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Descriptive Finding

How marriages based on bride capture differ: Evidence from Kyrgyzstan

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Abstract

BACKGROUND
A significant proportion of women in the Kyrgyz Republic marry via *ala kachuu*, generally translated as bride capture or kidnapping. Many regard this practice as harmless elopement or a tradition; others perceive it as a form of forced marriage.

OBJECTIVE
This paper contributes to the understanding of *ala kachuu* by exploring the extent to which couples in these marriages differ from those in arranged or love marriages.

METHODS
We use the 2013 wave of the Life in Kyrgyzstan survey to compute profile similarity indices for the personality of couples. We then regress marriage type on the profile similarity index, controlling for sociodemographic variables.

RESULTS
Couples in marriages resulting from bride capture are far less assortatively matched on personality traits than other couples, especially those who have only recently married.

CONCLUSIONS
This greater dissimilarity is consistent with *ala kachuu* being forced marriage rather than merely staged or ritualized elopement.

CONTRIBUTION
This paper provides a novel source of evidence on the possible nonconsensual nature of bride capture in Kyrgyzstan, adding further weight to those arguing that it is forced.

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1. Introduction

According to ethnographic reports, many women were captured for marriage in societies across Europe, Asia, Africa, Australia, and the Americas in the past (Ayres 1974; Barnes 1999). In many places, this so-called bride capture no longer seems common, but it is still practiced in such countries as Armenia, Ethiopia, Kazakhstan, Kyrgyzstan, and South Africa. In Kyrgyzstan, for example, an estimated 16–24% of currently married women were captured (Becker, Mirkasimov, and Steiner 2017; Nedoluzhko and Agadjanian 2015; UNFPA 2016). Here, contemporary 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, a school, her workplace, or on the street. 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, Ablezova, and Aitieva (2005) estimate that only 8 to 17% of bride captures do not result in marriage.

In principle, the extent of force involved may vary (Amsler and Kleinbach 1999; Kleinbach, Ablezova, and Aitieva 2005). One extreme is fully nonconsensual abduction, in which the man captures the woman through physical force. Another extreme is elopement, in which the man and the woman agree on the capture beforehand – for example, in the case of parental disapproval of their marriage plans. For policy-making, it is important to determine whether marriages following bride capture tend to be coercive or consensual as only coercive captures would be a matter of concern.

Despite bride capture being illegal, and the emergence of several initiatives by nongovernmental organizations and international organizations combating the practice and publishing anecdotes of violent bride captures (UN Women 2016), there is substantial belief among the Kyrgyzstani population that marriages following bride capture 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 such marriages are significantly lighter at birth – between 40 and 200 grams, depending on the specification – than those offspring of other marriages. We argue that this birth-weight loss is a sign of increased psychological stress experienced by women who have to live with a partner they did not choose.

As a follow-up to this research, we study assortative mating in the three types of marriage prevalent in Kyrgyzstan to investigate whether and how capture-based marriages are different. We exploit a comprehensive data set from the Life in

Kyrgyzstan survey, in which couples self-report their marriage type: love marriage, arranged marriage, or marriage following bride capture.

A conventional approach to measuring similarity of married couples would be to focus on age and education. We choose instead to focus on personality for the following reasons. First, women's age at first marriage is highly concentrated between ages 17 and 23. Even in a coercive setting, social conventions are such that men would naturally target women in this age range and 0–5 years younger than themselves. Second, there is remarkably little variation in educational attainment, especially in rural Kyrgyzstan. A high proportion of young men and women finish, or nearly finish, secondary school; only a small proportion goes on to university. Third, personality is more difficult to ascertain on the marriage market than age and education, which makes this characteristic particularly interesting in the context of forced marriages in which spouses might not know each other very well. Fourth, it might be that men who capture a woman actively choose a spouse with different personality traits than themselves. For instance, this would be the case if socially unattractive men targeted women with more socially acceptable traits in order to enhance their own social acceptance.

2. Data

We use data from the Life in Kyrgyzstan (LiK) survey, which is nationally representative (Brück et al. 2014). This survey was first conducted in 2010. 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 July 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. We know the type of marriage for 2,520 of these 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.

Marriage type 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% have married twice. Since information on marriages is only

provided by women in the LiK, we cannot report the corresponding numbers for married men.

Table 1 shows the prevalence of different types of marriage. Overall, 58.2% of interviewed women report to have married through love marriage; 30.3% through arranged marriage; and 11.5% through bride capture. 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% of all couples are inter-ethnic. According to the women's self-report, 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, marriages following bride capture 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.

Table 1: Prevalence of marriage type (in %), by couple's ethnic group

	Love marriage	Arranged marriage	Bride capture	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

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.
Source: LiK survey data.

Arranged marriages in Kyrgyzstan are different from capture-based marriages in that both the man and woman typically have some choice over their spouse (Kleinbach, Ablezova, and Aitieva 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 contemporary arranged marriages are more comparable to love than to capture-based marriages.

3. Measuring similarity in personality

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 stated 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.

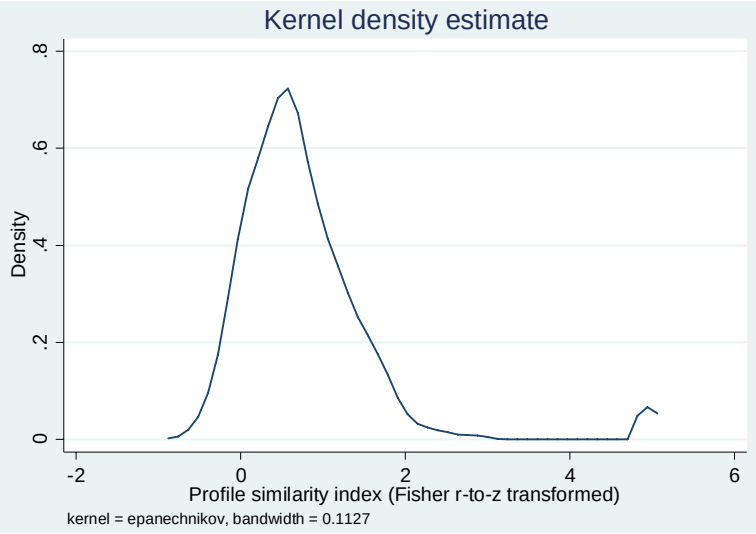
The formula to calculate the profile similarity index is:

$$Profile\ similarity\ index = \frac{\sum_{a=1}^{z}(x_{wa} - \bar{x}_w)(x_{ha} - \bar{x}_h)}{\sqrt{\sum_{a=1}^{z}(x_{wa} - \bar{x}_w)^2 \sum_{a=1}^{z}(x_{ha} - \bar{x}_h)^2}}$$

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.

Due to item nonresponse, 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.

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

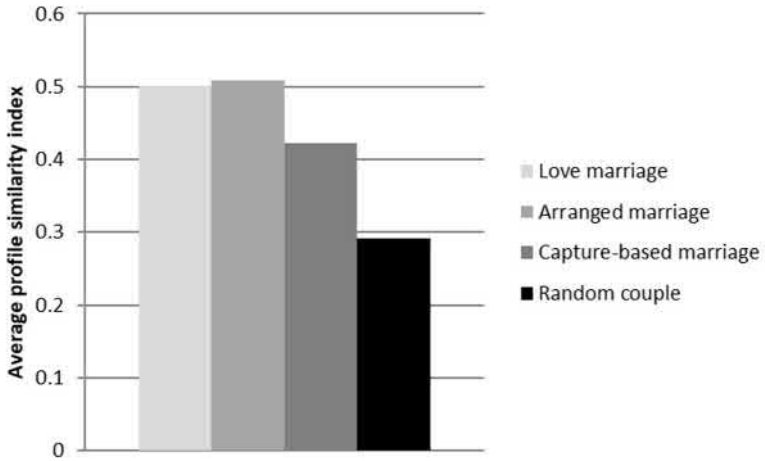


Source: Authors' calculation based on LiK data.

4. Results

Figure 2 illustrates the extent of assortative mating in love, arranged, and capture-based marriages. While the average profile similarity index is almost identical in arranged and love marriages, it is substantially lower in capture-based marriages (p-value < 0.01 for a one-tailed test comparing them to love or arranged marriages). This suggests that spouses in capture-based marriages are more randomly paired than spouses in other marriages.

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



Source: Authors' calculation based on LiK data.

We next analyze how couples in capture-based 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 capture-based marriages (p-value < 0.01 for a one-tailed test). Hence, while spouses in capture-based marriages seem to be more randomly paired than spouses in love and arranged marriages, they are not fully random matches.

It is important to acknowledge that marriage type is self-reported. Thus, it is possible that women who were captured and are happy with their marriage report it as love marriage. If so, the pattern shown here would be an overestimation of the difference between marriages resulting from bride capture and other marriage types because the first group would only contain the more adverse marriages.

The simple comparison of profile similarity indexes also 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 sociodemographic characteristics (Table 2). We control for ethnic composition of the couple, age and education of both partners, interaction terms for partners' ages and

schooling years, and district of residence (by including district dummies). Nonetheless, despite this rich set of controls, it is still possible that unobserved variables also account for variation in couples' similarity.

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

	Identical couples included				Identical couples excluded			
	(1) No controls	(2) Control for demographics	(3) Add district indicators	(4) Kyrgyz only	(5) No controls	(6) Control for demographics	(7) Add district indicators	(8) Kyrgyz only
Capture-based 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 identical ethnicity		–0.051	0.129*			0.044	0.125**	
		(0.079)	(0.065)			(0.064)	(0.056)	
Spouses are of different ethnicity		–0.098	0.013			–0.005	0.024	
		(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
		(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**
		(0.0001)	(0.0001)	(0.0001)		(0.0001)	(0.0000)	(0.0000)
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.

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 ethnicity, age, and education. Columns (3) and (7) add dummies for the district of residence. Hence, here we only compare couples within the same district to each other. Finally, columns (4) and (8) restrict the analysis to Kyrgyz couples because bride capture is 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 capture-based marriages turn out to have a significantly lower profile similarity index than newlywed couples in love marriages, and at least at a 5% significance level. Coefficients vary between –0.33 and –0.18, indicating a 37%–70% lower index for capture-based marriages compared with the average profile similarity index. There is only little evidence for social homogamy as coefficients differ little between columns (1) and (2) as well as between columns (5) and (6). Adding in district indicators 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 capture-based marriage imply that this convergence is particularly important for couples in these 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 capture-based marriages relative to those in early love marriages. In all cases the sign on the capture-based marriage indicator is negative, though it is only significant in the case of openness and agreeableness. It has been suggested to us by Monika Bauer (Instructor of Psychology and Neuroscience at Duke University) 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 capture-based marriages converge, above all, in openness, the trait in which they were most dissimilar at the beginning of marriage.

Table 3: Estimation results: Association of personality trait similarities index and type of marriage, controlling for marriage duration

	(1) Openness	(2) Conscientiousness	(3) Agreeableness	(4) Extraversion	(5) Neuroticism
Capture-based 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 identical ethnicity	0.179	0.255	0.199	0.061	0.347**
	(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

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

We find systematic differences in assortative mating in terms of personality traits in capture-based marriages compared with love and arranged marriages. Spouses in the first type of marriage are less similar, particularly in early years of marriage. Our descriptive finding can have several explanations. First, it could be an indication that spouses do not know each other well at the time of marriage. This explanation is consistent with our view that capture-based marriages tend to be coercive rather than consensual. Potential partners need to spend time with each other to determine the goodness of fit of each other's personality. If a man captures a woman coercively, he is unlikely to have the same notion of her personality as would partners in an arranged or love marriage. Almost certainly, the woman also would have less complete information on her captor than on partners in an arranged or love marriage. Second, the findings are equally consistent with an outcome in which spouses in capture-based marriages deliberately choose partners who are dissimilar. We cannot determine from the analysis in this paper where the larger dissimilarity comes from and whether both men and women, or only one of them, have different personality traits on average than those in love and arranged marriages. We see scope for further research to answer this question.

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Supplemental material

Table A-1: The Big Five Personality Traits (21-item version)

Big Five Personality Trait	Statement in questionnaire: I see myself as someone who …
Agreeableness	Tends to find fault with others
	Is generally trusting
	Can be cold and aloof
	Is sometimes rude to others
Conscientiousness	Does a thorough job
	Tends to be lazy
	Is inventive
	Makes plans and follows through with them
Extraversion	Is reserved
	Generates a lot of enthusiasm
	Tends to be quiet
	Is outgoing, sociable
Neuroticism	Is depressed, blue
	Is relaxed, handles stress well
	Worries a lot
	Gets nervous easily
Openness	Is curious about many things
	Is ingenious, a deep thinker
	Has an active imagination
	Values artistic, aesthetic experiences
	Has few artistic interests