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Research Article

Predictors of Life Satisfaction: A Nationwide Investigation in Iran

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Iran is a developing country with low levels of economic development and globalization and is ruled by a theocratic government. To address the lack of national research on well-being in Iran, this retrospective observational study aims to examine life satisfaction and its main determinants among Iranian adults. Using World Gallup Poll data collected between 2006 and 2017, we examined life satisfaction as a cognitive aspect of subjective well-being in relation to various factors. Our results show that income is the strongest predictor of life satisfaction, followed by standard of living, gender, social support, age, negative affect, and education. In developing countries such as Iran, which face significant economic, political, and social challenges, individuals prioritize the satisfaction of basic needs by emphasizing factors such as the socioeconomic status. In contrast, developed countries with established welfare systems may emphasize other values such as social connections and healthy lifestyle behaviors as key factors in life satisfaction. This study contributes to a deeper understanding of the determinants of life satisfaction in Iran and provides insights for future research and policy making.

1. Introduction

Subjective well-being (SWB) can be defined based on two key components: "contentment," which reflects an individual's cognitive evaluation of his or her life, and "happiness," which focuses more on affective elements such as emotions and moods. This definition posits that subjective well-being is a broad construct that includes both a reflective assessment of one's life circumstances and a more immediate, emotional response to those circumstances [1]. SWB can be assessed through key measures such as life satisfaction (LS) and quality of life scales [2]. SWB is attracting significant attention globally within public policy and economics arenas, amidst attempts at improving population well-being [3]. As the cognitive component of SWB, LS is defined as an individual's overall assessment of life, which can be influenced by various factors such as demographic factors, psychosocial factors, and life experiences. Such

determinants are known to influence physical and psychological health at both the individual and population levels [4]. LS has thus received considerable interest within the SWB literature when seeking a "global" judgment or assessment of participants' quality of life or well-being at a particular point in time [5, 6]. However, despite the increasing international literature relating to LS, inquiry, and debate ensues as to its specific determinants, predictors, and its heterogeneity [7].

A range of determinants at the individual level have been proposed as influencing LS. These include wealth/income/control over financial matters, control over work matters, age, gender, marital status, children, socioeconomic status such as education and employment, birthplace, residency, occupation, and family size [8–14]. Age and gender-related LS have attracted particular attention at this individual level. For instance, Joshanloo & Jovanović [15] used multilevel modeling in adults (a sample of 952,739) from 150 countries

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to examine social and psychological determinants of LS across five different age groups (15–24, 25–33, 34–43, 44–57, and \geq 58). The determinants were more significant in the older age group (i.e., age \geq 34 years). Concerning gender, the same authors in their global study in 2019 identified that women had higher LS than men across socioeconomic status factors, such as education, income, and employment groups (Joshanloo & Jovanović, 2018). That said, Joshanloo and Jovanocis' (2018) findings showed that variables such as employment, education, and sociopolitical factors are more significant in determining LS in men, whereas variables at the micro/individual level can be more important for women (e.g., marital status and interpersonal relationships).

Other key determinants include desirable perceptions around the family situation [9, 10, 12]; emotional, social, and psychological variables [16]; meaning in life, spirituality, and/or religiosity [8, 12, 14, 17]; perception of general health, personality, major life events [12, 14]; and social connections [11]. Individual perception relating to past experiences or comparison to the quality of life of others can also impact our subjective perception of LS [18]. LS has also been positively associated with higher self-efficacy and individuals' perception of being in control of their lives, health, and well-being status [2, 19, 20]. Furthermore, idiosyncratic features can influence LS. For example, positive associations have been found with extroversion, whilst neuroticism has shown an inverse association [21]. Therefore, individual personalities and characteristics may significantly moderate the factors affecting LS. Similarly, an inverse LS association has been found with various conditions such as anxiety and depression, as well as suicide, workforce disability, fatal accidents, and all-cause mortality [22].

Key determinants of LS at a macro level are said to include environmental factors (e.g., air pollution, noise, waste, and climate change) [23]; culture, leisure, and social activities [9]; social welfare/public benefit [8]; a sense of community and feeling of belonging [19, 24]; and pleasure, engagement, and (life) meaning [10, 19].

Although LS has a diverse range of determinants, some may be more stable over long periods, whilst others appear more transient [21]. For example, relationship and employment status may change over an individual's lifespan, as might the health status of individuals [21]. But, overall, high LS can result in long-term health advantages, such as general physical health and reduced mortality risk and disability [6].

The international literature concerning LS has primarily focused on developed countries and, in particular, European countries. Authors have noted that Iran, like many low- to middle-income countries, has been understudied in this context [25, 26]. However, research interest in the LS of Iranian cohorts has emerged through the study of a diverse range of influential factors at the individual and societal level, including the specific social, financial, and political situation of the country [2, 4, 27, 28].

Iran is a Muslim country with a 70 million population and has a theocratic government, with a different language, culture, political, and cultural regime in comparison with

other Arabic countries. Iran is also considered a collectivist society [29] and is currently among the least globalized countries in the world [30]. Economic issues such as inflation and unemployment, a consequence of sanctions and troubled relationships with Western countries [30], can be arguably detrimental to the LS and ultimately health and well-being status of the Iranian population. Based on the World Happiness Report (2018), Iran ranks 115 among 156 countries, following subjective measures of LS. However, comprehensive data relating to LS in Iran are still in its infancy. The aim of this present study was, therefore, to examine the key determinants of LS in the Iranian population, via analysis of Gallup World Poll data from 2006 to 2017. This study can build upon the LS knowledge emerging from Iran and contribute to its related debate and public policy initiatives, especially where they relate to health promotion planning and evaluation programs.

2. Methods

2.1. Participants. A retrospective observational design was used through the Gallup World Poll, which is a national data collection scheme, representing Iranian samples since 2006. Participants (≥15) have been surveyed each year, via face-to-face, landline, or mobile telephone interviews. Sample sizes are about 1000 per year except for 2006 (N=1300), 2012 (N=3507), and 2014 (N=2009). All existing data (2006 to 2017) were included in the present analyses, consisting of 13,864 participants (49.4% females, $M_{\rm age}$ =35.98, SD $_{\rm age}$ =13.77). The age distribution is shown in Figure 1.

2.2. Measures. Several factors from the Gallup World Poll collection were used. The Gallup World Poll has a diverse range of item variables, not all of which were relevant to the objectives of this study. The variables selected in the current study represented the most relevant social and psychological well-being content in Iranian society and at the same time were consistent with LS-related attributes discussed in the international literature. These variables were also used in previous Gallup-based studies of well-being, such as the World Happiness Report, and other relevant literature as determinants of mental and psychological well-being. Table 1 presents the items and responses. One specific example of the scale used is the Cantril Ladder of Life Scale [31] to measure LS, as the key outcome measure of our study.

Considering the weak intercorrelations between the items, we used all of them as separate variables. However, three composite variables were calculated according to the results of separate reliability/factor analyses. Principal axis factoring indicated that worry, stress, anger, and sadness formed a single factor, as a factor of negative affect (Eigenvalue = 2.630, variance explained = 65.749%), with factor loadings of 0.69–0.79 (α = 0.83). Enjoyment and laughter shaped another factor (Eigenvalue = 1.396, variance explained = 69.778%), with factor loadings of 0.63 (α = 0.57). Perceptions of corruption in businesses and the government

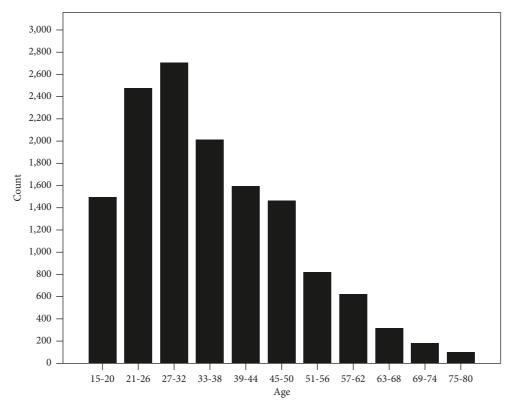


FIGURE 1: Age distribution (individuals older than 80 years were excluded due to their small sample size).

formed the third factor (Eigenvalue = 1.486, variance explained = 74.305%), with factor loadings of 0.69 (α = 0.65). Cronbach's alpha was used to measure internal consistency and reliability of multi-item scales. Although Cronbach's alphas for positive effect and corruption were below the typical threshold of 0.70, the low alphas should be interpreted because these scales each have only two items. The results of the factor analyses showed that the items within each scale have considerable shared variance, justifying the construction of two composite variables of positive effect and corruption.

3. Results

T-test was used to compare the means of demographic groups within LS, indicating that females scored significantly higher on LS [t (13721.793) = -16.615, p < 0.001, 95% CI of difference: -0.744, -0.587, d = 0.283] with a moderate effect size. LS levels by age and gender are shown in Figure 2. For a precise representation of the data, locally weighted regression smoothing (LOESS) was used to visualize the representation of LS. We also looked at gender differences in effect. T-tests indicated that women rated significantly higher on negative effect [t (12858) = -5.721, p < 0.001, 95% CI of difference: -0.054, -0.026, d = 0.101] with a small effect size. Positive effect did not show any gender differences. Figure 3 shows the distributions of stress, sadness, and

worry, which partially explains that LS stops declining and leveling off over the age of 50 for males. Men over the age of 50 reported lower levels of sadness, worry, and stress.

ANOVA was used to explain the role of sociodemographic factors variations in LS. Table 2 shows the findings of seven separate ANOVAs, using sociodemographic factors as independent categorical variables explaining LS. The strongest determinants of LS were the income quintile (explaining 4.6% of the variance), followed by education (explaining 2.6% of the variance), and employment status (explaining 2.1% of the variance). Figure 4 shows group differences based on these variables.

Location and relationship status explained 0.6% and 0.7% of the variance, respectively. A separate ANOVA indicated that gender moderated the link between relationship status and LS but only slightly. As shown in Figure 5, single and married females were more satisfied than single and married males. A final ANOVA indicated that the factors collectively explained about 9% of the variance in LS. When factors were entered simultaneously, the contributions of variables were reduced to 2.4% (employment), 1.4% (education), 0% (location), 0.7% (relationship status), and 2.8% (income).

Multiple regression analysis was used to understand how various predictors influence LS. We used all predictors of LS along with key demographic variables in a multiple regression analysis using the simultaneous regression method.

TABLE 1: The items used in the study.

Variable	Item	Response format
Life satisfaction	Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. The top of the ladder represents the best possible life for you, and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?	0 worst 10 best
Enjoyment	Did you experience the following feelings during a lot of the day yesterday? How about enjoyment?	1 yes 2 no
Worry	Did you experience the following feelings during a lot of the day yesterday? How about worry?	1 yes 2 no
Sadness	Did you experience the following feelings during a lot of the day yesterday? How about sadness?	1 yes 2 no
Stress	Did you experience the following feelings during a lot of the day yesterday? How about stress?	1 yes 2 no
Anger	Did you experience the following feelings during a lot of the day yesterday? How about anger?	1 yes 2 no
Laughter	Did you smile or laugh a lot yesterday?	1 yes 2 no
Freedom	In this country, are you satisfied or dissatisfied with your freedom to choose what you do with your life?	
Safe at night	Do you feel safe walking alone at night in the city or area where you live?	1 yes 2 no
Respect	Were you treated with respect all day yesterday?	1 yes 2 no
Interesting experience	Did you learn or do something interesting yesterday?	1 yes 2 no
Satisfaction with city	vith city Are you satisfied or dissatisfied with the city or area where you live?	
Household income satisfaction	Which one of these phrases comes closest to your own feelings about your household's income these days?	1 comfortable 2 getting by 3 difficult 4 very difficult
Health problems	Do you have any health problems that prevent you from doing any of the things people your age normally can do?	1 yes 2 no
Social support	If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them or not?	1 yes 2 no
Satisfaction with standards of living	Are you satisfied or dissatisfied with your standard of living, all the things you can buy and do?	1 satisfied 2 dissatisfied
Corruption in business	Is corruption widespread within businesses located in Korea or not?	1 yes 2 no
Corruption in government	Is corruption widespread throughout the government in Korea or not?	1 yes 2 no
Confidence in government	In (this country), do you have confidence in each of the following or not? How about national government?	1 yes 2 no
Religion important	Is religion an important part of your daily life?	1 yes 2 no
Religious attendance	Have you attended a place of worship or religious service within the past seven days?	1 yes 2 no

Note. The household income satisfaction item was reverse-coded to represent satisfaction (rather than dissatisfaction) with household income. All items had also two other response options: "Don't know" and "Refuse to answer." For nonbinary items, "Don't know" and "Refused" were considered missing. Binary variables were dummy-coded as 1 for "yes" or "satisfied" and 0 for "no," "Dissatisfied," "Don't know," and "Refused."

A total sample of 6286 participants had no missing values on all 20 variables and was included in the analysis. There is no evidence of a common method bias. Principal axis factoring was used to explain the pattern of correlations within the 20 variables, indicating that a single factor explained only 11.465% of the variance in the scores (Table 3). Confirmatory factor analysis was used to assess the construct validity of the scale in which all variables loaded on a common method factor (with an equality constraint on all factor loadings). This yielded an unstandardized factor loading of 0.066, indicating that the proportion of variance attributable to the common method factor was very small.

There was no evidence of multicollinearity, with tolerances ranging between 0.63 and 0.95. The results of simultaneous regression analysis are shown in Table 3. The predictors collectively explained 27.7% of the variance in LS, F (19, 6266) = 126.619, p < 0.001, and $R^2 = 0.277$. Seven out of 19 variables were not significant predictors of LS at the 0.05 level.

Stepwise regression analysis was used to identify the most significant determinants of LS, indicating household income as the strongest predictor explaining 15.4% of the variance. Satisfaction with standards of living was the next strongest predictor contributing an additional 6.5%. Gender,

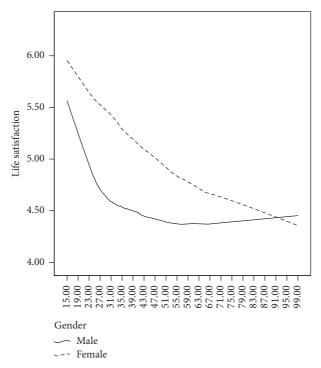


FIGURE 2: Life satisfaction by age and gender.

social support, age, negative affect, and education came next explaining 1.9%, 1.8%, 0.7%, 0.4%, and 0.3% respectively. These seven factors collectively explained 27% of the variance in LS scores. The other variables collectively added about 0.7% of the additional variance. According to the stepwise regression, confidence in the government, perceptions of corruption, city satisfaction, freedom, feeling safe at night, respect, and living in a large city were not identified as significant factors and were excluded from the equation.

Regression analyses were conducted separately across age and gender groups, via the simultaneous method (Tables 4 and 5). Based on separate regression analyses using the stepwise method, we also present the five most important determinants for each group in Table 5 (the stepwise method is a statistical technique for selecting predictors for a regression model. It starts with an empty model and adds predictors one at a time in a stepwise fashion. The predictors are added based on their correlation with the outcome variable and their ability to improve the model's predictive accuracy. The stepwise method continues to add predictors until no additional predictor can significantly improve the model's predictive accuracy. It also removes predictors from the model that no longer contribute significantly to the model's predictive accuracy. Therefore, using this approach will result in the fewest predictors being part of your model [32]. Four age categories were used to represent age groups, based on the previous literature [33-35], including emerging adulthood (15-25), young adulthood (26-44), middle adulthood (45-64), and late adulthood (65 and older). This categorization proves advantageous in the Iranian sample due to its notably younger demographic compared to the global sample, ensuring a sufficient number of individuals in each age group.

The results showed some slight differences across the age and gender groups, with more similarities than differences.

The association between annual household income (International Dollars) and LS satisfaction is shown in Figure 6 (incomes more than \$41,000 were infrequent and not included). Very strong associations were found with LS, at extremely low levels of income. Although there is still a positive relationship between a higher level of income and LS, the relationship becomes less steep with increasing income.

Religiosity questions (importance of religion and religious attendance) have not been included in many waves, and therefore, they have high missing rates. For this reason, they were not included in the previous regression analyses to avoid a considerable loss of data. A separate regression analysis was conducted to examine the relationships between these two variables and LS. The sample size for this analysis was 2,326. The two predictors collectively explained 0.7% of the variance in LS, F(2, 2323) = 8.437, p < 0.001, and $R^2 = 0.007$. This amount of variance is comparable to the amount explained by relationship status or location. Whereas religious attendance was not a significant determinant (Beta = -0.032), the importance of religion was a significant determinant of LS (Beta = 0.089).

4. Discussion

This research builds upon the limited data relating to LS in the Iranian population and contributes to the global debate on societal happiness and well-being across different countries. Socioeconomic status has been shown as the strongest determinant of LS in the Iranian population. At the

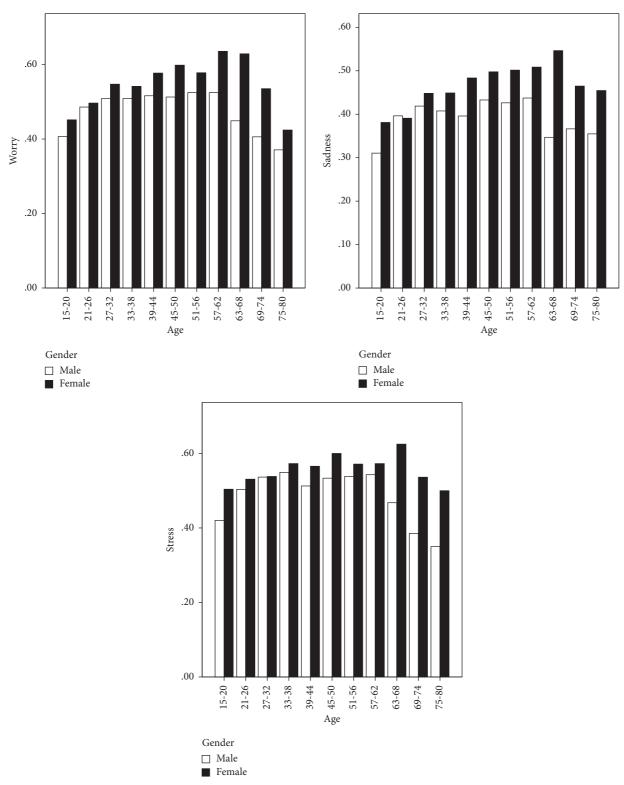


FIGURE 3: Age and gender patterns in the predictors of life satisfaction.

individual level, income, education, and employment status are the key determinants of LS followed by gender, social support, age (LS stops declining over the age of 50 for males), and negative effect (higher in females). At the macro level, satisfaction with standards of living and/or the welfare

system has been shown as the strongest factor correlated with LS. All of these factors can be influential in both individual and collective health and well-being status. In this section, we have discussed and compared the key determinants of LS in Iran with other relevant studies from

TABLE 2: ANOVA results predicting life satisfaction.

		M	SD	N
	Employed full time for an employer	4.836	2.349	1356
Employment	Employed full time for self	4.538	2.487	1776
df = 5, 10391	Employed part-time do not want full time	5.437	2.394	446
F = 44.756	Unemployed	4.166	2.480	1190
<i>p</i> < 0.001	Employed part-time wanting full time	4.548	2.420	529
$\eta^2 = 0.021$	Out of workforce	5.125	2.413	5100
•	Total	4.861	2.450	10397
Education	Elementary	4.201	2.701	2254
df = 2, 13700	Secondary	4.986	2.326	8119
F = 179.650	Tertiary (four years beyond high school)	5.407	2.108	3330
p < 0.001 $\eta^2 = 0.026$	Total	4.959	2.372	13703
Location	Rural or farm	4.546	2.432	1414
<i>df</i> = 3, 13613	Small town or village	4.883	2.461	2933
F = 29.586	Large city	5.091	2.317	8307
<i>p</i> < 0.001	Suburb of a large city	4.648	2.372	963
$\eta^2 = 0.006$	Total	4.958	2.372	13617
Relationship status	Single	5.206	2.249	4064
<i>df</i> = 3, 13683	Married	4.881	2.401	9232
F = 32.701	Separate/divorced	4.007	2.381	138
<i>p</i> < 0.001	Widow	4.273	2.731	253
$\eta^2 = 0.007$	Total	4.958	2.371	13687
Images quintiles	1 poorest 20%	4.029	2.674	1505
Income quintiles	2 second 20%	4.400	2.491	1608
df = 4, 10392 F = 125.267	3 middle 20%	4.621	2.349	1908
	4 fourth 20%	5.063	2.314	2283
p < 0.001	5 richest 20%	5.505	2.280	3093
$\eta^2 = 0.046$	Total	4.861	2.450	10397

similar societies, as well as other recent publications on the Gallup dataset. This is from a diverse range of countries, including Australia, New Zealand, Malaysia, Japan, and Italy.

Generally, the literature suggests a positive, significant relationship between socioeconomic status and LS, with higher levels of income being associated with greater LS and happiness [9, 36], and more family and leisure satisfaction [9]. The relationship between family income, employment, and living space was also highlighted in another national study on LS in Iran [13]. It was highlighted somewhere else that financial security and economic equity need to be the center of policy and practice changes [37]. In addition, subjective concerns about job security correlated negatively with LS [9, 38], with those unemployed less happy than others overall [36]. The negative impact of unemployment is known to center around the psychological anxiety of being excluded from the labor market, loss of self-esteem, and depression [9]. Education as the other socioeconomic determinant of LS was shown as a determinant of a better health situation, family satisfaction, more social connections, and overall happiness [2, 9, 39].

The importance of socioeconomic status was confirmed in other countries, regardless of their level of development (developing or developed countries), using the same database (Gallup - 2006 to 2017), including Australia, New Zealand, and Japan [40–42]. According to the Gallup survey of 166 nations (more than 1.7 million respondents),

employment status was a stronger determinant, particularly around age 50 [10]. Japan reported relatively low LS, whereby socioeconomic status, including education and income (at both individual and societal levels such as income and welfare system), was the strongest determinant of LS [41]. Overall, in Japan, household income and standards of living were strongly related to LS [41]. Similar findings were reported in Italy, Australia, and New Zealand [42, 43]. For example, in Australia, there have been suggestions to offer increased income support to individuals with very low socioeconomic status and to enhance healthcare support for the aging population [42]. A sample of 10,799 participants from New Zealand suggested that for males (any age) and females up to 40 years, household income was the key determinant of LS. In addition, being happy with the city lived in was a determinant for females regardless of age and for men under 40 [40]. According to findings from Malaysia, individuals with higher socioeconomic status (e.g., high education/income and living in large cities) reported higher LS, due to opportunities and resources available in urban areas [44].

Overall, the evidence suggests that at extremely low levels of income, the relationship between income and LS is very strong. At higher levels of income, however, the relationship is still positive but becomes less important. In general, there is evidence that other subjective factors such as health, social support, spirituality/religiosity, and meaning in life may moderate the socioeconomic

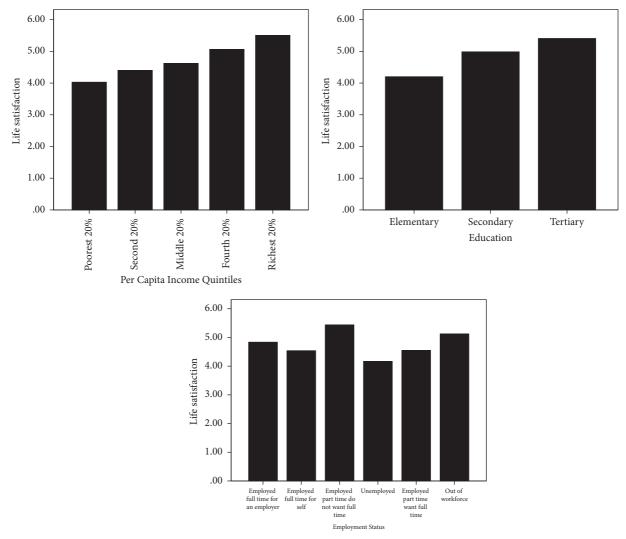


FIGURE 4: Life satisfaction for income, education, and employment groups.

situation, particularly for those with moderate to highincome levels. Although the majority of studies point to the need for economic well-being to meet basic needs as a foundation for health and well-being, the relationships between income/welfare and LS can be complex. Economic psychology suggests a negative relationship, while macroeconomic literature suggests a positive relationship. Materialism can lead to life dissatisfaction when people evaluate their standard of living using fantasy/ideal expectations versus reality-based expectations, suggesting the possibility of a negative evaluation of their life [45]. In addition, there may be different variables in different societies that mediate the relationship between income and LS (e.g., religious, cultural, and social factors). For example, religiosity and/or spirituality, and not necessarily religious practice, have been identified as one of the key factors mediating the negative effect of income inequality [17]. In the Iranian context, some of the religious population may feel more satisfied due to their belief in the theocratic position of their country, which may increase their resilience and financial constraints [20].

Religiosity may act as a moderator between many adverse life conditions and mental health or subjective well-being, including poverty. There may be a belief that no matter how difficult life is, there is a divine reason why it is that way [17]; this points to the inner (metaphysical) dimensions of religion [14]. Additionally, this may be related to the importance of social networking and likemindedness through faith or religion [14].

Moreover, material goals/values and positions are not necessarily prerequisites for happiness [46]. Those who are more generous to others may spend less on themselves and arguably be happier people. Individuals who place greater value on their social connections (meaningful, high-quality, and rich social networks) often have more active participation in their society, so paying attention to good community deeds and participation can enable greater selfworth [21, 39]. Materialism or status goals are seen as less satisfying and can be seen as coming at the expense of someone else [21]. For the majority of people, zero-sum disappointment rather goals can lead to satisfaction [21].

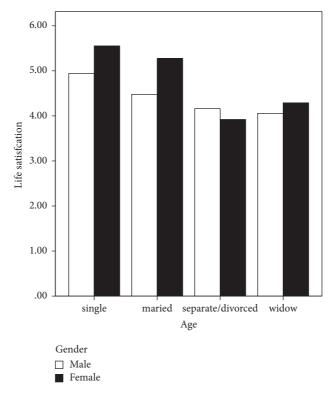


FIGURE 5: The interaction between relationship status and gender.

TABLE 3: Results of regression analysis.

		95% CI for <i>B</i>					Semipartial
	В	Low	Up	t	P	Beta	correlation
(Constant)	1.068	0.733	1.402	6.254	0.000	_	
Female	0.684	0.577	0.791	12.566	0.000	0.140	0.135
Age	-0.016	-0.021	-0.012	-6.802	0.000	-0.092	-0.073
Age squared	0.000	0.000	0.001	3.233	0.001	0.042	0.035
Negative affect	-0.264	-0.402	-0.127	-3.776	0.000	-0.046	-0.041
Positive affect	0.203	0.058	0.347	2.756	0.006	0.034	0.030
Health problems	-0.154	-0.287	-0.022	-2.284	0.022	-0.026	-0.025
Household income satisfaction	0.610	0.545	0.676	18.224	0.000	0.228	0.196
Satisfaction with standards of living	1.069	0.945	1.193	16.925	0.000	0.209	0.182
Confidence in government	0.069	-0.053	0.191	1.108	0.268	0.013	0.012
Corruption	0.023	-0.105	0.151	0.356	0.721	0.004	0.004
City satisfaction	0.075	-0.048	0.198	1.191	0.234	0.014	0.013
Social support	0.526	0.410	0.643	8.861	0.000	0.105	0.095
Interesting experience	0.132	0.022	0.242	2.357	0.018	0.027	0.025
Freedom	0.084	-0.044	0.212	1.283	0.200	0.015	0.014
Safe at night	0.055	-0.060	0.170	0.939	0.348	0.011	0.010
Respect	0.076	-0.077	0.229	0.971	0.332	0.011	0.010
Unemployed	-0.341	-0.505	-0.177	-4.076	0.000	-0.045	-0.044
Education	0.246	0.160	0.331	5.602	0.000	0.066	0.060
Large city	0.090	-0.019	0.199	1.615	0.106	0.018	0.017

In countries with less stable political and financial situations, an increase in the income and welfare system can significantly improve people's LS, particularly for people living in poverty [19]. This is evident in the context of Iran based on the findings of the current study. Factors at the political-societal level, such as economic and political crises, elections, and migration, can result in different financial

impacts across provinces and, subsequently, on LS [36]. Overall, based on identified studies conducted in Asia, factors such as standard of living and the role of government significantly affect LS. This is an important determinant in low-income countries, such as Iran. While in societies with a more stable economic situation, the increasing status of the public income (e.g., social welfare and public benefits) may

HH income, SWSL, gender, positive

		_	_			
	Gender			Aş		
	Male	Female	15-24	25-44	45-64	65+
(Constant)	0.716**	2.173***	1.473***	1.129***	1.124**	-0.329
Female	_	_	0.656***	0.754***	0.546***	0.910^{*}
Age	-0.016***	-0.018***	_	_	_	_
Age squared	0.000**	0.000	_	_	_	_
Negative effect	-0.275**	-0.254*	-0.020	-0.270**	-0.460**	-0.383
Positive effect	0.219*	0.180	0.540**	0.169	-0.078	0.912*
Health problems	-0.100	-0.203*	-0.400*	-0.151	-0.228	0.581
Household income satisfaction	0.585***	0.636***	0.719***	0.587***	0.561***	0.654**
Satisfaction with standards of living	1.016***	1.115***	0.978***	1.081***	1.152***	1.086**
Confidence in government	0.140	-0.006	0.076	0.062	0.015	0.396
Corruption	-0.052	0.088	-0.105	0.103	-0.089	0.252
City satisfaction	0.064	0.086	0.237	0.062	-0.049	0.247
Social support	0.505***	0.560***	0.611***	0.613***	0.469***	-0.301
Interesting experience	0.134	0.137	0.179	0.110	0.118	0.223
Freedom	0.162	0.011	0.103	0.080	0.129	-0.219
Safe at night	0.057	0.038	-0.040	0.053	0.157	-0.015
Respect	0.099	0.044	-0.292	0.140	0.099	0.425
Unemployed	-0.433***	-0.230*	-0.211	-0.315**	-0.379	-1.659
Education	0.386***	0.080	0.082	0.198**	0.433***	0.379
Large city	0.207**	-0.035	0.050	0.082	0.088	0.200

TABLE 4: Unstandardized regression coefficients for age and gender groups.

0.225

65+

	R^2	F	df	Most important predictors
Male	0.274	66.910***	18, 3198	HH income, SWSL, social support, education, negative
Female	0.256	58.206***	18, 3050	HH income, SWSL, social support, negative, age
15-24	0.273	26.039***	17, 1179	HH income, SWSL, gender, social support, positive
25-44	0.271	73.083***	17, 3344	HH income, SWSL, gender, social support, negative
45-64	0.279	33.475***	17, 1470	HH income, SWSL, gender, social support, education

Table 5: Regression results across age and gender groups.

Note. The estimates come from regression analyses using the method of enter in SPSS (simultaneous regression). There were only four significant predictors in the 65+ group. The most important predictors come from separate regression analyses using the stepwise method. SWSL = satisfaction with standards of living; HH income = satisfaction with household income; positive = positive effect; negative = negative effect. *** p < 0.001.

17, 221

3.781***

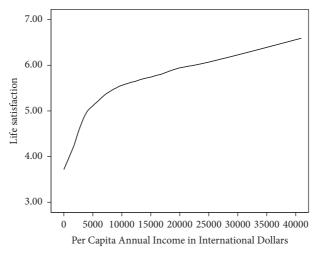


FIGURE 6: The relationship between annual household income and life satisfaction.

^{*}p < 0.05; **p < 0.01; ***p < 0.001.

not directly correlate with increasing LS [8]. This indicates that an individual's LS determinants change, as factors at the societal level change, across different countries. This is following Maslow's pyramid of human needs, whereby societal factors can affect our need levels (physiological, safety, social belonging, esteem, and self-actualization), and subsequently our subjective well-being, and happiness. In developing countries, such as Iran, individuals may struggle in attending to basic needs, which can be detrimental to many aspects of health and well-being. This is evidenced by the ongoing protests in Iran about the unstable financial situation during the last 44 years of the Islamic Republic life [47]. While in countries with sustainable welfare systems, the criteria for LS change from income to other values, such as preferences around the meaning of life/values, partner's personality, working hours, social connections/support, and healthy lifestyle behaviours [21]. A decade-long longitudinal study of well-being highlighted the substantial impact of quality social connections across multiple domains, including family, friendships, and the broader community, as a central factor affecting overall happiness, satisfaction, and well-being [46].

It is also important to consider the role of transition towards a more stable economy and its impact on people's LS and well-being. For example, rapid economic growth could result in more individualization, empowerment, and change of personal agency, subsequently further enhancing LS in those individuals who have aligned their situation with such economic growth. However, the speed of change and modernization may affect LS negatively due to its impact on cultural norms and values. Under these circumstances, the provision of transition policies has been posited as helping with the enhancement of LS in rapidly changing environments [48].

The current study showed a higher negative effect in women in comparison with men. Positive and negative effects partially mediate the relationship between optimism and LS [11]. Women generally score higher regarding LS and negative effect than men [49]. There are mixed findings across the international literature using a similar method (Gallup). For example, an Italian study showed that women reported lower LF than men [43]. In a Malaysian study, females reported higher LS, although males surpassed them in the 75 and above age category [44]. Overall, LS is positively linked to positive functioning and negatively linked to distress or negative emotions [11]. The high level of negative effect in Iranian women is consistent with previous studies conducted on young Iranian women, reporting a low level of self-efficacy and control at individual and societal levels, which can decrease their level of confidence and self-esteem [2, 20, 28]. Specifically, Salehi et al. [39] reported a low level of subjective well-being (including quality of life and LS) in young Iranian women, purportedly due to sociocultural restrictions affecting their circumstances, lifestyle, health status, and their life as a whole. Women in Iran face gender inequalities, which encompasses various forms of discrimination against them. This system of discrimination began with the control exerted over women's bodies as a primary strategy to consolidate power after the revolution and also

control their minds. These practices of gender segregation further contribute to the prevalence of negative effect among Iranian women [50].

The current study showed that LS stops declining and becomes almost flat over the age of 50 for males. Males over 50 report lower levels of stress, sadness, and worry, and LS levels off and stop declining in this cohort. The literature indicates that LS increases with age in some countries but not in others, although the reasons for this remain somewhat unclear [7, 51]. This is consistent with other similar (Gallup) studies in Italy and Japan. LS decreases as people age [41, 43] and is even low for those who are 50 or older [44]. A study from Australia suggested that the age and LS relationship is U-curved [42], and the gender gap stays consistent, indicating a higher level of satisfaction in women across age groups [42]. The high LS in females was also confirmed in another study in Iran [13]. Another study in Iran also showed a U-shape trend, highlighting the ages 35-44, as the lowest LS age [51].

There is evidence that increasing age is both positively and negatively associated with satisfaction with the economic situation, leisure activities, family, and health [9]. Elsewhere, a British Household Panel Survey for 1994–2008 established a connection between levels of youth happiness and its relationship with LS in adults in later life. The authors posit that this is related to stable demographic, socioeconomic, and personality effects over a lifetime [52]. The effect of personality on LS was stronger in effect than that of demographic and socioeconomic status, which may indicate the significance of peer status positions, social support, and networks in that period of youth [52].

Considering the relationship between social support and LS in the Iranian context, the bonding with family and social support received, particularly from family and relatives may also apply to Iranian people as a mediator of happiness [2], particularly in older age (over the age of 50). Overall, irrespective of gender, positive and negative effects and isolation/loneliness mediate the relationship among core self-evaluations, social support, and LS [2, 20, 24, 53]. Social support plays a mediating role between empathy and forgiveness and, subsequently, its relationships with LS [16]. Intimate social connections aligned to feelings of connectedness and a sense of community are positively related to LS. For example, married individuals are happier than other groups (e.g., divorced and separated) [36, 51]; widowed people are less happy than singles; and men are less happy than women [36]. Overall, a balance between independence and connection with key social partners enhances LS, such as strong bonding with parents and peers [18]. The importance of meaningful life, social support, and quality connections were emphasized across different countries, with the same study design (Gallup). Social connections were significantly correlated with a positive effect, and meaningful life was a strong determinant of all subjective well-being determinants across diverse regions and ages [10, 41, 43]. There was a key emphasis also on the quality of the marital status [40-42], as well as health and well-being status and its relationship with LS [51].

5. Conclusion and Recommendations

This research is one of the few studies on LS conducted in Iran considering its specific sociocultural and political situation. Socioeconomic status at both individual and societal levels was found to be the main determinant of LS in the Iranian population. This highlights Maslow's pyramid of human needs; if basic needs are not met (e.g., physiological and safety), the other aspects of growth may not be prioritized by the majority of the population (e.g., self-actualization). This can be detrimental to subjective well-being and happiness, particularly for those with very low income and low socioeconomic status. Although the role of income as an indicator of LS has been emphasized in various countries, including developed ones, the situation in Iran is different due to its unique circumstances with a theocratic, paternalistic, and nondemocratic government. This has a significant impact on the financial disparities among the population. The significance of socioeconomic status in the Iranian context emphasizes a more complex interrelationship across multiple levels. These levels include sophisticated and intertwined individual, societal, and international factors that collectively influence the country's overall socioeconomic situation. Consequently, these factors also play a crucial role in shaping the overall LS of individuals. For example, the theocratic government, sanctions, and troubled relations with Western countries have led to economic instability, inflation, and unemployment [30]. The main recommendation is to strengthen governance in Iran by fostering positive relationships and cooperation with other nations. This approach aims to alleviate international sanctions, thereby improving living standards and governance while striving for socioeconomic improvements. In addition, there are critical health policy suggestions for Iranian society at various levels to improve life satisfaction, taking into account the current complexity of the situation in Iran.

The second recommendation is to advocate for grassroots social change initiatives led by educated and informed leaders. This study highlights the correlation between high levels of education and employment status with increased LS. In the Iranian context, there is a notable increase in educational attainment, particularly among women, which directly increases their sense of control and self-efficacy both in their personal lives and within their communities. This educated cohort, especially those who have faced social exclusion, such as women, are at the forefront of advocating for changes in the social status of women and the revitalization of social capital. As a result, these individuals tend to be more satisfied with their lives as they engage in these new roles of advocacy and move away from a focus on victimization [39]. To catalyze these social changes, strategies should focus on fostering group membership to create a sense of belonging, increasing influence to enable control over groups and communities, promoting integration, and ensuring the fulfillment of individual and collective needs through the collective capabilities of these groups. In addition, fostering a shared emotional connection within these groups is critical for sustainable and impactful social change [19].

In summary, while money may not be the sole determinant of happiness, in the current Iranian context, financial factors play a pivotal role in determining LS. This is primarily because their fundamental needs have yet to be adequately addressed. On a broader scale, an examination of Iran over the decades reveals a continuous cycle of unrest and dissatisfaction with the government. This discontent stems from various macrolevel factors, including social, financial, and political inefficiencies. During this period, there have been several recurrent protests in Iran. Notable examples include the student protests in 1999, sparked by the closure of a reformist newspaper. In 2009, concerns emerged over irregularities in presidential elections (called the Green Revolution). Additionally, in 2017-2018, untimely government economic policies fueled discontent among the populace. The substantial hikes in fuel prices in 2019 and 2020, as documented by Ghasseminejad et al. [47], also contributed to social unrest. Most recently, persistent uprisings were ignited by the tragic death of 22-year-old Mahsa Amini, who faced consequences for not adhering to the proper Hijab dress code [50, 54]. This event triggered an uprising for several months [54].

5.1. Limitations and Further Studies. The findings may not be generalizable to other geographical regions beyond Iran. It is acknowledged that predictors were necessarily self-reported. Subsequently, method variance may apply to some outcomes more than others. For instance, it would be reasonable to assume that satisfaction with standards of living and other similar variables might correlate with well-being simply due to shared method variance. This makes comparisons with associations with more objective predictors more difficult to interpret and subject to the authors' ideas about whether differences should emerge in Iran.

For future research, it is essential to conduct more longitudinal studies in countries with complex sociocultural and political landscapes similar to Iran. These studies should explore the intricate relationships among various factors that influence life satisfaction (LS). A major focus should be on examining a wide range of variables at both the individual and societal levels and how they interact over time. This comprehensive approach will provide a deeper understanding of LS. Another interesting area for future research is to examine people's perceptions of education and its role in promoting overall happiness. It is important to understand whether education that raises people's ambitions and expectations might inadvertently lead to lower LS. Conversely, education that focuses on building personal resilience could potentially increase LS. Insights from such

studies can help shape effective strategies for health promotion and education programs, including their planning and evaluation processes [8].

Data Availability

For more information about the data and data collection procedures, see Gallup's official website: https://www.gallup.com/178667/gallup-world-poll-work.aspx.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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References

- [1] P. Steel, V. Taras, K. Uggerslev, and F. Bosco, "The happy culture: A theoretical, meta-analytic, and empirical review of the relationship between culture and wealth and subjective well-being," *Personality and Social Psychology Review*, vol. 22, no. 2, pp. 128–169, 2018.
- [2] A. Salehi, N. Harris, E. Coyne, and B. Sebar, "Perceived control and self-efficacy, subjective well-being and lifestyle behaviours in young Iranian women," *Journal of Health Psychology*, vol. 21, no. 7, pp. 1415–1425, 2016.
- [3] A. Steptoe, A. Deaton, and A. A. Stone, "Subjective wellbeing, health, and ageing," *The Lancet*, vol. 385, no. 9968, pp. 640– 648, 2015.
- [4] N. Harris, A. Salehi, E. Coyne, and B. Sebar, "Life satisfaction and its determinants among young Iranian women," *Women's Health Bulletin*, vol. 3, no. 3, 2016.
- [5] L. Hodačová, E. Hlaváčková, D. Sigmundová, M. Kalman, and J. Kopčáková, "Trends in life satisfaction and self-rated health in Czech school-aged children: hbsc study," *Central European Journal of Public Health*, vol. 25, pp. S51–S56, 2017.
- [6] J. M. Smyth, M. J. Zawadzki, V. Juth, and C. N. Sciamanna, "Global life satisfaction predicts ambulatory affect, stress, and cortisol in daily life in working adults," *Journal of Behavioral Medicine*, vol. 40, no. 2, pp. 320–331, 2017.
- [7] M. Callens, "Long term trends in life satisfaction, 1973–2012: flanders in europe," *Social Indicators Research*, vol. 130, no. 1, pp. 107–127, 2017.
- [8] C. K. Cheung and R. M. H. Ngan, "Filtered life satisfaction and its socioeconomic determinants in Hong Kong," Social Indicators Research, vol. 109, no. 2, pp. 223–242, 2012.
- [9] N. Gandelman and G. Piani, "Quality of life satisfaction among workers and non-workers in Uruguay," *Social Indicators Research*, vol. 111, no. 1, pp. 97–115, 2013.
- [10] A. T. Jebb, M. Morrison, L. Tay, and E. Diener, "Subjective well-being around the world: trends and predictors across the life span," *Psychological Science*, vol. 31, no. 3, pp. 293–305, 2020.
- [11] N. A. Kapikiran, "Positive and negative affectivity as mediator and moderator of the relationship between optimism and life satisfaction in Turkish university students," *Social Indicators Research*, vol. 106, no. 2, pp. 333–345, 2012.

- [12] S. Margolis, J. Elder, B. Hughes, and S. Lyubomirsky, What Are the Most Important Predictors of Subjective Well-Being? Insights from Machine Learning and Linear Regression Approaches on the MIDUS Datasets, Psyarxiv, Davis, CA, USA, 2021.
- [13] M. Mirtaher, S. Malihe, A. M. Mohammad, S. Homeyra, T. Farhad, and A. Shervin, "Life satisfaction in Iran; A national representative study," *Scientific Research and Essays*, vol. 6, no. 8, pp. 1839–1844, 2011.
- [14] E. Sinnewe, M. A. Kortt, and B. Dollery, "Religion and life satisfaction: evidence from Germany," *Social Indicators Re*search, vol. 123, no. 3, pp. 837–855, 2015.
- [15] M. Joshanloo and V. Jovanović, "The relationship between gender and life satisfaction: Analysis across demographic groups and global regions," *Archives of women's mental* health, vol. 23, pp. 331–338, 2020.
- [16] H. Zhu, "Social support and affect balance mediate the association between forgiveness and life satisfaction," *Social Indicators Research*, vol. 124, no. 2, pp. 671–681, 2015.
- [17] M. Joshanloo and D. Weijers, "Religiosity moderates the relationship between income inequality and life satisfaction across the globe," *Social Indicators Research*, vol. 128, no. 2, pp. 731–750, 2016.
- [18] S. Guarnieri, M. Smorti, and F. Tani, "Attachment relationships and life satisfaction during emerging adulthood," *Social Indicators Research*, vol. 121, no. 3, pp. 833–847, 2015.
- [19] E. M. Muilenburg-Trevino, M. K. Pittman, and M. G. Holmes, "Sense of community and income as indicators of life satisfaction," *Journal of Alternative Medicine Research*, vol. 4, no. 3, p. 311, 2012.
- [20] A. Salehi, N. Harris, E. Coyne, and B. Sebar, "Trust and quality of life: a cross-sectional study of young women," *International Journal of Social Psychiatry*, vol. 61, no. 5, pp. 506–514, 2015.
- [21] B. Headey, R. Muffels, and G. G. Wagner, "Choices which change life satisfaction: similar results for Australia, Britain and Germany," *Social Indicators Research*, vol. 112, no. 3, pp. 725–748, 2013.
- [22] F. Cavallo, P. Dalmasso, V. Ottova-Jordan et al., "Trends in life satisfaction in European and North-American adolescents from 2002 to 2010 in over 30 countries," *The European Journal of Public Health*, vol. 25, no. suppl 2, pp. 80–82, 2015.
- [23] P.-S. Liao, D. Shaw, and Y. M. Lin, "Environmental quality and life satisfaction: subjective versus objective measures of air quality," *Social Indicators Research*, vol. 124, no. 2, pp. 599–616, 2015.
- [24] F. Kong and X. You, "Loneliness and self-esteem as mediators between social support and life satisfaction in late adolescence," *Social Indicators Research*, vol. 110, no. 1, pp. 271–279, 2013.
- [25] M. Joshanloo and S. Afshari, "Big five personality traits and self-esteem as predictors of life satisfaction in Iranian Muslim university students," *Journal of Happiness Studies*, vol. 12, no. 1, pp. 105–113, 2011.
- [26] Y. T. Ngoo, N. P. Tey, and E. C. Tan, "Determinants of life satisfaction in Asia," *Social Indicators Research*, vol. 124, no. 1, pp. 141–156, 2015.
- [27] A. Salehi, N. Harris, B. Sebar, and E. Coyne, "Self-perception of quality of life and its association with lifestyle behaviours of young Iranian women," *Iranian Journal of Public Health*, vol. 44, no. 3, pp. 332–340, 2015.
- [28] A. Salehi, N. Harris, B. Sebar, and E. Coyne, "The relationship between living environment, well-being and lifestyle behaviours in young women in S hiraz, I ran," *Health and Social Care in the Community*, vol. 25, no. 1, pp. 275–284, 2017.

- [29] M. Joshanloo, "Mental well-being in Iran: the importance of comprehensive well-being in understanding the linkages of personality and values," in *Mental Well-Being*, pp. 177–207, Springer, Berlin, Germany, 2013.
- [30] M. Joshanloo, "Factor structure of subjective well-being in Iran," *Journal of Personality Assessment*, vol. 98, no. 4, pp. 435–443, 2016.
- [31] H. Cantril, *The Pattern Of Human Concerns*, Rutgers University Press, New Brunswic1965, NJ, USA, 1965.
- [32] N. Brace, R. Kemp, and R. Snelgar, SPSS for Psychologists: A Guide to Data Analysis using SPSS for Windows, Lawrence Erlbaum Associates Publishers, 2006.
- [33] J. J. Arnett, "Emerging adulthood: a theory of development from the late teens through the twenties," *American Psychologist*, vol. 55, no. 5, pp. 469–480, 2000.
- [34] E. H. Erikson, *Identity, Youth, and Crisis*, W. W. Norton, New York, NY, USA, 1968.
- [35] M. F. Steger, S. Oishi, and T. B. Kashdan, "Meaning in life across the life span: levels and correlates of meaning in life from emerging adulthood to older adulthood," *The Journal of Positive Psychology*, vol. 4, no. 1, pp. 43–52, 2009.
- [36] A. Caner, "Happiness and life satisfaction in Turkey in recent years," *Social Indicators Research*, vol. 127, no. 1, pp. 361–399, 2016.
- [37] P. Diego-Rosell, R. Tortora, and J. Bird, "International determinants of subjective well-being: living in a subjectively material world," *Journal of Happiness Studies*, vol. 19, no. 1, pp. 123–143, 2018.
- [38] L. Helbling and S. Kanji, "Job insecurity: differential effects of subjective and objective measures on life satisfaction trajectories of workers aged 27–30 in Germany," *Social Indicators Research*, vol. 137, no. 3, pp. 1145–1162, 2018.
- [39] A. Salehi, B. Sebar, D. Whitehead, N. Hatam, E. Coyne, and N. Harris, "Young Iranian women as agents of social change: a qualitative study," *Women's Studies International Forum*, vol. 79, Article ID 102341, 2020.
- [40] R. J. Jarden, M. Joshanloo, D. Weijers, M. H. Sandham, and A. J. Jarden, "Predictors of life satisfaction in New Zealand: analysis of a national dataset," *International Journal of Environmental Research and Public Health*, vol. 19, no. 9, p. 5612, 2022
- [41] J. Park, M. Joshanloo, and H. Scheifinger, "Predictors of life satisfaction in a large nationally representative Japanese sample," *Social Science Research*, vol. 82, pp. 45–58, 2019.
- [42] J. Park, M. Joshanloo, and H. Scheifinger, "Predictors of life satisfaction in Australia: a study drawing upon annual data from the Gallup World Poll," *Australian Psychologist*, vol. 55, no. 4, pp. 375–388, 2020.
- [43] V. Capone, M. Joshanloo, and H. Scheifinger, "Predictors of life satisfaction in a large representative sample from Italy," *Current Psychology*, vol. 40, no. 7, pp. 3609–3627, 2021.
- [44] M. S.-A. Park and M. Joshanloo, "Satisfaction with life declines with age in Malaysia: an exploratory analysis of factors influencing subjective well-being in a developing/middle-income country," *Applied Research in Quality of Life*, vol. 16, no. 2, pp. 471–486, 2021.
- [45] M. Joseph Sirgy, E. Gurel-Atay, D. Webb et al., "Is materialism all that bad? Effects on satisfaction with material life, life satisfaction, and economic motivation," *Social Indicators Research*, vol. 110, pp. 349–366, 2013.
- [46] R. Waldinger and M. Schulz, The Good Life: Lessons from the World's Longest Scientific Study of Happiness, Simon & Schuster, New York, NY, USA, 2023.

- [47] S. Ghasseminejad, B. B. Taleblu, and E. Katz, "Evolution toward revolution: the development of street protests in the Islamic Republic of Iran," *Journal of International Affairs*, vol. 73, no. 2, pp. 147–162, 2020.
- [48] P. Abbott, C. Wallace, K. Lin, and C. Haerpfer, "The quality of society and life satisfaction in China," *Social Indicators Research*, vol. 127, no. 2, pp. 653–670, 2016.
- [49] M. Joshanloo and V. Jovanović, "The relationship between gender and life satisfaction: analysis across demographic groups and global regions," *Archives of Women's Mental Health*, vol. 23, no. 3, pp. 331–338, 2019.
- [50] M.-A. Kohan, "Politics of the body in the woman, life, free-dom'movement in Iran," *Psychotherapy and Politics International*, vol. 20, no. 4, pp. 1–8, 2022.
- [51] R. Daroudi, A. Rashidian, H. Zeraati, A. Oliyaeemanesh, and A. Akbari Sari, "Life and health satisfaction in the adult population of Iran," *Epidemiology and Health*, vol. 38, Article ID e2016047, 2016.
- [52] S. Jewell and U. S. Kambhampati, "Are happy youth also satisfied adults? An analysis of the impact of childhood factors on adult life satisfaction," *Social Indicators Research*, vol. 121, no. 2, pp. 543–567, 2015.
- [53] D. He, M. Shi, and F. Yi, "Mediating effects of affect and loneliness on the relationship between core self-evaluation and life satisfaction among two groups of Chinese adolescents," *Social Indicators Research*, vol. 119, no. 2, pp. 747–756, 2014.
- [54] A. Bayat, "Is Iran on the verge of another revolution?" *Journal of Democracy*, vol. 34, no. 2, pp. 19–31, 2023.