

UNIVERSITY OF CENTRAL ASIA GRADUATE SCHOOL OF DEVELOPMENT Institute of Public Policy and Administration

How Forced Marriages Differ: Evidence on Assortative Mating in Kyrgyzstani Marriages

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WORKING PAPER #45, 2018



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Abstract:

A significant proportion of women in the Kyrgyz Republic marry via ala kachuu, or forced marriage. Little is known about the extent to which this practice is truly involuntary rather than ritualized elopement, or the harm that it may cause. We contribute to the understanding of marriage following bride capture by exploring behavioral similarities of couples in these marriages relative to those in arranged or "love" marriages. We use the 2013 wave of the Life in Kyrgyzstan survey to compute profile similarity indices for couples, and use regression analysis to explore the association between marriage type and similarity in personality, controlling for demographic variables. We find that couples in forced marriages turn out to be far less similar than other couples, especially for those who have only recently married. This greater dissimilarity is inconsistent with staged or ritualized elopement as a characterization of ala kachuu. Couples in marriages following bride capture not know each other nearly as well, and it is implausible that all of these marriages are consensual. This paper provides a novel source of evidence on the non-consensual nature of bride capture in Kyrgyzstan, adding further weight to those arguing that it is forced, and damaging in many aspects to women in such marriages.

Keywords: Kyrgyzstan, assortative mating, forced marriage, bride kidnapping **JEL classification:** I12, J12

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1. Introduction

Individuals tend to choose partners who are similar to themselves. Numerous empirical studies find that partner selection is non-random, instead following a systematic pattern: assortative mating. Partners tend to be alike in terms of age, education, general intelligence, opinions, attitudes, values, and certain personality traits (Watson et al. 2004; Luo and Klohnen 2005; Rammstedt and Schupp 2008). Most studies on assortative mating focus on so-called love marriages in Western countries, in which partners freely choose each other. However, marriages can evolve through ways other than love marriage. It is an open question to what extent the pattern of assortative mating established for love marriages also holds for forced marriages. Given the lack of choice in mate selection for one or even both spouses, we hypothesize that the extent of assortative mating is lower. In other words, we expect spouses in forced marriages to be more randomly paired than in love marriages, which may in turn have consequences for marital quality.

We exploit a comprehensive data set from Kyrgyzstan, a post-Soviet Central Asian country of approximately 6 million people, to measure the extent of assortative mating in different types of marriage. People tend to get married young and without long courtships (Borbieva 2012). In our data set, couples self-report their marriage type: love marriage, arranged marriage, or marriage following bride capture. We argue that many, though not necessarily all, marriages following bride capture are forced (and thus call them forced marriages throughout this note).

Bride capture usually involves a potential groom and his male friends taking a young woman into a car and transporting her to his home. The woman might be captured from her house, school or workplace. In the man's home, his female relatives pressure her to put a marriage scarf over her hair, signifying that she accepts the marriage (Borbieva 2012). In principle, a woman may resist but Amsler and Kleinbach (1999) and Kleinbach et al. (2005) estimate that only 8 to 17 percent of bride captures do not result in marriage. The extent of force involved may vary (Amsler and Kleinbach 1999; Kleinbach et al. 2005). One extreme is fully nonconsensual abduction, in which the man captures the woman through physical force. Another extreme is elopement or staged abduction, in which the man and the woman agree on the capture beforehand—for example, in the case of parental disapproval of their marriage plans. Since type of marriage is self-reported in our data set, we cannot determine the degree of force involved. However, if we find less assortativeness than in love marriages, we conclude that there is a certain level of coercion.

Arranged marriages in Kyrgyzstan are different from forced marriages in that both the man and woman typically have a choice over their spouse (Kleinbach et al. 2005; Borbieva 2012). In the past, the man's parents often chose a wife for their son, but this is no longer normal practice today. It is now common that arranged marriage is initiated when a man identifies a woman as a potential marriage partner. The man's parents then visit the woman's parents. If they and the woman agree, negotiations for the marriage begin. This interviewing stage suggests that arranged marriages will be more assortative than forced marriages, and may be comparable to love marriages.

Interest in the degree of mating assortativeness is not simply a matter of idle curiosity. Rather, identifying differences in marriages following bride capture relative to love marriages provides further evidence as to their coercive nature. There is substantial belief among the Kyrgyzstani population that these marriages are largely consensual displays that pay homage to tradition while being practical, in the sense of lowering wedding costs (UNFPA, 2016).

We strongly dispute this claim. As we document in Becker, Mirkasimov and Steiner (2017), infants born to Kyrgyz women in forced marriages are significantly lighter at birth – between 40 and 200 grams, depending on the specification – than those offspring of other marriages. Becker, Steiner, and Zhao (2018) provide evidence that women in forced marriages are far less happy on a broad range of measures. A third piece of evidence appears in this note: couples in these marriages have less in common with one another than do other couples.

2. Data

We use data from the Life in Kyrgyzstan (LiK) survey (Brück et al. 2014). This survey was first conducted in 2010; one of the authors (Steiner) was involved in its design and implementation. The original sample consisted of slightly more than 8,000 adult individuals in 3,000 households. LiK is an individual panel survey in which all adult individuals of the originally sampled households are tracked and interviewed. Five survey waves have been collected (2010, 2011, 2012, 2013 and 2016) but only the first four are publicly available as of June 2018.

Our main data source is the 2013 LiK wave, which consists of 7,652 adult individuals in 2,584 households. In this wave, married respondents are requested to name their spouse in the household, which facilitates identification of couples yielding 2,812 married couples. This number is large compared with previous studies on assortative mating as most studies are not based on nationally representative survey data. Exceptions are Rammstedt and Schupp (2008), Rammstedt et al. (2013), Dyrenforth et al. (2010), and Furler et al. (2013).

We know the type of marriage for 2,520 of the 2,812 couples. Marriage type was self-reported by female LiK respondents in 2011 and later updated for those respondents with a change in marital status. Some women observed in 2013 were not part of the 2011 LiK sample. Most newly observed women were migrants and thus absent from their household in 2011. These women should have reported their marital status in 2012 or 2013 but many did not do so.

The type of marriage refers to the current marriage, regardless of whether individuals are married for the first time or a second time. Most married women are in their first marriage; no more than 4 percent married twice. Since information on marriages is only provided by women in the LiK, we cannot report the corresponding numbers for married men.

	Love marriage	Arranged marriage	Forced marriage	Number of couples
Total	58.2	30.3	11.5	2,520
Kyrgyz	60.2	23.5	16.3	1,688
Uzbek	33.3	65.1	1.6	381
Russian	96.0	4.0	0	126
Other ethnicity	54.7	42.2	3.1	223
Inter-ethnic	79.4	19.6	1.0	102

Table 1. Marriage types (in percent)

Source: LiK survey data.

Note: Other ethnicity includes all remaining ethnic groups that reside in Kyrgyzstan. They are not reported separately as each ethnicity numbers fewer than 100 couples in the survey.

Table 1 shows the prevalence of different types of marriage. Overall, 58.2% of couples report to have married through love marriage; 30.3% through arranged marriage; and 11.5%

through forced marriage. The table also reports prevalence of the three types of marriage for different ethnic groups. Most couples in our sample are mono-ethnic; *i.e.*, husband and wife report having the same ethnicity. Only 4 percent of all couples are inter-ethnic. Love marriages are most prevalent among Russian and inter-ethnic couples, and arranged marriages dominate among Uzbek and other ethnic couples. While Kyrgyz couples practice all three types of marriage, forced marriages are essentially limited to this ethnic group. With few exceptions, non-Kyrgyz do not engage in bride capture but marry through either love or arranged marriages.

3. Measuring similarity

We measure couples' similarity in terms of personality with the help of the 21-item version of the Big Five Inventory (Rammstedt and John 2005) contained in the LiK. Respondents had to state to what extent they agreed with the 21 personality statements on a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree).

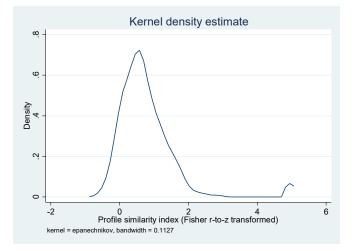
Our measure of spousal similarity is the profile similarity index (Klohnen and Mendelsohn 1998; Luo and Klohnen 2005). This index correlates wife and husband's responses across all personality statements of the Big Five Inventory. Ranging from -1 to 1, it captures the relative importance that each spouse accords to these statements. The advantage of the profile similarity index – compared with standard correlation coefficients – is that we obtain a measure of spousal similarity for each couple. We use this measure as an outcome variable in multivariate regressions below.

The formula to calculate the profile similarity index is:

Profile similarity index=
$$\frac{\sum_{a=1}^{Z} (x_{wa} - \overline{x}_{w})(x_{ha} - \overline{x}_{h})}{\sqrt{\sum_{a=1}^{Z} (x_{wa} - \overline{x}_{w})^{2} \sum_{a=1}^{Z} (x_{ha} - \overline{x}_{h})^{2}}}$$

where \bar{x}_w and \bar{x}_h are the average values over all personality statements for the wife *w* and husband *h*, respectively. x_{wa} and x_{ha} are the wife and husband's values *x* for a specific statement *a*. *z* is the total number of statements.

Figure 1. Profile similarity index frequency distribution (Fisher r-to-z transformed)



Source: Authors' calculation based on LiK data.

Due to item non-response, we lack personality information for some couples in the sample and have full information for 2,399. For this sample, the mean profile similarity index amounts to 0.49, suggesting that most couples are more similar than dissimilar. However, the index ranges from -0.65 to +1; hence, there are both very similar and very dissimilar couples in our sample. To illustrate the entire distribution of spousal similarity, we perform the Fisher r-to-z transformation of our profile similarity index (Figure 1). This transformation helps to obtain a variable that is close to normally distributed, a characteristic not found in the original profile similarity index. The heap at the right end of the distribution in Figure 1 is due to 54 couples that provided identical responses to all personality statements. We replaced their profile similarity index of 1 with 0.9999 to be able to perform the transformation. It is not straightforward how to treat these couples. We consider it unlikely that spouses naturally would give identical responses to 21 statements. These spouses may instead have influenced each other in the LiK interview and converged to identical responses. We report our estimation results with these couples included and excluded.

4. Results

Figure 2 illustrates the extent of assortative mating in love, arranged, and forced marriages. While the average profile similarity index is almost identical in arranged and love marriages, it is substantially lower in forced marriages (p-value = 0.06 for a one-tailed test comparing forced to love marriages). This suggests that spouses in forced marriages are more randomly paired than spouses in love marriages, as hypothesized.

We next analyze how couples in forced marriages compare with randomly matched couples by creating 25,440 random pairs of husbands and wives and computing their profile similarity indexes. Only individuals within the same province are matched to each other because marriage markets in Kyrgyzstan tend to be local. The resulting average profile similarity index for the random couples is positive, possibly due to common response biases, common general knowledge about human behavior, or true shared human nature (Luo and Klohnen 2005). Yet, it is lower than that of couples in forced marriages (p-value = 0.007 for a onetailed test). Hence, while spouses in forced marriages seem to be more randomly paired than spouses in love marriages (and in arranged marriages), they are not fully random matches.

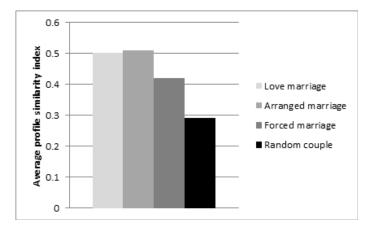


Figure 2. Average profile similarity index, by type of marriage

Source: Authors' calculation based on LiK data.

The simple comparison of profile similarity indexes ignores the possibility of social homogamy: spouses may be similar in personality simply because they are similar in social background. To investigate this possibility, we regress the profile similarity index (r-to-z transformed) on type of marriage, without and with controls for demographic characteristics (Table 2). Columns (1)-(4) include the 54 couples that provided identical responses to the personality statements; columns (5)-(8) exclude them. Columns (1) and (5) do not control for demographics. In columns (2) and (6), we control for the couple's ethnicity, husband and wife's age and years of schooling, an interaction term for the spouses' age, and an interaction term for the spouses' schooling. Columns (3) and (7) add indicators for the district in which a couple lives. Hence, we here only compare couples within the same district to each other. Finally, columns (4) and (8) restrict the analysis to Kyrgyz couples because forced marriages are rarely practiced by other ethnic groups, as shown above. All regressions control for duration of marriage, as couples may grow more alike over time (or the most dissimilar couples may divorce); duration is also interacted with marriage type. Controlling for marriage duration reduces the number of observations from 2,399 to a maximum of 2,392.

In all columns, newlywed couples (i.e., at zero years of marriage duration) in forced marriages es turn out to have a significantly lower profile similarity index than newlywed couples in love marriages, at least at a 5% significance level. Coefficients vary between -0.33 and -0.18, indicating a 37%-70% lower index for forced marriages compared with the average profile similarity index. There is only little evidence of social homogamy as coefficients differ little between columns (1) and (2) as well as between columns (5) and (6). Adding in district fixed effects only slightly reduces the forced marriage coefficient's absolute value. Newlywed couples in arranged marriages do not seem to have different profile similarity indexes than those in love marriages, save for when the sample is restricted to only those of Kyrgyz ethnicity and in which identical couples are included.

Marriage duration does turn out to matter for similarity. Over time, observed couples become more alike, regardless of marriage type. The positive interaction terms for duration and forced marriage imply that this convergence is particularly important for couples in forced marriages – quite likely because they were so dissimilar to begin with.

We now turn to an exploration of similarities across narrower personality traits. We group the personality statements into the Big Five traits. According to results from Germany, couples do not tend to be similar in all five traits, but do have similarities in openness, conscientiousness and - to a lesser extent - agreeableness (Rammstedt and Schupp 2008). We find little difference in the similarity index for individual personality traits between those in love and arranged marriages at the early stage of marriage (Table 3). In contrast, there are personality dissimilarities among those in early forced marriages relative to those in early love marriages. In all cases the sign on the forced marriage indicator is negative, though it is only significant in the case of openness and agreeableness. It has been suggested to us by Prof Monika Bauer that gender differences in extraversion and other characteristics may be driving the relatively small differences in similarities between couples, regardless of marriage type. Again, with increasing duration of marriage, couples become more similar in all types of marriage. Spouses in forced marriages converge, above all, in openness, the trait in which they were most dissimilar at the beginning of marriage.

Table 2. Estimation results - Association of profile similarity index and type of marriage

	Identical couples included			Identical couples excluded				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	No con- trols	Con- trol for demo- graphics	Add district indica- tors	Kyrgyz only	No con- trols	Control for demo- graphics	Add district indica- tors	Kyrgyz only
Forced marriage	-0.314**	-0.331**	-0.300***	-0.241**	-0.252***	-0.270***	-0.261***	-0.183**
	(0.127)	(0.127)	(0.110)	(0.117)	(0.096)	(0.098)	(0.078)	(0.085)
Arranged marriage	-0.145	-0.155	-0.161	-0.236**	-0.023	0.040	-0.015	-0.058
	(0.091)	(0.122)	(0.115)	(0.113)	(0.060)	(0.061)	(0.058)	(0.057)
Duration of marriage	0.0003	0.010**	0.010**	0.007	0.002	0.011***	0.012***	0.013***
	(0.002)	(0.004)	(0.004)	(0.005)	(0.001)	(0.003)	(0.003)	(0.004)
Duration*forced	0.007*	0.007*	0.008**	0.005	0.005	0.006*	0.007**	0.004
	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)
Duration*arranged	0.006	0.006	0.005	0.006	0.001	0.001	0.001	0.001
	(0.004)	(0.004)	(0.004)	(0.005)	(0.002)	(0.002)	(0.002)	(0.002)
Spouses are Uzbeks		0.0825	0.154			-0.127*	-0.071	
		(0.276)	(0.189)			(0.071)	(0.074)	
Spouses are Russians		-0.085	-0.011			-0.004	-0.007	
		(0.093)	(0.075)			(0.086)	(0.075)	
Spouses are of other, but		-0.051	0.129*			0.044	0.125**	
identical ethnicity		(0.079)	(0.065)			(0.064)	(0.056)	
Spouses are of different ethnicity		-0.098	0.013			-0.005	0.024	
1		(0.095)	(0.078)			(0.084)	(0.080)	
Wife's age		0.004	0.002	0.0003		-0.003	-0.005	-0.004
		(0.011)	(0.010)	(0.009)		(0.005)	(0.005)	(0.005)
Husband's age		-0.004	0.004	0.005		-0.0001	0.005	0.006
nusbana s age		(0.005)	(0.004)	(0.005)		(0.004)	(0.003)	(0.004)
Wife's age*Husband's age		-0.0001	-0.0001	-0.0001		-0.0001	-0.0001**	-0.0001**
whe s age musband s age		(0.0001)	(0.0001)	(0.0001)		(0.0001)	(0.0000)	(0.0000)
Wife's we are of each a align			. ,					
Wife's years of schooling		0.014	0.021	0.008		0.004	0.014	0.005
		(0.020)	(0.017)	(0.022)		(0.016)	(0.016)	(0.019)
Husband's years of schooling		0.034*	0.021	0.010		0.013	0.010	-0.0000
		(0.012)	(0.019)	(0.023)		(0.017)	(0.016)	(0.020)
Wife's years of schooling*		-0.002	-0.001	-0.0003		0.0002	-0.0001	0.001
Husband's years of schooling		(0.002)	(0.002)	(0.002)		(0.001)	(0.001)	(0.002)
District indicators	No	No	Yes	Yes	No	No	Yes	Yes
Observations	2,392	2,356	2,356	1,581	2,338	2,302	2,302	1,549
R-squared	0.009	0.017	0.280	0.264	0.012	0.029	0.239	0.321

Note: Standard errors are clustered at the community (primary sampling unit) level. Constant omitted.

*** p<0.01, ** p<0.05, * p<0.1

Source: Authors' calculation based on LiK data.

	(1)	(2)	(3)	(4)	(5)
	Openness	Conscientiousness	Agreeableness	Extraversion	Neuroticism
Forced marriage	-0.769***	-0.279	-0.366*	-0.459	-0.210
	(0.209)	(0.233)	(0.215)	(0.289)	(0.212)
Arranged marriage	-0.305*	0.0260	-0.089	-0.134	0.030
	(0.159)	(0.223)	(0.213)	(0.192)	(0.203)
Duration of marriage	0.011	0.033***	0.031***	0.026**	0.025**
	(0.009)	(0.010)	(0.011)	(0.010)	(0.011)
Duration*forced	0.024***	0.005	0.001	0.019*	0.002
	(0.009)	(0.008)	(0.007)	(0.011)	(0.009)
Duration*arranged	0.014**	-7.41e-05	-0.005	0.007	0.0003
	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)
Spouses are Uzbeks	0.202	0.020	0.124	0.444**	0.172
	(0.211)	(0.205)	(0.178)	(0.206)	(0.183)
Spouses are Russians	-0.117	-0.182	0.039	0.154	0.159
	(0.139)	(0.208)	(0.254)	(0.212)	(0.232)
Spouses are of other, but	0.179	0.255	0.199	0.061	0.347**
identical ethnicity	(0.138)	(0.178)	(0.165)	(0.148)	(0.145)
Spouses are of different ethnicity	0.343**	-0.333	-0.048	0.169	-0.050
	(0.156)	(0.229)	(0.250)	(0.242)	(0.244)
Wife's age	0.014	-0.023	-0.015	-0.021	-0.003
	(0.015)	(0.019)	(0.020)	(0.018)	(0.020)
Husband's age	-0.001	-0.005	0.010	0.007	0.005
	(0.011)	(0.010)	(0.012)	(0.012)	(0.012)
Wife's age*Husband's age	-0.0002	-0.0004	-0.0002	-0.0001	-0.0003
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
Wife's years of schooling	0.081	-0.024	-0.018	0.040	-0.029
	(0.049)	(0.052)	(0.051)	(0.060)	(0.065)
Husband's years of schooling	0.059	-0.023	-0.051	0.055	-0.078
	(0.049)	(0.049)	(0.059)	(0.058)	(0.064)
Wife's years of schooling*	-0.006	0.004	0.003	-0.002	0.006
Husband's years of schooling	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)
District indicators	Yes	Yes	Yes	Yes	Yes
Observations	2,141	2,227	2,217	2,277	2,086
R-squared	0.184	0.153	0.157	0.137	0.204

Table 3. Estimation results - Association of personality trait similaritiesindex and type of marriage, controlling for marriage duration

Note: Standard errors are clustered at the community (primary sampling unit) level. Constant omitted.

*** p<0.01, ** p<0.05, * p<0.1

Source: Authors' calculation based on LiK data.

5. Conclusion

The patterns of personality traits discussed in this note provide further evidence that couples in marriages following bride capture are quite different from those in love and arranged marriages. If bride capture in Kyrgyzstan was merely staged elopement, one would not expect to find such large personality differences in these but not in other marriages.

Beyond this finding, it is important to note that a low degree of assortative mating may have negative consequences as well. Luo and Klohnen (2005) hypothesize that more similar spouses have higher marital quality and marital satisfaction. However, empirical findings are ambiguous: controlling for each partner's personality traits, similarity in terms of personality does not appear to matter greatly for life satisfaction (Furler et al. 2013; Dyrenforth et al. 2010). Rather than similarity, having a psychologically healthy spouse not inclined to extremes is more likely to make for happiness: this is a topic that merits subsequent exploration.

References

Amsler, S. and Kleinbach, R. (1999). Bride Kidnapping in the Kyrgyz Republic. *International Journal of Central Asian Studies* 4: 185–216.

Becker, C.M., Mirkasimov, B. and Steiner, S. (2017): Forced Marriage and Birth Outcomes, *Demography* 54(4): 1401-1423.

Becker, C.M., Steiner, S. and Zhao, L. (2018): Forced Marriage: Models of Ala-Kachuu. Paper presented at the Association for Comparative Economics sessions, Allied Social Science Associations annual meeting, Philadelphia, January 4-7, 2018.

Borbieva, N.O. (2012). Kidnapping Women: Discourses of Emotion and Social Change in the Kyr-gyz Republic. *Anthropological Quarterly* 85(1): 141–169.

Brück, T., Eseanliev, D., Kroeger, A., Kudebayeva, A., Mirkasimov, B. and Steiner, S. (2014): Household Survey Data for Research on Well-Being and Behavior in Central Asia, *Journal of Comparative Economics* 42(3): 819-835.

Dyrenforth, P.S., Kashy, D.A., Donnellan, M.B. and Lucas, R.E. (2010): Predicting Relationship and Life Satisfaction from Personality in Nationally Representative Samples from Three Countries: The Relative Importance of Actor, Partner, and Similarity Effects. *Journal of Personality and Social Psychology* 99(4): 690-702.

Furler, K., Gomez, V. and Grob, A. (2013): Personality Similarity and Life Satisfaction in Couples. *Journal of Research in Personality* 47(4): 369-375.

Kleinbach, R., Ablezova, M. and Aitieva, M. (2005). Kidnapping for Marriage (Ala Kachuu) in a Kyrgyz Village. *Central Asian Survey* 24(2): 191–202.

Klohnen, E.C. and Mendelsohn, G.A. (1998): Partner Selection for Personality Characteristics: A Couple-Centered Approach. *Personality and Social Psychology Bulletin* 24(3): 268-278.

Luo, S. and Klohnen, E.C. (2006): Assortative Mating and Marital Quality in Newlyweds: A Couple-Centered Approach. *Journal of Personality and Social Psychology* 88(2): 304-326.

Rammstedt, B. and John, O.P. (2005): Kurzversion des Big Five Inventory (BFI-K). *Diagnostica* 51(4): 195-206.

Rammstedt, B. and Schupp, J. (2008): Only the Congruent Survive – Personality Similarity in Couples. *Personality and Individual Differences* 45(6): 533-535.

Watson, D., Klohnen, E.C., Casillas, A., Nus Simms, E., Haig, J. and Berry, D.S. (2004): Match Makers and Deal Breakers: Analyses of Assortative Mating in Newlywed Couples. *Journal of Personality* 72(5): 1029-1068.

United Nations Population Fund in Kyrgyz Republic (UNFPA). (2016). Gender in Society Perception Study: National Survey Results. Bishkek, Kyrgyzstan: National Statistical Committee of the Kyrgyz Republic.