ASERC Journal of Socio-Economic Studies

Journal homepage: www.ajses.az Volume 4, Number 1, (2021) Pages 175-184

DOES THE MARITAL STATUS AFFECT SELF-REPORTED HAPPINESS? EVIDENCE FROM AZERBAIJAN

Khatai Aliyev[1, 2], Nazila Musayeva[3], Sevgin Huseynova[3]

[1] UNEC Empirical Research Center,
Azerbaijan State University of Economics, Baku, Azerbaijan.
[2] Department of World Economy,
Baku Engineering University, Khirdalan, Azerbaijan.
[3] International School of Economics,
Azerbaijan State University of Economics, Baku, Azerbaijan.

ABSTRACT

Marriage is one of the most important decisions in one's life which also affects the well-being of individuals. Comparing the life satisfaction of individuals due to marital status could be interesting. The current study aims to explore the impact of marital status on the self-reported happiness of individuals in Azerbaijan. Using a cross-sectional data set of 2009 respondents, we empirically estimate the life satisfaction difference due to the marital status of individuals while stepwise inclusion of a set of covariates. Estimation results display that marital status is a significant determinant of happiness in Azerbaijan. With no covariates, no significant happiness difference was revealed among unmarried, married and widowed people while divorced individuals are significantly less satisfied than others. All models confirm that the least happy group is divorced people. Married people are more satisfied than unmarried individuals. Results about widowed people require further research for a scientific justification. Meanwhile, gender status, age and educational attainment level are significant determinants of life satisfaction in Azerbaijan.

Keywords: Life satisfaction, marital status, gender, age, well-being, Azerbaijan.

INTRODUCTION

Since several decades ago, the happiness of people has been at the center of interest as an economic construct. In modern economies, one of the primary welfare indicators is the societal well-being or happiness in the country. In this context, happiness research is increasing its attractiveness day by day. It is the fact that life satisfaction embodies a person's overall evaluation of his/her life quality. Therefore, it should be affected by a lot of socio-economic factors. One of them is the relationship status of people such as being unmarried, married, divorced, etc. (Zhu et al., 2018). Being married is an influential factor for an individual's well-being. According to a study in the case of Taiwan, happiness is especially higher during the first 3 years of being married (Tao, 2019). The happiness return of marriage is more and more durable for females compared to males (Tao, 2019). However, the role of married females is "more stressful and disadvantageous" than married females according to Williams (2003). In the case of India, Patel and Dhar (2020) reveal higher marital happiness for males than females and underline the role of family type and social support among the primary determinants of the gap.

Marital status affects the happiness of individuals through the promotion of financial satisfaction and improving healthiness (Stack and Eshleman, 1998). Lawrence et al. (2019) argue that "married individuals are healthier and live longer than those who are never married, divorced, or widowed" while the keyword here is "happy marriages". The benefits of marital status are limited for "not too happy" marriages while "unhappy marriages" may be considered as within a vulnerable population category, underlined by Lawrence et al. (2019). Although "unhappy marriages" yield negative health effects (Lawrence et al., 2019), lots of studies confirm that marriage increases happiness (see Coombs (1991) for the review of older studies). The effect is especially higher in the first year of being married, so-called the "honeymoon effect".

The fact that unmarried individuals are the fastest-growing population group in a lot of countries (Klinenberg, 2012; Fry, 2013) and better healthiness of married people compared to others (Dupre et al., 2009), studying the wellbeing distribution due to marital status becomes an important issue for Azerbaijan. The current study employs a social survey dataset (ASERC, 2021) to assess life satisfaction differences among the people (17 or older) of Azerbaijan while controlling for the effects of different socio-economic factors. To our best knowledge, no prior study focused on investigating the impact of marital status on the life satisfaction of people in Azerbaijan. In some selected studies, marital status was considered as one of the control variables in the regression analyses (Aliyev, 2020; Aliyev, Nadirov and Dehning, 2021; Aliyev et al., 2021; Aliyev, 2021). Hence, the current study aims to fill the gap in the literature and examine marital status-based life satisfaction distribution in Azerbaijan.

1. DATA

The data employed in the research was obtained from "Social Survey -7", conducted by ASERC (2021). The dataset was obtained from a self-select online comprehensive survey, representing different ages, gender, marital status and other socio-economic groups. Data collection has happened from September 10 - November 10, 2021, through paid social media (primarily Facebook and Instagram) advertisements. Overall, nearly 100 thousand people reached the ads, 4 thousand opened the self-administrated questionnaire. 2208 respondents have filled and submitted the survey (45% male / 55% female). The average age is 34.6.

1.1. Variables

The dependent variable used in empirical analyses is the self-reported happiness or life satisfaction of an individual. Regression models include marital status as the primary explanatory factor accompanied by a set of covariates. Below, the definition and measurement methodology of each variable has been explained briefly.

Life satisfaction (LS)

In the survey, the life satisfaction of each respondent was measured according to "the Satisfaction with Life Scale (SWLS)" approach developed by Pavot and Diener's (1993). The methodology is based on the responses of each individual to 5 questions: (1) *In most ways, my life is close to my ideal*, (2) *The conditions of my life are excellent*, (3) *I am satisfied with my life*, (4) *So far, I have achieved the important things I want in life*, and (5) *If I could live my life over, I would change almost nothing*. Responses to each question were measured on a 7-point Likert scale: $1 = totally\ disagree$, and $7 = totally\ agree$. LS score of each individual denotes the sum of scores to all 5 questions, ranging from 7 to 35. The respondent is:

- extremely dissatisfied if $5 \leq LS \leq 9$;
- dissatisfied if $10 \leq LS \leq 14$;
- slightly dissatisfied if $15 \leq LS \leq 19$;
- neither dissatisfied nor satisfied (neutral) if $LS = 20$;
- slightly satisfied if $21 \leq LS \leq 25$;
- satisfied if $26 \leq LS \leq 30$;
- extremely satisfied if $31 \leq LS \leq 35$.

The reliability of the scale was confirmed ($\alpha = 0.852$).

Marital status

In the survey, the marital status of each respondent was identified according to a 5-categorical multiple-choice question. The respondent should choose one of the following options: (a) Single, (b) Engaged, (c) Married, (d) Divorced, and (e) Widowed.

Based on the given categories, 3 dummy variables (*Married*, *Divorced*, and *Widowed*) are created while unmarried respondents (single + engaged) are left as the base group:

Married is a dummy variable equals 1 if the respondent is currently married, and 0 otherwise.

Divorced is a dummy variable equals 1 if the respondent's marital status is being divorced, and 0 otherwise.

Widowed is a dummy variable equals 1 if the respondent's wife or husband is dead, and 0 otherwise.

Control variables

Marital status-related dummies include two variables. Unmarried individuals are in the reference group. *Married* equals 1 for married respondents, and 0 otherwise. Simultaneously, *Widowed* represents widowed/divorced individuals (equals 1) while 0 for unmarried and married respondents.

Empirical models also include selected socio-demographic indicators to avoid omitted variable biasedness. Control variables are:

Age denotes the respondent's age, ranging from 17 to 72.

Gender is a dummy variable included to take the impact of gender status into account. The variable equals 1 for females and 0 for males. Those who did not report their gender status are coded as missing data.

The group of dummy variables represents information about the respondent's highest level of educational attainment. Because the survey measures educational attainment level with a 5-category question, we created 4 dummy variables (*School, College, Master, PhD*) while leaving bachelor graduates with no further degrees as the reference group:

School equals 1 if the person did not get any further education after graduating from 9 or 11-year comprehensive schools (which is mandatory in the country), and 0 otherwise.

College gets 1 if the person's highest educational attainment level is graduation from vocational schools/colleges, and 0 otherwise.

Master equals 1 if the person received a master's degree (with no PhD education), and 0 otherwise.

PhD gets 1 if the person has completed a PhD program or an equivalent education level, and 0 otherwise.

The group of dummy variables was added to control for the effects of living area and type of the settlements.

Regarding the living area, two dummy variables were created while respondents living in the remaining regions are left as the base group:

Baku equals 1 if the respondent currently living in Baku (Azerbaijan's capital and the biggest), and 0 otherwise.

Absheron-Khizi equals 1 if the respondent is currently Absheron-Khizi economic region (surrounding Baku city), and 0 otherwise.

Regarding the type of settlements respondents currently living in, 4 dummy variables are created while people living in an urban area (i.e., cities) are left as the base group:

Urban-type settlement equals 1 if the respondent living in an urban-type settlement location, and 0 otherwise.

Rural near urban equals 1 if the settlement the respondent is living in is a village near to urban areas, and 0 otherwise.

Rural far from urban equals 1 if the settlement the respondent is living in is a village far from urban areas, and 0 otherwise.

Mountain village equals 1 if the settlement the respondent is living in is a village in mountainous areas (generally very far from urban or urban-type settlements), and 0 otherwise.

1.2. Descriptive analyses

Table 1 describes primary measures for each variable. 41.5% of respondents are unmarried people while 51.2% are currently married. The share of widowed (2.3%) or divorced (5%) are not so much. In terms of mean age, the sample can be considered representative of the population. There can be a certain level of negative bias which is acceptable as the survey attendance requires some technological knowledge (through social media accounts). Relative higher participation of people with higher educational attainment can be considered as a weakness of the sample. Thus, 71.3% of total respondents are a bachelor or higher degree

holders. Most likely, this is due to (1) limited access to rural areas, (2) limited technology use among less educated people, and (3) less educated people are less aware of surveys and demonstrate less interest to participate in the data collection process. Though the survey is a self-select online survey and does not yield a probability sample, overall results most likely should represent Azerbaijan society.

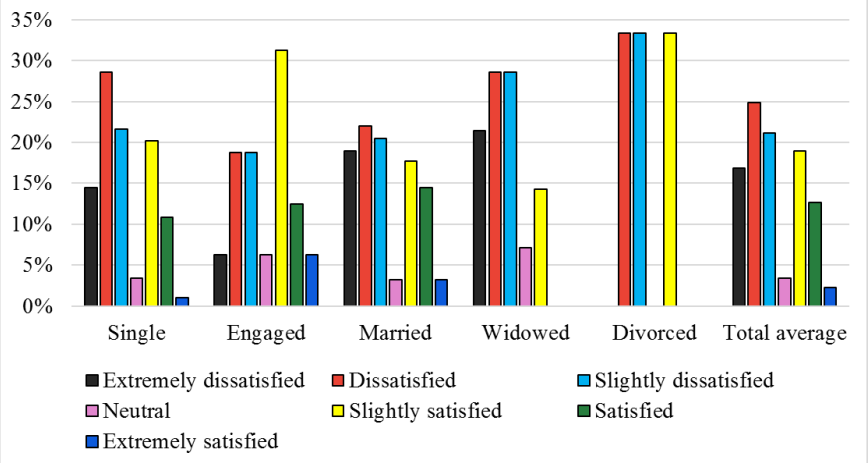
Table 1: Descriptive statistics of variables

Variable	*No. of Obs.*	*Mean*	*Min.*	*Max.*	*Std. D.*
LS	2208	17.76	5	35	6.981
Single (Ref.)	2195	0.415	0	1	0.492
Married	2195	0.512	0	1	0.499
Widowed	2195	0.023	0	1	0.151
Divorced	2195	0.050	0	1	0.218
Age	2176	34.61	17	80	12.52
Gender	2184	0.548	0	1	0.498
School	2191	0.166	0	1	0.372
College	2191	0.121	0	1	0.326
Bachelor (Ref.)	2191	0.461	0	1	0.498
Master	2191	0.205	0	1	0.404
PhD	2191	0.047	0	1	0.212
Baku	2171	0.488	0	1	0.499
Absheron-Khizi	2171	0.142	0	1	0.349
Urban (Ref.)	2161	0.642	0	1	0.479
Urban-type settlement	2161	0.102	0	1	0.304
Rural near urban	2161	0.176	0	1	0.381
Rural far from urban	2161	0.066	0	1	0.249
Mountain village	2161	0.013	0	1	0.115

Source: *Authors' own completion*

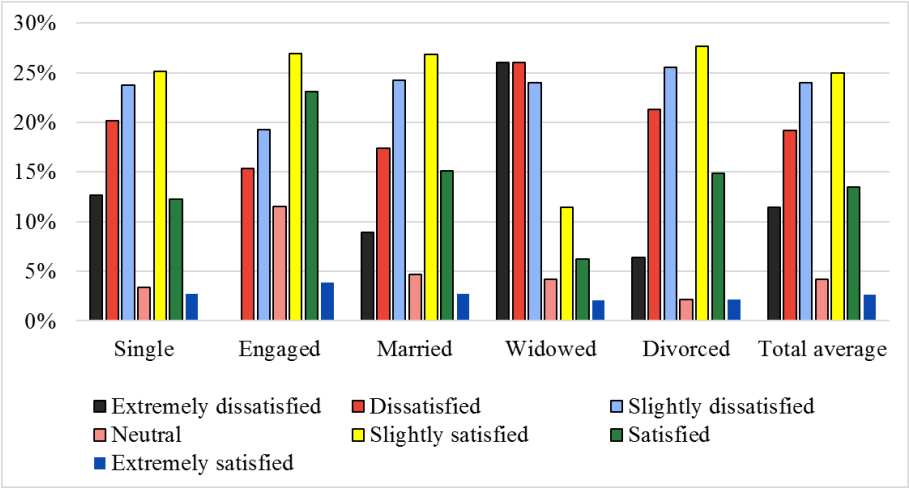
Overall, the initial inference is that the average life satisfaction score (17.76) is at the bottom line of being dissatisfied. Note that a respondent is considered to be somewhat satisfied if the score is above 20. The average score is the most for engaged (20.47) and the least for divorced (14.73) people. An unexpected finding is that widowed respondents reported higher happiness (18.96) compared to married individuals (18.17). In this context, we reveal a clear happiness difference by marital status. Figures 1 and 2 are more informative in terms of life satisfaction distribution by marital status for males and females.

Figure 1: Life satisfaction distribution among males



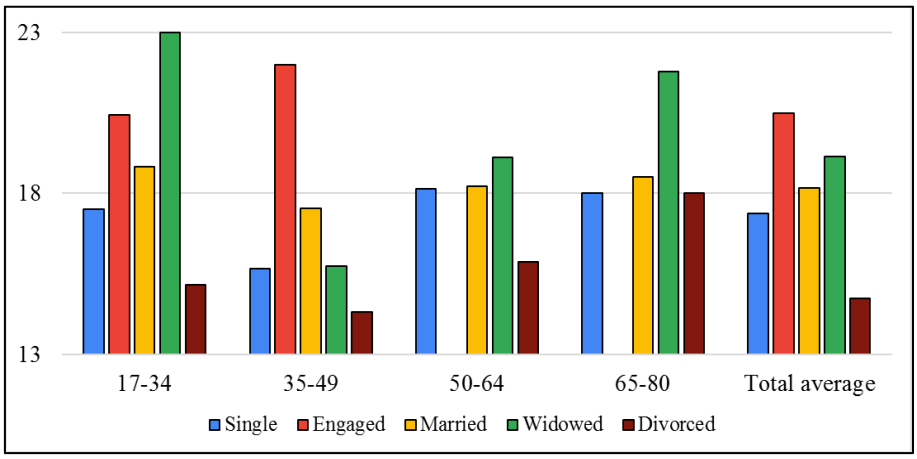
Source: *Authors' own creation*

Figure 2: Life satisfaction distribution among females



Source: *Authors' own creation*

Figure 3: Average life satisfaction score by age groups



Source: *Authors' own creation*

Figure 3 displays life satisfaction differences due to marital status for given age groups. In the 17-34 age group, widowed individuals report being "more satisfied" than others. Explanation of this "strange" outcome is due to a sample problem. There is only one widowed respondent within this age group. On total average, the inference that "*widowed individuals are more satisfied with life than married ones*" links to the impact of age. Among elderly widowed people, 10 of 12 are females and at this age, losing a spouse may hurt less.

2. EMPIRICAL METHODOLOGY

The research employs a cross-sectional data set. The empirical model should be based on the survey data within a cross-sectional analyses framework and includes multiple factors. Meanwhile, a multistage empirical modelling framework would yield more reliable and informative outputs. Considering the fact that the age and happiness relationship is expected to be U-shaped (Frijtest and Beatton, 2012) and results of Ramsey-RESET test outcomes, the model includes a polynomial of age variable.

$$\ln(\mathrm{LS})_i = \beta_0' + \beta_1' * Married_i + \beta_2' * Widowed_i + \beta_3' * Divorced_i + u_i' \quad (1)$$

$$\ln(\mathrm{LS})_i = \beta_0'' + \beta_1'' * Married_i + \beta_2'' * Widowed_i + \beta_3'' * Divorced_i + \beta_4'' *$$

$$* Age_i + \beta_5'' * Age_i^2 + \beta_6'' * Gender_i + u_i'' \quad (2)$$

$$\ln(\text{LS})_i = \beta_0''' + \beta_1''' * Married_i + \beta_2''' * Widowed_i + \beta_3''' *$$
$$* Divorced_i + \beta_4''' * Age_i + \beta_5''' * Age_i^2 + \beta_6''' * Gender_i + \beta_7''' *$$
$$* School_i + \beta_8''' * College_i + \beta_9''' * Master_i + \beta_{10}''' * PhD_i + u_i''' \quad (3)$$

$$\ln(\text{LS})_i = \beta_0'''' + \beta_1'''' * Married_i + \beta_2'''' * Widowed_i + \beta_3'''' *$$
$$* Divorced_i + \beta_4'''' * Age_i + \beta_5'''' * Age_i^2 + \beta_6'''' * Gender_i + \beta_7'''' *$$
$$* School_i + \beta_8'''' * College_i + \beta_9'''' * Master_i + \beta_{10}'''' * PhD_i + \sum_{k=1}^{6} \gamma_k * Z_{k,i} + u_i'''' \quad (4)$$

Note that β and γ denote model parameters while u_i is the error term. Z_k includes the group of dummy variables added to control for the effects of living area and type of the settlements.

3. EMPIRICAL RESULTS

Using the survey data, we have estimated Models (1-4) by using the Ordinary Least Squares (OLS) method. Note that models have no functional misspecification problem. Although the results of the Breusch-Pagan-Godfrey test indicates the existence of heteroscedasticity problem, empirical results are still enough reliable due to the large sample size. Table 1 reports the empirical findings.

Model (1) does not include any control variable and aims to measure only group differences. Here, the result implies no significant happiness difference between unmarried (single or engaged), married and widowed people ($p > 0.1$). However, there is a significant negative happiness gap against divorced individuals ($p < 0.01$). Hence, on average, divorced people are 20% less satisfied with life compared to unmarried respondents.

Once we control for age and gender status (Model 2), the marital happiness gap substantially changes. Life satisfaction differences between married and unmarried individuals are found significant ($p < 0.01$) and positive. Meanwhile, the "*Married*" variable's coefficient increases more than 3 times, from 0.028 to 0.104, which implies a married individual to be 10.4% more satisfied with life than an unmarried individual, on average. On contrary, the happiness gap against divorced people diminishes after controlling for age and gender status but remains to be negative and statistically significant ($p < 0.01$). No substantial change was recorded about the coefficient of the "*Widowed*" variable ($p > 0.1$).

In Model (3), educational dummies are added to the model which changes coefficients of marital status dummies at some level. Happiness gap between married and unmarried people expands slightly against the latter group ($p < 0.01$) while the gap decreases for divorced individuals ($p < 0.01$). For the first time, the coefficient of the "*Widowed*" variable tends to be significant at a 90% confidence level ($p < 0.1$).

Regarding the final model specification which also includes the location and settlement related dummies, the marital happiness gap becomes more evident. Results display a significant life satisfaction gap between married-unmarried, widowed-unmarried and divorced-unmarried individuals ($p < 0.05$). As expected, the least satisfied marital group is divorced people - 11.1% less happy than unmarried ones. On average, married people are 12.5% more satisfied with life compared to unmarried individuals.

The marital happiness gap result for widowed people is a little strange and uncommon. While controlling for given factors, the model reveals widowed people as the "happiest group" ($p < 0.05$). Most likely, this result is due to the fact that the number of widowed respondents is limited and age distribution is towards being elderly. Especially, a larger share of widowed females belonging to the 65 or older age groups may make the result biased. An additional, but comparatively less persuasive explanation is that widowed people are not challenged by wife-husband conflicts and receive some financial support from the government as a socially vulnerable group. Both can have a positive impact on the well-being of widowed individuals.

Table 1: Empirical results

Variable	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
C	2.779***	3.142***	3.225***	3.221***
	(0.014)	(0.092)	(0.093)	(0.096)
$Married_i$	0.028	0.104***	0.120***	0.125***
	(0.020)	(0.027)	(0.026)	(0.026)
$Widowed_i$	0.097	0.104	0.133*	0.143**
	(0.065)	(0.072)	(0.071)	(0.072)
$Divorced_i$	-0.200***	-0.149***	-0.114**	-0.111**
	(0.045)	(0.050)	(0.050)	(0.051)
Age_i	-	-0.024***	-0.027***	-0.028***
		(0.005)	(0.005)	(0.005)
Age_i^2	-	0.0003***	0.0003***	0.0003***
		(0.00006)	(0.00006)	(0.00006)
$Gender_i$	-	0.117***	0.109***	0.105***
		(0.002)	(0.019)	(0.200)
$School_i$	-	-	-0.101***	-0.100***
			(0.028)	(0.028)
$College_i$	-	-	-0.0064**	-0.061*
			(0.031)	(0.031)
$Master_i$	-	-	0.069***	0.069***
			(0.025)	(0.026)
PhD_i	-	-	0.096***	0.096**
			(0.046)	(0.046)
$Baku_i$	-	-	-	0.021
				(0.023)
$AbsheronKhizi_i$	-	-	-	0.085***
				(0.031)
$UrbanTypeSettlement_i$	-	-	-	-0.053
				(0.032)
$RuralNearUrban_i$	-	-	-	-0.049*
				(0.026)
$RuralFarFromUrban_i$	-	-	-	0.037
				(0.041)
$MountainVillage_i$	-	-	-	0.025
				(0.090)
R^2	0.012	0.040	0.056	0.063
$Std.Error\ of\ Reg.$	0.450	0.444	0.440	0.438
$Ramsey\ RESET\ test$	-	0.589	1.090	1.429
		[0.5553]	[0.2757]	[0.1529]
$BPG\ Het.Test$	1.804	5.905	3.621	2.476
	[0.1436]	[0.0000]	[0.0001]	[0.0010]

Note: *Dependent variable is* $\ln(LS)_i$. ****, ** and * denote rejection of null hypothesis at 1%, 5% and 10%, respectively. Standard errors are in ( ). Probabilities are in [ ]*

Additional output is finding a U-shaped causality from age to life satisfaction. The threshold value of age in Model (4) is:

$$\frac{\partial \ln(LS)}{\partial Age} = -0.028 + 2 * 0.0003 * Age = 0 \quad (5)$$

$$Age = \frac{0.028}{2*0.0003} = 46.7 \quad (6)$$

The threshold value implies that the impact of age on life satisfaction is negative up to 46.7 which later turns to positive in older ages. Especially, the negative marginal impact is larger in younger ages. This can be about getting married, increasing responsibilities, etc.

Also, it is noteworthy to mention that results display females to be more satisfied with life (11-12%) compared to males which is in line with previous studies (Graham and Chattopadhyay, 2013; Arrosa and Gandelman, 2016). Regarding the impact of educational attainment, empirical results show a significant happiness increase towards higher educational attainment (Cheung and Chan, 2009; Ferrante, 2009; del Mar Salinas-Jiménez, Artés and Salinas-Jiménez, 2011). Results show no significant impact of living region or type of settlements over the well-being of individuals in Azerbaijan.

CONCLUSION

Well-being, happiness or life satisfaction of individuals can be considered as one of the key development indicators in contemporary economies. The point is that recent studies reveal disputable sides of considering income as an indicator of success as the impact of income on life satisfaction is not unidirectional (Aliyev, Nadirov and Dehning, 2021). Because the primary goal of economic policy decisions is to enhance individual and societal well-being (Oishi and Diener, 2014), happiness related studies increases their importance in policymaking processes. As underlined by Oishi and Diener (2014), an ideal society is "*in which citizens are happy, feel satisfied, and find their lives meaningful*".

Marriage is one of the most important decisions in a human's life which significantly affects a person's well-being (Zhu et al., 2018; Tao, 2019; Patel and Dhar, 2020). To our best knowledge, the relationship between marital status and happiness was not studied in the case of Azerbaijan. The current study attempts to fill this gap by empirically exploring the impact of marital status on the life satisfaction of individuals. Using survey data (ASERC, 2021), we estimate life satisfaction differences due to marital status while step-by-step including a set of control variables. Overall, results confirm that a significant causality exists from marital status to self-reported happiness of individuals in the country.

With no covariates, results display no significant life satisfaction difference among unmarried, married and widowed individuals while divorced people report significantly lower satisfaction with life. After step-by-step including the control variables, we reveal that married people report higher satisfaction than unmarried ones while divorced people remains to be the least happy group. Though widowed people are found "the happiest" group, this result is controversial and required further research.

The current study fills the gap partially. However, there are some important shortcomings required to be solved in future studies. Overall, having low goodness of fit measure indicates a limited role of the selected factor in determining happiness in Azerbaijan society. Future studies should control for further factors in order to determine the ceteris paribus life satisfaction difference due to marital status in Azerbaijan.

REFERENCES

1. Aliyev, K., Nadirov, O., & Dehning, B. (2021). Income and Life Satisfaction: A 'Wave Formation'Framework. *Journal of Happiness Studies*, 1-14.
2. Aliyev, K., Ismayilov, A., Gasimov, I., & Isayeva, A. (2021). Unhappy moves? Assessing the link between life (dis)satisfaction and intention to emigrate from Azerbaijan. *Economics & Sociology*, *14*(3), 127-145.
3. Aliyev, K. (2020). Well-Being Effects of Novel Coronavirus Pneumonia (Covid-19): Moderating Role of Age. *ASERC Journal of Socio-Economic Studies*, *3*(1), 1-11.
4. Aliyev, K. (2021). Does the life satisfaction depend on self-perceived social stratification: Evidence from Azerbaijan? *ASERC Journal of Socio-Economic Studies*, *4*(1), 20-28.
5. Arrosa, M. L., & Gandelman, N. (2016). Happiness decomposition: Female optimism. *Journal of Happiness Studies*, *17*(2), 731-756.
6. ASERC. (2021). Social Survey -7. Unpublished dataset.
7. Cheung, H. Y., & Chan, A. W. (2009). The effect of education on life satisfaction across countries. *Alberta Journal of Educational Research*, *55*(1).
8. Coombs, R. H. (1991). Marital status and personal well-being: A literature review. *Family relations*, 97-102.
9. del Mar Salinas-Jiménez, M., Artés, J., & Salinas-Jiménez, J. (2011). Education as a positional good: A life satisfaction approach. *Social indicators research*, *103*(3), 409-426.
10. Dupre, M. E., Beck, A. N., & Meadows, S. O. (2009). Marital trajectories and mortality among US adults. *American journal of epidemiology*, *170*(5), 546-555.
11. Ferrante, F. (2009). Education, aspirations and life satisfaction. *Kyklos*, *62*(4), 542-562.
12. Fry, R. (2013). A rising share of young adults live in their parents' home. *Pew Research Center*, *1*.
13. Frijters, P., & Beatton, T. (2012). The mystery of the U-shaped relationship between happiness and age. *Journal of Economic Behavior & Organization*, *82*(2-3), 525-542.
14. Graham, C., & Chattopadhyay, S. (2013). Gender and well-being around the world. *International Journal of Happiness and Development*, *1*(2), 212-232.
15. Klinenberg, E. (2013). *Going solo: The extraordinary rise and surprising appeal of living alone*. Penguin.
16. Lawrence, E. M., Rogers, R. G., Zajacova, A., & Wadsworth, T. (2019). Marital happiness, marital status, health, and longevity. *Journal of Happiness Studies*, *20*(5), 1539-1561.
17. Oishi, S., & Diener, E. (2014). Can and should happiness be a policy goal?. *Policy insights from the behavioral and brain sciences*, *1*(1), 195-203.
18. Patel, K. K., & Dhar, M. (2020). Gender Differences in Marital Happiness among Newly Married Individuals in India: Do the Demographic and Socioeconomic Factors Matter?. *Demography India*, *49*(1), 112-123.
19. Stack, S., & Eshleman, J. R. (1998). Marital status and happiness: A 17-nation study. *Journal of Marriage and the Family*, 527-536.
20. Tao, H. L. (2019). Marriage and happiness: Evidence from Taiwan. *Journal of Happiness Studies*, *20*(6), 1843-1861.
21. Williams, K. (2003). Has the future of marriage arrived? A contemporary examination of gender, marriage, and psychological well-being. *Journal of health and social behavior*, *44*(4), 470.
22. Zhu, X., Wang, K., Chen, L., Cao, A., Chen, Q., Li, J., & Qiu, J. (2018). Together means more happiness: relationship status moderates the association between brain structure and life satisfaction. *Neuroscience*, *384*, 406-416.