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HEALTH PSYCHOLOGY | RESEARCH ARTICLE

Happiness, health, and religiosity among Lebanese young adults

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Abstract: This study aimed to estimate the associations between, and sex-related differences in happiness, health, and religiosity. A sample ($N = 476$) of Lebanese undergraduates took part in the study (215 men and 261 women). They answered Arabic versions of the Oxford Happiness Inventory (OHI), the Satisfaction with Life Scale (SWLS), the Love of Life Scale, as well as five self-generated rating scales. Men obtained a significantly higher mean score on happiness and mental health than did their female counterparts, whereas women obtained a significantly higher mean score on religiosity. All the Pearson correlations between the study scales were significant and positive but one (between the self-rating scales of physical health and religiosity among men). Principal components analysis yielded one salient component separately in men and women, and labeled “Happiness, health, and religiosity.” The predictors of happiness as assessed with the OHI were love of life and SWLS, and happiness self-rating scale. Based on the responses of the present sample, it was concluded that those who consider themselves as felt happiness, reported higher mental and physical health, and being more religious.

Subjects: Mental Health; Psychological Science; Social Sciences

Keywords: happiness; health; religiosity; college students; Lebanon



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In Arabic, he is the author and co-author of 23 books, editor of six books. In Arabic or English, he developed 10 psychological scales, presented 47 conference presentations, and published 321 in Arabic or international periodicals, in addition to 14 chapters in edited books and three articles in Encyclopedias in English. He is the recipient of the State Award in psychology in Egypt as well as four Awards and 16 research grants from Kuwait University. He supervised 48 MA and PhD theses.

PUBLIC INTEREST STATEMENT

All of us wish to feel happy. Positive emotions such as hope, optimism, trust, faith, pleasure, satisfaction, and contentment are basic components of happiness. Happiness is related to the absence of negative emotions such as depression, anxiety, anger, and guilt. If we strive to look at the half-full cup, our experience of the positive emotions will enlarge and the effect of the negative ones will be reduced.

Happiness is positively related to our degree of love of life. Love of life is a general positive regard toward our own life, a liking for it, and pleasurable attachment to it. Love of life is associated also with satisfaction with life, optimism, and hope. We have to learn how to enhance our feeling of love of life. Happiness is associated with religiosity. Those who consider themselves religious reported higher mental and physical health and being more happier.

1. Introduction

The general aim of this study was to test for associations between happiness, health, and religiosity using an understudied sample of Lebanese undergraduates. A specific number of studies were carried out in this domain using participants from different Arab countries—namely Algeria, Egypt, Kuwait, Palestine, Qatar, and Saudi Arabia (See: e.g. Abdel-Khalek, 2012; Al-Kandari, 2003; Tiliouine, Cummins, & Davern, 2009). To the best of my knowledge, there are no published studies on this topic using Lebanese undergraduates. In its recent history, Lebanon endured cataclysmic event. In 1975, the civil war broke out, and fighting continued for 16 years between all the Lebanese militant sects pertaining to the conflicting religious and political denominations and which had been triggered by manifold historical, ethnic, and social factors. Frequent violent deeds changed to wholesale massacres and kidnappings. In June 1982, the Israeli army swept into Lebanon. At last, the civil war ceased in 1991. These circumstances may mold the Lebanese life and personality. Therefore, the present study is unique in using an underrepresented sample in the literature. Further, the present sample experienced traumatic events in their childhood.

Plenty of studies were carried out on happiness (Veenhoven, 2010). Argyle, Martin, and Lu (1995) proposed three possible components of happiness: positive emotion, satisfaction, and the absence of negative emotions such as depression or anxiety. Lucas and Diener (2008) stated that the balance of positive to negative emotions is a powerful determinant of happiness or subjective well-being (SWB). On the other hand, Veenhoven (2011) used happiness in its widest sense, as an umbrella term for all that is good. In this meaning, it is often used interchangeably with terms like “well-being” (WB) or “quality of life.” He stated that happiness is commonly understood as how much one likes the life one lives, or more formally, the degree to which one evaluates one’s life as a whole positively.

Seligman (2002) classified positive emotions into three categories as follows: those associated with the past (satisfaction, contentment, pride, and serenity). The positive emotions about the present are divided into two different categories: (a) bodily pleasures such as scrumptiousness, warmth, and orgasm, and higher pleasures such as bliss, glee, and comfort, and (b) gratification, that is, activities such as reading, good conversation, and camping. Positive emotions associated with the future include optimism, hope, confidence, trust, and faith (pp. 261–262).

Carr (2004) presented a framework for conceptualizing the various components of SWB at two levels. First, the cognitive component, i.e. the satisfaction with self, family, peer group, health, finances, work, and leisure. Second, the affective component, i.e. the positive affect: happiness, elation, ecstasy, pride, affection, joy, and contentment, and the negative affect: depression, sadness, envy, anger, stress, guilt or shame, and anxiety (p. 12). Nevertheless, some authors have used the three terms (SWB, happiness, and satisfaction with life) interchangeably (Diener, Lucas, & Oishi, 2002; Lyubomirsky, 2001).

Love of life (LOL) was proposed by Abdel-Khalek (2007b) as a new construct in the SWB domain. LOL was constructed to tap a specific aspect of WB related to quality of life, that is, adherence to, and grasping at, life. Further, it was developed to be the contrary of life hatred or antipathy, and the suicidal ideations. LOL was defined as a generally positive regard towards one’s own life, a liking for it, and pleasurable attachment to it. The LOL scale was significantly correlated with happiness, optimism, self-esteem, hope, satisfaction with life, and extraversion, approximately as the same correlation between happiness and satisfaction with life.

What are the variables that correlate with, and predict happiness? Different answers have been proposed. Myers and Diener (1995) found that better clues to WB came from knowing about a person’s traits, close relationships, work experience, culture, and religiosity. More recently, Myers (2000) found that age, gender, and money provided few clues to happiness, whereas personality traits, religious faith, marriage, and social support seemed to be the best predictors of happiness. In a

similar vein, Abdel-Khalek and Lester (2010) sought to explore the personal, social, and personality correlates of happiness. They found that personality traits played the more important role in determining happiness.

In this study, happiness is assessed with the Oxford Happiness Inventory (OHI), and the self-rating scale of happiness (see the Method section). Physical health and mental health are considered to be among the basic components or correlates of happiness and SWB. Health is the strongest predictor of WB in both younger and older populations. One meta-analysis on WB and health revealed a consistent correlation of approximately 0.32, and correlations were particularly strong among women (Koenig, King, & Carson, 2012). Therefore, WB is the positive side of mental health. In the present study, physical health and mental health were assessed with two separate self-rating scales.

The interest in studying the psychological aspects of religion dates back more than a century (Galton, 1872; Hall, 1882, 1904; James, 1902/2002; Starbuck, 1899). Recent years have witnessed rapid growth and upsurge in the psychology of religion (e.g. Al-Issa, 2000; Argyle, 2000; Emmons & Paloutzian, 2003; Loewenthal, 2000; Pargament, 1997; Spilka, Hood, Hunsberger, & Gorsuch, 2003; Wulff, 1997). Several studies have suggested a positive relationship between happiness, health, and religiosity (e.g. Chatters, 2000; Ellison, 1991; Ferriss, 2002; Koenig, 1997, 2004; Larson & Larson, 1994; Levin & Chatters, 1998; Maselko & Kubansky, 2006; Miller & Thoresen, 2003; Rew & Wong, 2006; Soydemir, Bastida, & Gonzalez, 2004; Swinyard, Kau, & Phua, 2001).

Many studies reported positive association between religiosity and both physical health and mental health (Mueller, Plevac, & Rumman, 2001; Powell, Shahabi, & Thoresen, 2003; Thoresen, 1998; Veenhoven, 2008; Wallace & Williams, 1997; Wong, Rew, & Slaikeu, 2006). Other studies hypothesized biological pathways and physiological mechanisms involved in religiosity and health (Seeman, Dubin, & Seeman, 2003; Seybold, 2007).

Using Arab Muslim participants in Algeria, Egypt, Kuwait, Palestine, Qatar, and Saudi Arabia, results revealed a positive relationship between happiness, health, and religiosity, and a negative relation between these constructs and psychopathology (Abdel-Khalek, 2012, 2013; Abdel-Khalek & Lester, 2012; Al-Kandari, 2003; Baroun, 2006; Tiliouine et al., 2009). Therefore, the generic objective of the present research was to replicate and extend these studies to Lebanese participants, inasmuch as Lebanon had experienced a violent civil war lasted for 16 years in its modern history. Furthermore, the literature on the sex-related differences on the aforementioned variables was mixed. Thus, it was important to explore these differences in the present sample.

The specific aims of this study were to (1) examine the sex-related differences in the study variables, (2) examine the relationships between happiness, health, and religiosity, (3) analyze the correlation matrices to explore the main components and the factorial structure of the study scales, and (4) explore the predictors of happiness. The following hypotheses were stated: (1) there will be significant sex-related differences in the study variables, in which men would report more SWB, (2) there will be significant and positive correlations between all the study variables, (3) the principal components analysis will extract one component from the correlation matrices, and (4) the self-rating of happiness, LOL, and satisfaction with life will be the predictors of the OHI.

2. Method

2.1. Participants

A convenience sample ($N = 476$) was selected (215 men, and 261 women). For men, $M_{age} = 22.6$, $SD = 2.8$. For Women, $M_{age} = 20.8$, $SD = 3.5$. The difference between their mean ages was significant ($t = 5.9$, $p < 0.001$). All of them were Lebanese citizens, Muslims, Christians, and students in the Lebanese University in Beirut. The differences between the religions in the study scales, and the correlations between age and the study variables were not statistically significant. However, all the statistical analyses were carried out for men and women separately.

2.2. Scales and questionnaires

2.2.1. *The adapted Oxford Happiness Inventory (OHI; Argyle et al., 1995)*

The OHI was devised as a broad measure of personal happiness. It follows the design and format of the Beck Depression Inventory which provides, when reversed, a set of 20 multiple-choice items relevant to SWB. Further items were added to cover aspects of happiness which were not otherwise included, and 29 items were retained in the final scale. In its English version, the OHI has high internal consistency, test-retest reliability, and validity. Each item was presented in four incremental levels, numbered from 0 to 3.

With the kind permission of late Professor Argyle (Personal communication, 27th September, 2001), the present researcher translated the OHI into Arabic. Then, this preliminary translation was carefully revised by bilingual psychologists and linguists. Following a similar pattern applied successfully to the Beck Depression Inventory (Abdel-Khalek, 2001), the present researcher developed a short version of the OHI by selecting only one statement from each item group, that is, the statement indicating the highest degree of happiness. It is always the last alternative in each set. These 29 statements comprised the adapted short version (in one page). The response alternative was five-point Likert format, from 1 (No) to 5 (Very much). Therefore, the total score on the Arabic-adapted OHI ranged from 29 to 145. The higher score indicated a high degree of happiness. The original English version of the OHI requested the participant to respond according to his or her feelings in the past week, including today. This period of seven days seemed to this researcher either too short or similar to standard “state” not “trait” scale. For these reasons, the time limit introduced in the original instruction has been deleted in the Arabic version of the adapted OHI, and the participants were instructed to respond to the scale items “in general.”

It is particularly noteworthy that the late Professor Argyle sent to the present researcher the original OHI (29 group of four items = 116 statements). Based on the present author’s idea and study (Abdel-Khalek, 2001), the OHI was shortened as previously stated. Interestingly, Hills and Argyle (1998) followed the same procedure to shorten the OHI because “the multiple-choice format necessitates a bulky scale that can only be presented as a stand-alone instrument. An alternative scale, the Oxford Happiness Questionnaire (OHQ) has been devised which consists of single 29 items that can be answered on a six-point Likert scale.” Therefore, the present adapted OHI is not different from the OHQ.

Alpha reliability of the Arabic short version of the adapted OHI, ranged from 0.91 to 0.93, whereas criterion-related validity ranged between 0.56 and 0.70 against a self-rating scale of happiness consists of one item. All these coefficients indicated high internal consistency and criterion-related validity of the Arabic-adapted OHI. These results were based on six male and female Kuwaiti volunteer groups of adolescents, undergraduates, and personnel (Abdel-Khalek, 2006).

2.2.2. *The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985)*

The SWLS assesses global life satisfaction and subjective well-being, but does not tap-related constructs such as positive affect or loneliness. The SWLS contains five items to be answered according to a seven-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Neither Agree nor Disagree, 5 = Slightly Agree, 6 = Agree, 7 = Strongly Agree). The scores on the SWLS can range from a low of 5 to a high of 35, with higher scores representing higher satisfaction with life. The scale has exhibited favorable psychometric properties, including high internal consistencies and temporal reliabilities. It has also a wealth of construct validation support (Diener et al., 1985; Pavot & Diener, 1993). The alpha reliability of the Arabic version was 0.74, indicating acceptable internal consistency.

2.2.3. *Love of Life Scale (LLS; Abdel-Khalek, 2007b)*

The LLS contains 16 short statements (e.g. “There are many things that make me love life”) answered on a five-point Likert format, anchored by 1: (No) and 5 (Very much). The total score can range from 16 to 80, with higher scores indicating a higher LOL. Cronbach’s α reliability was 0.91, and

one-week test-retest reliability was 0.81 among college students, indicating high internal consistency and temporal stability. Principal components analysis yielded three components labeled “Positive attitude towards life,” “Happy consequences of love of life,” and “Meaningfulness of life,” with moderate inter-component correlations. Construct validity is indicated by significant positive correlations with measures of happiness, optimism, self-esteem, hope, satisfaction with life, and extraversion. A principal components analysis of the total scores on the LLS and the last-mentioned six questionnaires yielded a general factor of WB in which the LLS loaded 0.78 onto this factor.

2.2.4. Self-rating scales

Five separate self rating-scales, in the form of questions, were used to assess happiness, satisfaction with life, mental health, physical health, and religiosity. These scales are as follows:

- (1) To what degree do you feel happy in general?
- (2) To what degree do you feel satisfied with your life in general?
- (3) What is your estimation of your mental health in general?
- (4) What is your estimation of your physical health in general?
- (5) What is your level of religiosity in general?

Each question was followed by a scale of numbers from 0 to 10. The research participant was requested (a) to respond according to his or her global estimation and general feeling (not their present states); (b) to know that the zero is the minimum, and that 10 is the maximum score; and (c) to circle a number which seems to him or her to accurately describe their actual feelings. A high score indicates the rating of the trait or the attribute at a high level. The one-week test-retest reliabilities of the five self-rating scales ranged between 0.76 and 0.88, indicating high temporal stability and corroborating the trait-like nature of the scores. Criterion-related validity of these scales have been adequately demonstrated (Abdel-Khalek, 2006, 2007a, 2012).

The single-item measure has been criticized frequently. However, as Wills (2009) reported, this measure is based on the assumption that the individual will assume the most relevant meaning that comes to his or her mind in relation to the subject of the question and answer accordingly. This is important from a parsimonious point of research, especially when the available time for the participant is limited. To take the single-item measure of health as an example, Zullig, Ward, and Horn (2006) quoted several studies to support the merit of the single-item question to assess it.

2.3. Procedure

The Arabic versions of the three questionnaires along with the five self-rating scales were administered anonymously to small groups of participants in their classrooms, in which the political and social situations were almost stable. All participants volunteered for the study after the tester explained its purpose and assured them that anonymity would be maintained. If any student did not want to participate he or she could leave. There was no incentive to participate. Trained assistants collected the data under the supervision of a PhD staff member in the Lebanese University. SPSS (2009) was used for the statistical analysis of data.

3. Results

To test the first hypothesis regarding the sex-related differences, Table 1 presents the descriptive statistics of the variables. Reference to this table indicates that men obtained a significantly higher mean score on the adapted OHI and the self-rating scale of mental health than did their female counterparts. The effect sizes were small. On the other hand, women obtained a significantly higher mean score on religiosity than did their male peers. The effect size was medium.

The general comparison between the present sample of Lebanese college students and other Arab samples previously tested, revealed that the differences were found only on the following scales: the Lebanese participants obtained low mean scores than did Kuwaiti samples on mental

Table 1. Mean (M), standard deviation (SD), the t value of the scales, and the effect size (d)

	Men (n = 215)		Women (n = 261)		t	d
	M	SD	M	SD		
Oxford happiness	88.09	17.99	83.28	17.82	2.92**	0.27 [†]
Happiness rating	5.73	2.32	5.66	2.11	0.38	–
Satisfaction scale	19.79	6.51	20.41	6.53	1.04	–
Satisfaction rating	5.65	2.49	5.61	2.27	0.20	–
Love of life	53.40	12.71	53.87	12.38	0.41	–
Mental health	6.13	2.55	5.61	2.27	2.31*	0.22 [†]
Physical health	7.45	2.06	7.14	1.90	1.65	
Religiosity	5.41	2.97	6.86	2.34	5.87**	0.54 ^{††}

*p < 0.05 (two-tailed).

**p < 0.01 (two-tailed).

[†]Small effect size.

^{††}Medium effect size.

health, happiness, satisfaction with life, LOL, and religiosity. However, the Lebanese participants obtained a higher mean score on LOL than did Egyptian participants (Abdel-Khalek, 2012, 2013).

Table 2 sets out the correlation matrices in men and women to test out the second hypothesis. All the correlations between the scales among men and women were significant and positive except one non-significant correlation between the self-rating scale of physical health and religiosity among men. Therefore, 99.1% of the correlations were significant. The correlations between the five scales of the happiness cluster (the first five scales in Table 2) ranged between 0.44 and 0.75. The correlations between the happiness cluster and the self-rating scale of mental health ranged from 0.40 to 0.70, whereas the associations between the happiness cluster and physical health ranged between 0.17 and 0.34. The range of the correlations between religiosity and both the happiness cluster and mental health was from 0.16 to 0.29.

As can be seen from Table 2, all the correlations between the scales and self-rating scales were positive. However, factor analysis may yield one or more factors. To test out the third hypothesis, and to define the factorial structure of the two matrices, the principal components analysis was used to analyze separately the correlation matrices of men and women. The Kaiser criterion (eigenvalue greater than 1.0), and the criterion of greater than an absolute value of 0.3 as the minimum salient loading for interpretation (Gorsuch, 1983, pp. 209–210) were applied. In men and women

Table 2. Pearson correlation coefficients between the scales for men (n = 215; the upper matrix) and women (n = 261; the lower matrix)

Scales	Oxford happiness	Happiness rating	Satisfaction scale	Satisfaction rating	Love of life	Mental health	Physical health	Religiosity
Oxford happiness	–	0.651	0.608	0.585	0.689	0.491	0.261	0.268
Happiness rating	0.695	–	0.615	0.659	0.573	0.548	0.219	0.221
Satisfaction scale	0.608	0.603	–	0.656	0.444	0.448	0.171	0.254
Satisfaction rating	0.595	0.749	0.676	–	0.459	0.581	0.341	0.287
Love of life	0.729	0.634	0.535	0.575	–	0.399	0.192	0.182
Mental health	0.595	0.699	0.608	0.678	0.502	–	0.332	0.155
Physical health	0.329	0.301	0.276	0.335	0.290	0.461	–	0.085 [†]
Religiosity	0.246	0.194	0.203	0.197	0.187	0.210	0.270	–

[†]The only non-significant correlation coefficient.

Table 3. Principal components analysis for the scales for the Lebanese men (n = 215) and women (n = 261)

Scales	Men Factor 1	Women Factor I
Oxford happiness	0.837	0.843
Happiness rating	0.840	0.862
Satisfaction scale	0.783	0.793
Satisfaction rating	0.831	0.846
Love of life	0.730	0.783
Mental health	0.710	0.828
Physical health	0.392	0.506
Religiosity	0.366	0.332
Eigen value	4.04	4.46
Variance (%)	50.44	55.78

Table 4. Stepwise regression for predicting happiness (OHI) in men (n = 215) and women (n = 261)

Predictor		B	β	t	R ²	F-ratio
Men	Love of life	0.583	0.413	7.57**	0.464	105.51**
	Satisfaction with life	0.756	0.272	4.85**	0.115	
	Happiness rating	1.938	0.249	4.06**	0.032	
	Constant	30.876		8.64**		
Women	Love of life	0.645	0.451	9.17**	0.549	161.76**
	Happiness rating	2.350	0.279	5.34**	0.084	
	Satisfaction with life	0.579	0.214	4.50**	0.028	
	Constant	23.164		7.69**		

**p < 0.001 (two-tailed).

samples, only one component was separately retained on the basis of the Kaiser Unity test. This component accounted for 50.4 and 55.8%, of the total variance, respectively, for men and women, and could be labeled “Happiness, health, and religiosity” in both samples (Table 3).

Regarding the fourth hypothesis, to explore the predictors of the happiness as assessed with the adapted OHI, the stepwise regression was applied for men and women separately (Table 4). Inspection of this table indicates that the two models were highly significant and explained 61 and 66% of the total variance in the dependent variable (the adapted OHI) among men and women, respectively. The predictors were LOL, satisfaction with life, and the self-rating scale of happiness among men and women. The excluded variables were the self-rating scales of satisfaction, mental health, physical health, and religiosity.

4. Discussion

In contemporary psychology, two trends, at least, can be identified. That is, a rapid growth and upsurge of interest in positive psychology and a greater investment in the psychology of religion. It is important to note that these two subjects are connected. Despite the considerable amount of work conducted on both subjects, the vast majority of published research papers carried out on Anglo-Saxon, Western, English-speaking, and Christian samples (see: e.g. Chatters, 2000; Diener & Clifton, 2002; Ferriss, 2002; Hackney & Sanders, 2003; Koenig et al., 2012). Research studies using Arab participants (see the introduction) are scarce and the Arab population is highly underrepresented in this field of study. Furthermore, the small number of studies with Arab samples did not include Lebanese young adults, notwithstanding they experienced severe traumatic events in their

childhood, than the other Arab countries. Thus, the present study was carried out. As the literature on positive psychology is increasing, it is good to have more data on so far less studied population. The fourfold hypotheses of this research have been adequately demonstrated.

As for the first hypothesis regarding the sex-related differences, the significant differences between the Lebanese men and women were in the adapted OHI and the self-rating scale of mental health in favor of men, but the effect size was small. This finding was compatible with previous results on Kuwaiti and Saudi adolescents, as well as Kuwaiti and Qatari young adults. The present finding was also consistent, albeit in a reversed direction, with the high mean scores on anxiety among Arab women, in comparison with their male counterparts (Abdel-Khalek & Alansari, 2004).

On the other hand, women obtained a significantly higher mean score on religiosity than did their male counterpart. This result is consistent with previous findings (Miller, 2003; Spilka et al., 2003, p. 153; Sullins, 2006; Yates & Pillai, 2003), whereas the present findings contradict previous results on Kuwaiti young adults (Abdel-Khalek, 2013). The reasons for these conflicting results may be due to the different characteristics of the samples and psychometric instruments, as well as to the complexity of the religiosity concept. Therefore, the first hypothesis was partially verified.

All the correlations, but one, were statistically significant and positive in both sexes, so the second hypothesis was verified. As expected, the highest correlations were between the adapted OHI, the SWLS, the LLS, and the two self-rating scales of happiness and satisfaction. The aforementioned correlations indicated the convergent validity of these scales. That is, the happiness cluster. As expected, the correlations between the happiness cluster of five scales and the self-rating of mental health were statistically significant, and positive. This result was consistent with previous findings (Abdel-Khalek, 2012). Overall, health is the strongest predictor of WB, and WB is the positive side of mental health (e.g. Koenig et al., 2012; Nordenfelt, 1993, p. 167).

All the correlations, between the happiness cluster of five scales and the self-rating scale of physical health in both groups, were significant. However, the order of these correlations was lower in value than that between the happiness cluster and the self-rating of mental health. This finding is congruent with previous results on Kuwaiti and American young adults (Abdel-Khalek & Lester, 2012). Based on the young age of the present sample, it may be suitable to hypothesize that mental health was more important for happiness than physical health among these participants. Thus, happiness and mental health had the highest correlation. Furthermore, those young adults had no problem in physical health inasmuch as their young age ($M = 22$ and 21 years for men and women approximately). It is noteworthy that the mean scores on physical health were higher than that on mental health in both sexes (see Table 1). Besides, the variance as measured with the standard deviation (SD) was the lowest in value on the self-rating scale of physical health in men and women. In general, the lower the SD, the correlation coefficient would be low.

The correlations between happiness scales and religiosity were consistent with previous results (Diener & Clifton, 2002; Francis, Jones, & Wilcox, 2000; French & Joseph, 1999). In a similar vein, the significant correlations between mental health and religiosity are congruent with Arabic and Western findings (Abdel-Khalek, 2012; Hackney & Sanders, 2003; James & Wells, 2003; Pajević, Sinanović, & Hasanović, 2005). One may speculate: notwithstanding the significant correlations between religiosity and both happiness and mental health, these correlations are always not high. Lowenthal (1995) has answered: “religion is too comprehensive a category to look at in relation to mental health –and mental health is too comprehensive a category to look at in relation to religion” (p. 219).

The third hypothesis regarding the extraction of one component was verified. On the basis of both the Kaiser criterion and the salient loading greater than 0.3, one component was retained in men and women groups, and labeled “Happiness, health, and religiosity.” This single component referred to both the resemblance and interference between the present study scales, and it was consistent with previous studies on Kuwaiti samples (Abdel-Khalek, 2012).

As for the fourth hypothesis, it was found that the predictors of the adapted OHI were LLS, SWLS, and the self-rating of happiness. This result indicates the strong relation between these constructs. On the other hand, the self-rating scales of satisfaction, mental and physical health, and religiosity were excluded as predictors of happiness.

Notwithstanding the strengths of the present study, that is, recruiting a sample in an underrepresented and understudied population, their Arabic culture is in contrast to the vast majority of previous studies, and the acceptable to good reliability and validity of the scales, specific limitations have to be acknowledged. Among them are the limited age range of the present sample, the non-representative sample from one university, and the necessary cautious in generalization from correlational data derived from self-report scales.

It was concluded that the present sample of Lebanese men obtained a higher mean scores on happiness and mental health than did their female counterparts, whereas women obtained a higher mean score on religiosity than did their male peers. All the correlations between the scales of happiness, health, and religiosity were significant and positive, but one. "Happiness, Health, and religiosity" was the only component in both groups. As far as the present Lebanese sample is concerned, those who consider themselves as feeling happy, experienced good mental and physical health, and being more religious. By and large, the results on the present sample of Lebanese young adults are consistent with previous findings with Western and Arabic participants in spite of the cultural-, racial-, and language- based differences.

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Competing interest

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