The Role of Safety and Security on the Subjective Well-Being of Armenians: Evidence from World Values Survey data

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Abstract

Using data from the World Values Survey wave 7 (Haerpfer et al., 2020), this paper looks at basic needs as a major predictor of subjective well-being. Perceptions of the respondent's economic situation and safety and security are analysed as components of basic needs. Drawing on previous research, we build a model of basic needs using exploratory factor analysis. We find five coherent dimensions of basic needs in the data. Using a binomial logistic regression model, we tested their role as predictors of subjective well-being. We control for major demographic variables (age, gender, education level, marital status, and employment status). We find that both community connectedness and perceptions of financial well-being are positively associated with subjective well-being. However, neither personal safety perceptions nor worries regarding a potential war affect subjective well-being significantly. This has important theoretical implications as previous literature posited that safety and security may be a predictor of subjective well-being in war-affected countries.

1 Introduction

2021 marked 30 years of Armenian independence. During all these decades conflict with Azerbaijan remained in the background as a national security threat. In parallel to security issues Armenia also faced economic problems during these years which were due to the collapse of Soviet Union and due to Armenia being a landlocked country with partially closed borders. After the outbreak of the conflict at the end of 2020, a change in prioritization of the issues facing Armenia occurred. Caucasus Barometer 2021 data showed a considerable shift in priorities compared with 2012 and 2019 from unemployment to peace and border issues (Armenia, 2022). This paper aims at exploring if this shift of priorities may affect subjective well-being among Armenians. Furthermore, few studies have examined the associations between war, post-war situations, and well-being (Weinberg et al., 2017). Specifically this paper aims to understand better how perceptions regarding basic needs affect the Subjective well-being of Armenians after the 44-day war. Basic needs is conceptualised as a multi-dimensional concept that goes beyond financial or safety concerns. First, a literature review describes different factors affecting subjective well-being. Second, we build a theoretical framework that describes predictors of subjective well-being and objective and subjective security factors, as well as touching upon the situation in Armenia that may affect the subjective well-being of the population. Part four describes the research design with independent and dependent variables, methods used to analyse the data. Part five presents the results of the exploratory factor analysis, its interpretation, the regression results and discussion. The topics and lessons developed in this research are drawn together in conclusion, which also includes a discussion about the future research on subjective well-being in relation to safety and security.

2 Subjective well-being in previous research

Subjective well-being is an emerging research area in the social sciences, and over the past few decades, a wide range of literature discussed what has been termed subjective well-being (SWB) and what are the major determinants of subjective well-being (Wang et al., 2020) . Subjective well-being is described as cognitive and affective evaluation used by people to show how satisfied they are with their lives. The affective component touches upon the balance of positive and negative affect on the population of the country, whereas the cognitive component describes people's subjective evaluation of their life circumstances (Diener, 1984; Diener and Larsen, 1993; Diener et al., 2009; Veenhoven, 1991). The SWB is being evaluated by individuals in a number of different ways Kim-Prieto et al. (2005) , rating their satisfaction with various aspects of life in a bottom-up procedure (Brief et al., 1993; Cummins, 1996). Individuals evaluate their well-being in different setting and contexts, including their subjective evaluation of income, health, education security, etc. (Wills-Herrera et al., 2011). It is a personal assessment that entails a cognitive and an affective dimension

(Wills-Herrera et al., 2009). Proximal situational factors mostly influence subjective well-being, generally conferred at the community or city level rather than the nation (Wills-Herrera et al., 2009). It is usually measured by life satisfaction and happiness, referring to the individual's assessment of their quality of life, and can be a helpful guide to promoting a better life. Satisfaction with personal safety, income, sense of community, and other factors form a part of many scales measuring subjective well-being (Wills-Herrera et al., 2011). Researchers found it interesting to study SWB in countries that have experienced a transition from a centrally planned economy to a market economy during the past 20 years.

A study of Habibov and Afandi (2009) examines the subjective well-being in Armenia, Azerbaijan, and Georgia. Most results in this study are similar to other countries and show that an increase in total household income, university education of the household head is associated with improvement in subjective well-being, as well as, having a salary as the main source of income in a household, and ownership of a car, mobile phone or satellite dish. Some interest in politics as well as having the perception that economic conditions had become better over the past three years or will improve over the next year also correlate with an increase in subjective well-being Habibov and Afandi (2009). On the contrary, having a high proportion of children in a household, obtaining social benefits, relying on a main source of income other than a salary correlates with a decrease in well-being Habibov and Afandi (2009). Being divorced, separated, widowed or unemployed, and working in agriculture also correlate with a decrease in well-being Habibov and Afandi (2009).

Given the field's size and diversity, it is hardly possible to provide a comprehensive review of the subject matter in this paper (see Jorm and Ryan, 2014). Instead, the research aims to focus on a specific area to study the subjective well-being in transitioning countries, in our case, Armenia. We argue that the perception of satisfaction with security is one of the vital aspects of life influencing evaluations of subjective well-being. If people feel unsafe, their life area could easily overwhelm their worldview and drastically reduce their well-being. We also state that social connections, and social capital, play an essential role in influencing perceptions of subjective well-being. Belongingness to social networks is one of the main facets of social capital. Social capital entails the capital that can be accumulated in social relationships and can be conceptualized as a resource for action (Coleman, 1988) . Social capital flows through social connections and individuals' potential to make connections (Wills-Herrera et al., 2011)

3 Theoretical Framework

3.1 The Predictors of Subjective Well-being

Maslow's hierarchy theory puts forward the hypothesis that people are motivated by five basic categories of need; the bottom two are physiological and

biological needs which are followed by safety, social and love, esteem, and self-actualization (Maslow, 1943; Desmet and Fokkinga, 2020). A number of researchers worldwide have used the needs hierarchy theory to explain the connection between subjective well-being and different variables such as income, safety, security, food supply (Diener and Biswas-Diener, 2002; Oishi et al., 1999; Veenhoven, 1991; Wills-Herrera et al., 2009) . From Maslow's needs hierarchy theory, it can be stated that only when lower-level needs (physiological, safety, belonging, and esteem) are satisfied, people attempt to meet their higher needs for self-actualization (Maslow, 1970). Although the lower needs are mostly satisfied in modern societies, those needs appear more vivid during extreme cases, like wars, poverty, and disasters (McClinton, 1990). Most studies in this sphere reveal that one's life satisfaction depends on how much their needs are fulfilled, which may vary from society to society (Oishi et al., 1999). For poor countries, meeting safety needs was a stronger predictor of life satisfaction, while esteem was a stronger predictor of life satisfaction in wealthier nations. The relationship between subjective well-being and income, health, marital status, age, gender, job morale, and education has been demonstrated in a number of studies conducted in various societies (Diener and Seligman, 2004; Dolan et al., 2008). Since security reflects order and stability in society, the human desire for protection becomes of utmost importance (Maslow, 1943, 1970) . Additionally, the modern age puts forward various challenges (Christie, 1997), and the fulfillment of safety needs becomes critical for people's neighbourhoods and overall society. A number of studies explore the relationships between crime and quality of life. The literature states that crime reduction is essential for a quality life. Previous research reveals that when the crime was measured subjectively (i.e., neighborhood worries, satisfaction with personal and family safety), personal safety had comparatively little impact on respondents' well-being (Michalos and Zumbo, 1999; Møller, 2005). Personal safety is a part of many dimensions that forms subjective well-being. However, intuitively, security has a different association with well-being than, for example, relationships because if high satisfaction with relationships is positive, satisfaction with safety is neutral. However, if people feel in danger, this would drastically reduce their well-being (Cummins, 2012).

Further research proposes that other critical external factors for SWB are close relationships and money. These items moderately influence SWB (Henderson, 1977). An important buffer to decreased SWB is the relationship with another human being, which involves mutual sharing and connectedness (Cummins et al., 2008). Likewise, money is a significant external buffer to decreased SWB. However, one of the misconceptions about money is that it can shift the set point to create a perpetually happier person. Set points for subjective well-being are under genetic control (Braungart et al., 1992). Indeed, an increase in income does not necessarily improve the level of subjective well-being indefinitely, and cannot improve beyond a certain set-point. Nonetheless, income can be used to shield oneself from hardships. In contrast, individuals lacking financials resources, are at the mercy of their circumstances (Cummins, 1996). However, intuitively, security has a different association with well-being than, for exam-

ple, relationships. High satisfaction with relationships is positively correlated with SWB, while satisfaction with safety has a neutral effect on SWB. However, if people feel in danger, this would drastically reduce their well-being (Cummins, 2012).

3.2 Objective and Subjective Security

Recent research has mostly explored the relationship between crimes and quality of life; however, there are few studies that examined the associations between war, post-war situations, and well-being (Weinberg et al., 2017). Objective security emphasizes national security from a military perspective by objectively expressing security through crime indicators or circumstances threatening societies. In contrast, subjective security describes the perception by individual of social insecurities (Sen, 1999).

Since 2000, research has tried to distinguish the security of nations or regions from the security of individuals. It is suggested to focus on the capabilities of individuals to control their surroundings rather than on the physical aspect of personal security (Wills-Herrera et al., 2009). In this sense, human security is an essentially subjective concept. It expresses an individual's ability to withstand threats from social conflict, political repression, and crime. It is measured by asking people how they feel about handling and controlling their primary conditions for life, expressing their political views, and having the freedom to meet and associate to pursue their interests. Some researchers argue that perceptions of insecurity will indicate subjective well-being better than objective measures of security because "objective" factors may be underrepresented (Wills-Herrera et al., 2009). Wills-Herrera et al. (2009) argue that this may be due to people becoming accustomed to insecure situations and develop coping strategies. In contrast, perceptions contain not only the perception of an external threat but also the ability and capacity the individual has to confront it and the coping strategies that individuals and communities use to reduce external threats or remove vulnerabilities (Wills-Herrera et al., 2009).

Additionally, several studies have explored that victimization and quality of life and revealed that poverty and unemployment are considered greater threats to the quality of life than victimization. However, the research also revealed the perceived likelihood of victimization and concern about safety had a more significant negative influence on life satisfaction than actual victimization (Møller, 2005). Another study conducted in Croatia reveals that crime-related problems did not influence life satisfaction. The author explains this fact by assuming that citizens live in a relatively safe environment and crime is a low priority in everyday life. In such cases, crime may not be a personally serious issue for the citizens and would not have a serious impact on person's quality of life (Aly, 2012).

3.3 Armenian context

In the autumn of 2020, a 44-day war broke out between Armenia and Azerbaijan over the Nagorno Karabakh region, ultimately reshaping the dynamics of a decades-old conflict in the South Caucasus. The conflict was in the predominantly Armenian-populated region of Nagorno-Karabakh (known as Artsakh). As a result of the war, Azerbaijan gained control over much of Nagorno-Karabakh's territory, including a portion of Nagorno-Karabakh and almost all of the surrounding territories (Welt and Bowen, 2021). Armenians control the remaining part of the region, including the capital city of Stepanakert. As a result, a cease-fire agreement mediated by the Russian Federation was signed, resulting in about 2,000 Russian peacekeeping troops entering the conflict zone to guarantee the security of a land corridor between Armenia and Nagorno-Karabakh. Because of the war, 3,809 Armenians were killed, 243 were still missing, and 11,000 soldiers were injured (Avetisyan, 2021). Multiple surveys show that collective security was an important issue in 2021 Armenia. According to the Caucasus Barometer, 61 percent of Armenians are extremely worried about their and their families' physical safety, and 68 percent are uncertain about their and their families future. Meanwhile, only 51 percent of the respondents are extremely worried about the negative impact of the war on their and their families income (Armenia, 2022) .

Since the above-discussed literature shows a lack of decent research on people's subjective well-being after war and war crimes, this study aims to measure what factors affect subjective well-being in Armenia after the 44-day war. For this, we have explored and statistically tested the following two hypotheses and relevant null hypothesis.

H0: Safety and security has no effect on the subjective well-being of the Armenian population after the 44-day war.

H1: Safety and Security perceptions affect negatively the subjective well-being of the Armenian population after the 44-day war.

H0: Factors other than safety and security does not affect the subjective well-being of the Armenian population after the 44-day war.

H2: Factors other than safety and security affect positively the subjective well-being of the Armenian population after the 44-day war.

4 Research Design

This section outlines the research design chosen to test our hypothesis. It contains four parts. First, we present the data used to measure the independent variable. This discussion includes the indicators considered initially and those eventually retained. Second, we present the data selected to measure our independent variables. Third, to move from a fuzzy list of indicators to empirically driven, but theoretically sound, independent variables we use an exploratory factor analysis (EFA). Fourth, we present the methodological decisions made to measure the relation between basic needs, safety and security and subjective well-being.

4.1 Data

To measure the relevant concepts, we use data from the world value survey (WVS) 7th wave (Haerpfer et al., 2020). This data is widely used in research which ensures both its quality and the comparability across time and countries. The data for Armenia was collected in 2021 (Haerpfer et al., 2020). This is important as the data collection took place after the 44-day war (2020), which has implications for the topic at hand. Importantly, we use questions for the WVS to measure both the dependent and independent variable. To do so allows us to perform analysis at the household level as it is the unit of the dataset. Furthermore, the sample is large (n=1119) and representative of the population of Armenia.

Independent Variables: Measuring Basic Needs

Since our concepts of interest reflect basic need we selected a number of questions from the World Values survey (7th wave) measuring various dimensions of basic needs. Due to the available data we focus on safety and security, subjective financial well-being and community connectedness. Subsequently we built a model using exploratory factor analysis. The questions used in the final model are summarized in Table 1 . Note that a larger selection was considered. However, these variables were ultimately dropped for various reasons (see section 5.1).

Table 1: Basic Needs Operationalisation

Concept	Question
Collective Security	To what degree are you worried about the following situations? A war involving my country A terrorist attack A civil war
Personal Safety	Which of the following things have you done for reasons of security? Didn't carry much money

Concept	Question
	Preferred not to go out at night
Financial Well-Being	On this card is an income scale on which 1 indicates the lowest income group and 10 the highest income group in your country. We would like to know in what group your household is. People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging one of them? How satisfied are you with the financial situation of your household?
Future Worries	To what degree are you worried about the following situations? Losing my job or not finding a job Not being able to give one's children a good education
Community connectedness	How close do you feel to your…?: Village, town or city County, region, district Country]

Dependent Variables: Measuring Subjective Well being

To measure well-being, we use two questions from the WVS. One question measures the "overall feeling of happiness on a four-point scale (very happy, quite happy, not very happy, not at all happy). The other question measures how satisfied respondents are as a whole on a 10-point scale (1: completely dissatisfied, 10: Completely satisfied, descriptive statistics for both questions are available in Table 2). Both these questions have been commonly used to measure SWB (Krueger and Schkade, 2008). Beyond measurement validity, this is welcome as this ensures the comparability of our results to the relevant literature.

4.2 Methods

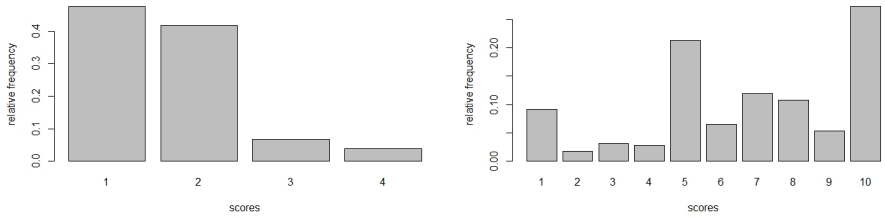
Exploratory Factor Analysis

Before analysing the relationship between our dependent and independent variables we conduct an exploratory factor analysis (EFA) on the questions previously selected. EFA is a method to establish the "smallest number of hypothetical constructs (also known as factors, dimensions or latent variables […]) that can parsimoniously explain the covariation observed among a set of measured variables". This method will allow us map coherent theoretical constructs (Watkins, 2018, , 220) and only retain the relevant variables. Once factors

making up the dimensions of basic needs, security and safety and community connectedness are established, scores can be estimated for each household and subsequently used in regressions. Thus, allowing us to analyse the effect of those constructs on SWB.

Regressions

To establish the relationship between the independent variables and dependent variables we use, a binomial logistic regression. This was preferred as the dependent variables are ordinal and do not follow a normal distribution as is shown in Figure 1.



(a) Q46 (b) Q49

Figure 1: Distribution of the Dependent Variables

The independent variables will be constituted of factor scores derived from the exploratory factor analysis. As binomial logistic regressions require dichotomous variable we transformed the data in the following manner. For question 46 responses coded 1 and 2 were assigned the value 0, responses coded 3 and 4 were assigned the value 1. For question 49, responses in the range 1-5 scales were assigned 0, and in the range 6-10 were assigned 1.

We specify three models in which only the dependent variables vary (Independent and control variables remain the same). Model 1 will use question 46 as the dependent variable, model 2 will use question 49, and model 3 uses the mean of these two questions.

Furthermore, previous findings have established some variables that may influence SWB, we include the following in all three models: Age (divided in six groups), Marital status (Married = 1 Not married 0), Gender (Female = 1, Male = 0), Employment (employed = 1 unemployed = 0) and education levels (ISCED scale). The selection was based on data availability.

Table 2: Descriptive Statistics (Dependent Variable)

	Mean	Std.Dev	Min	Max	N
Q46: Feeling of happiness	1.69	0.78	1	4	1213
Q49: Satisfaction with your life	6.61	2.89	1	10	1220

5 Analysis

5.1 Modelling Basic Needs, Safety, Security and Connectedness

We use an exploratory factor analysis (EFA) to perform data reduction on the items outlined above. This section reports the relevant statistics and decision made in this process. Throughout this section, we follow the best practices as outlined by Watkins (2018). The data management and analysis were conducted using the software R (Team, 2021), the EFA was conducted using the "psych" package(Revelle, 2021). Descriptive statistics for the data used can be found in Table 3. As EFA requires complete observations cases with missing values (n=104) were dropped.

Table 3: Descriptive Statistics

	Mean	Std.Dev	Min	Max	N
CloseCountry	3.54	0.58	1	4	1119
CloseRegion	3.38	0.69	1	4	1119
CloseTown	3.63	0.60	1	4	1119
Finances	5.32	2.73	1	10	1119
ScaleClass	2.97	0.97	1	5	1119
ScaleIncome	4.75	2.01	1	10	1119
SecMoney	1.51	0.50	1	2	1119
SecNight	1.50	0.50	1	2	1119
WorryChildEd	1.79	1.15	1	4	1119
WorryCivil	1.52	0.77	1	4	1119
WorryJob	2.04	1.23	1	4	1119
WorryTerror	1.50	0.74	1	4	1119
WorryWar	1.14	0.39	1	4	1119

Data and EFA appropriateness

We first examine the suitability of the data for exploratory factors analysis, both Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) test report satisfactory results (2.22e-16 and .62 respectively). Although a higher KMO results would be preferable, our data is well past the minimum .5 threshold routinely defined in the literature (Watkins, 2018). In addition, as our data does not respect linearity and normality assumptions assumed in EFA are not met. We circumvent this problem by using a mixed correlation matrix (uses Pearson or polychoric coefficients as appropriate) polychoric coefficients were found to be more appropriate than Spearman coefficients when dealing with data that is not normally distributed (Watkins, 2018).

Model development

To determine the number of factors to be used we used a parallel analysis displayed in Figure 2. This is an important step to avoid misspecification of the model which could skew the results (Hayton et al., 2004). Although multiple methods are available, parallel analysis has been shown to display better results (Watkins, 2018; Hayton et al., 2004). In our case, the parallel analysis shows that a 5-factor structure is the most appropriate solution to represent our data. As we expect our items to represent latent structure of these items common factor analysis was preferred to PCA. Oblique rotations (oblimin) were preferred to orthogonal rotations as we expect our factors to be correlated[1].

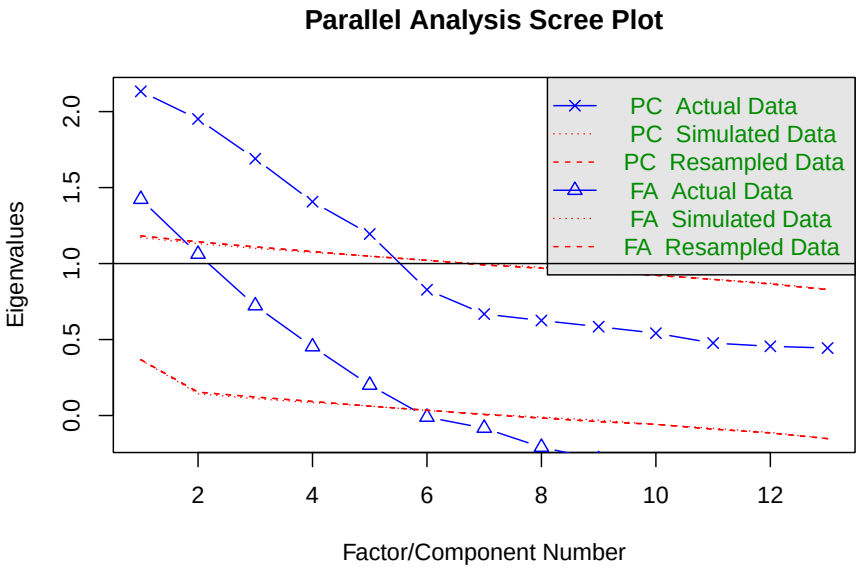


Figure 2: Parallel Analysis Scree Plot

Following our theoretically driven item choice several EFA models were built in iteration. We follow the "simple structure" approach combined with other criteria outlined by Watkins (2018, p.234-235). The most appropriate model was chosen based on three factors (data and model fit, item loadings, and theoretical convergence).

To test data and model fit several scores were checked (Bartlett, KMO, TLI, RMSA, RMSEA). Although some models performed better than others on these tests, all models were appropriate and hence none was dropped on this account.

[1]Other model specifications (rotation and estimation method) were tested with no to negligible changes in the results.

The scores of our final model are displayed in Table 4. Note that all scores are well above the minimum thresholds defined by the literature[2].

Table 4: Data and Model fit

	Minimum Requirements	Results
Bartlett Sphericity	<.05	2.22e-16
Keyser-Meyer Olkin (KMO)	> .5	0.62
Tucker-Lewis Index	<.1	0.01
RMSA	> .9	0.962
RMSEA	<.05	0.043

Then, models with items exhibiting non-salient loadings (< .3) or exhibited significant cross-loadings on several factors were dropped to retain a simple structure. The final estimation method retained is "maximum likelihood" as this is the most appropriate if "*factor-variable relationships are strong (>.40), sample size is large, multivariate normality is attained, and the number of factors is correctly specified*" [Watkins (2018), p.229]. This selective iteration process allows us to arrive at a final model. The final check consisted of assessing the theoretical consistency of the model. Fortunately this model although limited in scope, was very consistent with the anticipated dimensions neatly representing.

Final Model

The final model developed is summarized in Table 5. Highlighting factor loadings above .3 allows us to distinguish five clear factors comprised of 2 to 3 items each. All items load cleanly onto one factor with loadings comprised between .37 and .95 and no significant cross-loading.

Factor 1 consists of three items denoting the closeness to one's town, region, and country with respective loadings of .8, .84, and .70. Factor two consists of three items regarding the worry a war (.75), a terrorist attack(.78) or a civil war (.79) will involve Armenia. Future worries regarding job-loss (1) and providing education to one's children (.67) constitutes a distinct factor (factor three) from security worries. Factor four consists of the two items measuring if respondents avoided carrying a lot of money (.53) or going out at night (1). Factor five consists of three items measuring the subjective ranking of the respondent by income (.95) and class (.39). The latter loading is relatively weak, but this is easily explained as a perception of social class is a concept larger than just income perception. Thus, it is distinct from purely financial perceptions. The third item in factor five measures one's satisfaction with their finances in the past year (.49).

[2]Reported minimum requirements are taken from Watkins (2018).

Table 5: Factor loadings, communality and uniqueness

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Communality	Uniqueness
CloseRegion	0.84	0.02	-0.04	-0.02	-0.02	0.71	0.29
CloseTown	0.80	-0.01	0.05	-0.01	0.01	0.65	0.35
CloseCountry	0.70	-0.03	0.00	0.02	0.03	0.50	0.50
WorryCivil	0.04	0.79	0.00	0.04	-0.04	0.61	0.39
WorryTerror	0.03	0.78	0.04	0.05	0.03	0.63	0.37
WorryWar	-0.09	0.75	-0.03	-0.11	0.02	0.59	0.41
WorryJob	-0.01	0.00	1.00	-0.03	0.01	1.00	0.00
WorryChildEd	0.02	0.01	0.67	0.12	-0.05	0.49	0.51
SecNight	0.00	0.00	0.00	1.00	0.02	1.00	0.00
SecMoney	-0.04	0.00	0.01	0.53	-0.06	0.29	0.71
ScaleIncome	0.00	0.00	-0.02	0.02	0.95	0.90	0.10
Finances	0.05	0.05	0.05	-0.05	0.49	0.26	0.74
ScaleClass	-0.06	-0.07	0.14	-0.15	0.39	0.21	0.79

Before moving on to the interpretation of the models, we share some of the limitations regarding our model. First, the number of items is sub-optimal as overdetermined factors are preferred in EFA (Watkins, 2020, p.220) However, the item-selection process and the pre-existing data scarcity, in terms of items, did not allow us to have more items per factor. Unfortunately, short of conducting further data collection there is no way to remedy this issue. For the same reasons, the questions used to form our model are not as direct as one could wish, sometimes only being a proxy for the concept we hope to measure. This is perhaps the explanation for the relatively low internal consistency of factor 2, 4, and 5 displayed in the form of Cronbach alpha's in Table 6. Note however that factors one and three exhibit good internal consistency and that the remaining factors have nonetheless acceptable alpha scores. Future builds of a similar model should remedy these issues.

Table 6: Eigenvalues, Variance Explained, Cronbach Alphas

Property	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
SS loadings	1.865	1.805	1.491	1.349	1.316
Proportion Variance	0.143	0.139	0.115	0.104	0.101
Cumulative Variance	0.143	0.282	0.397	0.501	0.602
Proportion Explained	0.238	0.231	0.191	0.172	0.168
Cumulative Proportion	0.238	0.469	0.660	0.832	1.000
Cronbach Alpha	0.721	0.636	0.700	0.528	0.569

Naming and model interpretation

Having a developed an empirically driven and statistically sound model is not sufficient in itself. This section deals with the interpretation of the model. We also link this model to the theoretical underpinnings outlined earlier, where they meet, and where they deviate.

Before doing so an important part of the EFA process is to name the five factors that emerged from the data. Please note that these names are "for ease of communication, this does not mean that (a) 'the hypothetical construct is understood or even correctly labelled', (b) they should not be thought of as corresponding to real things (i.e., reification), and (c) it should not be assumed that if they have the same name that two factors are the same thing (jingle fallacy) or that if they have different names that they are different things (jangle fallacy)" (Kline (2016) in Watkins, 2018, p.236). Fortunately, the dimensions do not depart from theories and can be easily named.

The first factor we observe is constituted of the three items measuring the closeness of the respondent to its town, region, and country, together we can refer to them as a measure of *community connectedness.* The second factor is constituted with items measuring worries towards war, civil war and terrorism, we refer to this factor as *perceived collective security.* Two items form the third factor, together they can be understood as *future worries.* The fourth factor is constituted of items measuring behaviours as a result of reasons of security, specifically not going out at night and not carrying a lot of money. This dimension can be understood as *perceived personal safety.* Finally, our last factor clearly concerns respondent's *(subjective) financial situation.* It is composed of the respondent's subjective ranking per income brackets, social class, and self-reported satisfaction with their financial situation in the past 12 months.

A few interesting observations can be made. Local safety and country level security seem to form two distinct dimensions of SWB. However, we cannot exclude the possibility that this is due to the questions used rather than two effectively distinct dimensions. Indeed, items in *perceived collective safety* measure a subjective perception while items in *personal safety* measure behaviours resulting from the perception of insecurity. While perception and behaviour are not unrelated, they are markedly different processes and hence may account for the diverging dimensions. Another possibility is that this is due to the distinction between past-present (behaviour) and the future (worries). Similarly, we cannot that worries regarding losing a job is, perhaps surprisingly, not loading onto the same dimension as the items in the *financial situation* factor.

5.2 Regression results

Using the specifications outlined above we computed three binomial regressions summarized in Table 7.

Table 7: Regressions

	Dependent variable:		
	Q49_binary	Q46_binary	mixed_q46_q49
	(1)	(2)	(3)
Community Connectedness	0.162**	0.356***	0.308***
	(0.067)	(0.098)	(0.079)
Financial Situation	0.547***	0.332***	0.616***
	(0.072)	(0.109)	(0.088)
Collective Security	0.019	-0.087	0.049
	(0.069)	(0.106)	(0.087)
Future worries	0.008	0.166	0.080
	(0.070)	(0.106)	(0.086)
Personal Safety	0.091	-0.070	0.093
	(0.070)	(0.109)	(0.086)
Female	0.033	0.167	0.218
	(0.155)	(0.249)	(0.191)
Age	-0.254***	-0.479***	-0.279***
	(0.044)	(0.079)	(0.056)
Married	0.282**	0.870***	0.607***
	(0.135)	(0.201)	(0.163)
Education	0.045	0.030	0.085*
	(0.039)	(0.061)	(0.048)
Employment	-0.088	0.427*	0.021
	(0.145)	(0.250)	(0.183)
Constant	1.163***	3.432***	1.803***
	(0.302)	(0.526)	(0.378)
Observations	1,119	1,114	1,119
Log Likelihood	-678.599	-321.004	-486.297
Akaike Inf. Crit.	1,379.197	664.008	994.594

Table 7: Regressions

Note:	*p<0.1; **p<0.05; ***p<0.01

The results are remarkably stable across the three models. Only two factors have a significant effect on SWB regardless of how it has been operationalised. When respondent's perception of Community connectedness increases their SWB increases in turn. This is also true of the respondent's financial perceptions. Perhaps surprisingly neither worries regarding collective security, personal safety, or future economic situation significantly affected SWB.

5.3 Discussion

Those results are consistent with existing literature regarding SWB however, does not show any strong evidence that the factors affecting the SWB of Armenians has been shifted because of safety and security issues. On a number of issues, our findings concur with previous literature. Community connectedness and financial perceptions have been found to affect SWB consistently. This is also the case in our results, further reaffirming Braungart's and Henderson's results. While local safety and perceptions of victimization can affect SWB in some contexts, it is generally not the case (Møller, 2005; Michalos and Zumbo, 1999). Hence, it is not surprising that perceptions of personal safety did not affect SWB in Armenia, especially given that local safety is generally good.

Finally, war-related worries does not seem to affect respondents' self-reported well-being. While this is not expected to be the case with countries with no significant conflict, this appeared to be a considerable factor in the case of countries involved in perennial conflicts. This is backed up by the literature discussed above, which states that over the years, people build coping strategies to maintain their usual lifestyle. This result is relevant both to the literature regarding the effects of protracted conflicts and to the immediate effect of war. Indeed, the first Nagorno-Karabakh conflict has been active since 1994 and was active in 2020. Furthermore, the WVS was conducted only a few months after the 44-day war, and WVS respondents were particularly worried about a potential war. Understandably, over 85% of respondents indicated they were "very" worried about a potential war involving Armenia.

Given the study's results, there is a need for further elaboration on this topic to penetrate into the psychological aspect of the subjective well-being of the Armenian population through experimental and qualitative research.

6 Conclusion

This paper has investigated the role of some basic needs on subjective well-being. We modelled basic needs as a five-dimensional construct including subjective perceptions of: community connectedness, collective security, personal security, financial situation and future worries. Of these five dimensions, only community connectedness and financial situation affected (positively) subjective well-being. Our data suggests personal safety and future worries do not affecte the SWB of Armenians in 2021. Unexpectedly given the circumstances of this survey, our data also suggests that worries towards collective security do not affect SWB. There is not enough evidence to say that the 44-day war in 2020 had a significant effect on the subjective well-being of the Armenian population. Deeper investigation of the issue is needed to confirm this finding and eventually reveal the causal relationship between subjective assessment of the Armenian population and beyond.

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