less wealthy than their natal family spend less time in productive work, while women whose husbands are wealthier than their natal family are more likely to spend time in productive work. Dowry is not significantly associated with productive work.

District of residence is a significant covariate of the percentage of time spent in productive work as reported by respondents. Women in Sherpur (the poorest district) and Chittagong (the wealthiest and most conservative district) spent less time in productive work relative to women in Chapainawabganj.

4.3   Time Spent in Self-Care

Column 3 in Table 4 shows factors associated with the amount of time women devote to self-care. The average respondent spent 21% of the previous day in self-care activities (Table 3). Our knowledge of the local culture leads us to interpret more time spent in self-care, in the presence of appropriate controls, as one of the ways in which a married woman can pamper herself – a form of self-indulgence. Although such behaviour may be frowned upon and it is common for young women to be chastised by mothers-in-law for spending too much time on themselves, these activities are permitted nevertheless. A husband may also express his appreciation of his new bride by buying her fragrant soap, shampoo and hair oil, so that she may indulge herself with these products. These little rituals also make time spent in self-indulgence a public statement of higher status. Thus, this indicator is perhaps the most sensitive time-related status indicator associated significantly with many of the covariates considered. In a setting where women's time use is strongly dictated by the needs of the household and by restrictions on her mobility outside the home, taking extra time to bathe, groom or simply rest is one of the limited ways in which young women can legitimately pamper themselves.

Amount of time spent in self-care increases slightly but significantly with education. Women in Chittagong spend more time in self-care relative to women in Chapainawabganj, and women in Sherpur spend less time in self-care. Relative to women who married into a household of similar economic status, women who married down (into a poorer family) spend less time on self-care. Women who married up (husband's family is richer) spent significantly more time in self-care relative to women who married a husband of equal status. Paying dowry is related to less time spent in self-care. Relative to women who paid no dowry, those in the lowest dowry quartiles were not significantly different, but women in the two middle dowry quartiles spent significantly less in self-care. As may be expected, women who have children spend less time in self-care.

Table 4
Regression coefficient estimates from analysis of time spent in various activities,
Bangladesh, 2003

Variables	Domestic Work	Productive Work	Self Care	Social / Leisure Time
District: Chapainawabganj (base)				
Chittagong	2.194 ***	-2.201 ***	1.557 *	1.730 ***
	(0.795)	(0.638)	(0.881)	(0.589)
Sherpur	1.083 *	-2.734 ***	-1.387 **	1.199 ***
	(0.582)	(0.467)	(0.645)	(0.431)
Age	0.393 ***	0.235 **	-0.212	-0.197 **
	(0.120)	(0.096)	(0.133)	(0.089)
Husband's occupation non agrar	-1.266 **	0.287	0.177	0.990 **
	(0.577)	(0.463)	(0.639)	(0.428)
Relative wealth of wife and husband's family (Base: Wife= husband)				
Wife> husband	-0.224	-1.051 *	1.280 *	0.269
	(0.686)	(0.551)	(0.760)	(0.508)
Wife< husband	0.555	1.335 **	-1.852 **	-0.259
	(0.666)	(0.534)	(0.737)	(0.493)
Husband's family's relative wealth ranking (Base: Highest quartile)				
3rd quartile	-0.846	0.271	-0.467	0.553
	(0.775)	(0.622)	(0.858)	(0.574)
2nd quartile	-1.241	1.160 *	-1.366	0.410
	(0.843)	(0.676)	(0.933)	(0.625)
Lowest quartile	-1.106	1.598 *	-1.479	-0.134
	(1.105)	(0.887)	(1.224)	(0.819)
Years of education	-0.079	-0.167 **	0.218 **	0.232 ***
	(0.092)	(0.074)	(0.102)	(0.068)
Dowry quartile: no dowry (base)				
Dowry (lowest quartile)	1.616 *	0.358	-0.860	-0.423
	(0.838)	(0.672)	(0.928)	(0.621)
Dowry (2nd quartile)	1.628 **	0.366	-2.182 **	-0.088
	(0.823)	(0.661)	(0.912)	(0.610)
Dowry (3rd quartile)	0.600	0.643	-1.866 **	-0.307
	(0.806)	(0.647)	(0.892)	(0.597)
Dowry (highest quartile)	0.691	0.054	-1.023	-0.652
	(0.804)	(0.645)	(0.890)	(0.596)
Number of Children	3.515 ***	-0.943 ***	-2.850 ***	0.424
	(0.374)	(0.300)	(0.414)	(0.277)
Sample Type	-2.548 ***	1.694 ***	0.018	0.707
	(0.817)	(0.656)	(0.905)	(0.605)
Constant	15.80 ***	3.961 *	30.05 ***	7.866 ***
	(2.552)	(2.048)	(2.826)	(1.891)
Observations	1275	1275	1275	1275
R-squared	0.213	0.055	0.143	0.043

Notes: Standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Source: Authors' calculation, Kishori Abhijan Surveys, 2001 and 2003.

4.4   Social Time

We define social time as any time spent playing, visiting, attending a social ceremony or hanging out with friends and relatives in the absence of other activities. Such activities account for only 6% of married women's time in the 24-hour recall period. Participation in such activities varies within the three study areas. In the context of rural Bangladesh, these are bolder ways for young, married women to indulge themselves and thus are qualitatively different from self-care in how they should be interpreted.

Coefficients associated with covariates of social time estimated from multivariate regression analysis are shown in the last column of Table 4. Our estimates show that young women spend significantly more time socializing time in Chittagong and Sherpur relative to Chapainawbganj. Social time decreases significantly with current age for married women and increases with their level of education. Social time is not significantly associated with the number of children a young women has borne. However, social time does not seem to be associated in a significant way with variables indicating marriage arrangements. Neither the relative wealth of natal and marital families nor level of dowry payments is significantly associated with the amount of social time reported.

4.5   Regional Variation

As we have noted above the three districts vary considerably in their pattern of time use even though in terms of social, ethnic and religious composition they are not different from each other. Thus, these differences bear further exploration. During the baseline study, these differences were documented in great detail. In terms of the lives of young women, perhaps the most significant dimension is variation in mean ages at marriage and proportions who have attended school (shown in Table 5). In Chittagong marriage occurs later and more girls attend school. These differences translate into young women having more friends, being more likely to have worked for pay and generally having wider social networks relative to both the other two districts where the mean age at marriage is considerably earlier (data not shown). However, the situation of married women in Chittagong stands in sharp contrast. Once women are married they appear to lead more circumscribed lives relative to women in Chapainawbganj and Sherpur. In Chittagong they are less likely to use contraception after marriage, more likely to report having been physically abused and sexually coerced and more likely to want larger families. Most economic indicators show that Chittagong is the wealthiest of the three districts and Sherpur the poorest. Other studies have shown stronger prevalence of religious practice in Chittagong as well as stronger resistance to social change with respect to women (Amin et al., 2002).

Table 5
Variation of sample characteristics by district, Bangladesh 2003

	Chapainawabganj	Chittagong	Sherpur
Mean age at marriage	15	17.2	15
Proportion of girls in school	33	45.0	25.0
Proportion of girls who are married	57	28	61
Among married women under age 24			
% ever conceived	75	81	72
% currently using contraception	38	31	43
% currently pregnant	3	15	4
% sexually coerced	42	66	33
% physically abused	13	21	30
Mean desired family size	1.35	2.07	1.67
Households with electricity	24	52	16
Households with television	12	21	6

Source: Authors' calculation, Kishori Abhijan Surveys, 2001 and 2003.

5   Discussion

We explored the patterns of association between women's individual and marriage characteristics and the ways in which women spend time. The analysis confirms our general hypothesis that marriage characteristics are important determinants of the quality of life after marriage as measured in terms of time allocation of young married women. However, there are important differences in terms of how they influence different categories of time use. Marriage characteristics have a stronger influence on domestic work and time spent in self-care than on productive work or social time. One reason that marriage influences on productive time or social time are not detected as strongly may be that young married women spend very little time in directly productive activities or in socializing. Paying dowry and small amounts of dowry in particular, is associated with more time in domestic work and less time in self-care. Using dowry payments and relative wealth status as measures of marriage status, we find that women who paid dowry reported more domestic work and less time on self-care relative to women who did not pay dowry. These associations between time use and marriage variables were similar to the association we found in an earlier study between marriage arrangements and gender-based violence (Suran et al., 2004). By contrast, the associations with women's education worked in a diametrically opposite way: better-educated women had more social time and spent more time in self-care and less time in productive work. If parents pay dowry with the expectation that daughters will lead a better life after marriage, our data do not bear out that expectation.

It is noteworthy that participation in productive work, although varying widely at the district level, was not strongly associated with marriage investments. The pattern of variation at the

district level suggests that women's participation in work that is not traditionally considered to be in the female domain is determined more by community norms than by household or individual factors. Women in the less conservative division of Rajshahi, where Chapainawabganj is located, have historically had relatively greater freedom (Amin et al, 2002) and have also engaged in higher levels of productive work relative to the more conservative but prosperous district of Chittagong and the poorer district of Sherpur.

Our analysis demonstrates that educating daughters and not paying dowry have similar associations with time-use patterns. This finding suggests that educating daughters and not paying dowry are related to the ability to break from societal norms and this ability is probably the latent variable that underlies most of these associations. Although our analysis contributes to the evidence base on marriage arrangements and their outcomes, we have not been able to shed light on a question of central concern in Bangladesh, namely why dowry payments persist and continue to rise when there is no evidence that girls who marry with dowry are better off. However, we have shown here, as well as in our earlier analysis of the covariates of gender-based violence, that whereas women who pay more dowry may fare better than those who pay less, women who pay no dowry are even better off than those who pay the highest amounts of dowry.

This evidence points to the need to explore further the characteristics of those marriages that take place with no dowry. The patterns of association we have presented here provide further detail on how marriage comes to be a defining moment in a woman's life. Dowry demands, as we have specified it and as it is commonly understood in contemporary Bangladesh, represents a form of monetization of the marriage exchange. Indeed, it is specifically the demands in kind and of "valued security" that are prohibited and abhorred in legislation on dowry. While there may be other negative aspects of marriage exchange, such as competitive gift giving and status competition, those are more difficult to identify and distinguish. Srimati Basu has written eloquently about some of the traditions of gift giving observed in Bengali society (Basu, 2005). Not paying dowry then is simply a measure of the ability to resist monetizing the marriage exchange. A second and apparently distinct set of influences is captured in the relative status of natal and marital families. We interpret this to be a reflection of the continuation of support from the natal family in determining a young woman's bargaining position in her marital household. By highlighting these associations with marriage, we emphasize the importance of paying particular attention to the practice of marriage as a key determinant of the status of women in Bangladesh.

Appendix

Appendix 1 Activities recorded in 24-hour time recall

Domestic Work	Productive Work
Cooking/washing utensils	Cleaning/weeding/planting/irrigation
Cleaning courtyard/house	Looking after field
Purchasing food and other items	Looking after poultry/livestock
Purchasing non-food items only	Harvesting/carrying crop
Washing/drying clothes	Threshing/drying/husking
Repairing house	Selling crop
Drying cow dung for fuel	Collecting vegetables and fruits
Attending sick person	Processing harvests
Other household work	Separating jute fiber
Breastfeeding	Drying fish
Other intensive feeding	Processing fish
Bathing children	Fishing
Nursing sick child	Feeding fish
	Selling fish
	Day labour (agri)
	Day labour (non-agri)
Self-Care	Contract labour
Rest	Other labour
Bathing, grooming, toilet	Cottage industry
Resting while sick	Carpentry
Eating	Private tutoring
	Pulling rickshaw/van
Social Time	Driving motor vehicle
Playing with child	Begging
Playing	Repairing farm equipment
Visiting other district	Helping business work
Moving around	Slaughtering animal
Attending social ceremony	Teaching
Visiting friends/relatives	Moving around for work
	Other mechanical work
	Tailoring
	Cutting tree/bamboo
	Collecting fuel and firewood

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