

Towards Youth Happiness and Mental Health in the United Arab Emirates: The Path of Character Strengths in a Multicultural Population

Eleni Petkari^{1,2} · Margarita Ortiz-Tallo³

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Abstract Happiness, good mental health and the possession of character strengths have been proposed in the context of positive psychology as important conditions for achieving a life full of gratification. However, there is a scarcity of studies examining those conditions in Eastern cultural contexts, in order to replicate findings from the Western countries. In this vein, the present study aims to explore the influence of strengths on happiness and mental health in the multicultural context of United Arab Emirates and it is hypothesised that certain strengths are better predictors of happiness and mental health than others, also after controlling for potential sociodemographic confounders. A sample of young university students, in the majority coming from eastern countries was assessed through the Global Happiness Scale, the GHQ-12 and the VIA-IS-120. The results of the regression analyses revealed that the group of character strengths under the denomination of Transcendence together with being young was associated with higher levels of happiness and better mental health. In addition, the possession of strengths of Restraint was associated with less happiness, whilst being a man indicated a better mental health. Such results have important implications regarding the replication of previous results from Western contexts in the context of UAE, highlighting the need for implementation of culturally context-tailored strategies for achieving happiness and mental health through the use of character strengths.

Keywords Happiness · Mental health · Character strengths · UAE · Cultural traits · VIA-IS

✉ Eleni Petkari
E.Petkari@euc.ac.cy

¹ School of Humanities and Social Sciences, European University of Cyprus, 6, Diogenis Str., Engomi, P.O. Box: 22006, 1516 Nicosia, Cyprus

² School of Science and Technology, Middlesex University Dubai, Dubai, UAE

³ School of Psychology, University of Malaga, Malaga, Spain

1 Introduction

In the context of positive psychology the notion of feeling happy, enjoying a perfect health state and having a good character are basic pillars for living a gratifying life. In fact, happiness and health constitute the basis for all the positive personal, psychological and social achievements of human beings (Lyubomirsky et al. 2005) and therefore should be enhanced in everyday life, clinical practice and education (Macaskill and Denovan 2014; Park and Peterson 2008). A pathway proposed for such enhancement is by means of the character strengths practice and use (Seligman et al. 2005).

1.1 Happiness and Well-Being

In order to understand the meaning and importance of happiness and the reasons why it is considered the ultimate goal of every human being (Crisp 2000) we need to place its roots in the ancient term of Aristotle's *eudemonia*, defined as "The good composed of all goods; an ability which suffices for living well; perfection in respect of virtue; resources sufficient for a living creature" (Cooper and Hutchinson 1997, p.1680). More recently, Diener (2000) proposed that subjective well-being is a broad concept that includes two affective components, positive and negative, and one component of cognitive appraisal which is entitled life satisfaction or happiness. This distinction was supported by an empirical study with a large sample (Arthaud-Day et al. 2005) showing that these three components are actually separate yet interrelated factors of the same construct.

1.2 Mental Health and Happiness

Similarly, the definition of health as not only the mere absence of symptoms but also the presence of human positive states, capacities and functioning (WHO 1948, 2013) has gradually created some space for positive psychology to expand its application into the field of health. In the same line, the mental health definition as "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (WHO 2013) illustrates the connection between mental health and achieving a state of happiness through the use of personal potential.

1.3 Character Strengths

This personal potential can be explored through the application of character strengths, which are traits with moral value that underlie virtues and could be defined as "a disposition to act desire and feel that involves the exercise of judgment and leads to a recognizable human excellence or instance of human flourishing" (Yearley 1990, p. 13, as cited in Park et al. 2004). In order to promote the enhancement of good character through the disposition of various strengths the pioneers of positive psychology created the Values In Action (VIA) project (Park and Peterson 2006; Peterson and Seligman 2004) with its corresponding instrument (VIA-IS) measuring twenty-four different character strengths, that underlie six proposed core virtues grouped as follows: Wisdom and Knowledge (strengths of curiosity, love of learning, judgement, ingenuity, social/personal/emotional intelligence and perspective); Courage (strengths of bravery, perseverance and honesty); Humanity (love and kindness); (d) Justice (including teamwork, fairness and

leadership); Temperance (self-control, modesty and prudence); Transcendence (appreciation of beauty, gratitude, hope, spirituality, forgiveness, humour and zest). However, the classification of the strengths under each virtue was theoretically proposed by the authors and was not based on empirical findings and more recently different authors suggested different strength components for each virtue, after empirical examination of the VIA-IS factors (for a review see McGrath 2014a). In this vein, McGrath (2015a) proposed that the discrepancy between theory and empirical studies may in fact reflect a real discrepancy between the strengths' psychological basis and the virtues' understanding in different cultures. His recent attempt to account for such inconsistency revealed a latent unique component for all strengths named Good Character, further divided in Goodness (i.e. caring and having self-control) and Inquisitiveness (Intellectual pursuits). Still, the strengths included in the VIA-IS have been proven to be ubiquitous through its empirical validation in several different cultural contexts and countries worldwide (Dahlsgaard et al. 2005; Park et al. 2006) including recent updates that expanded the validation with more populations (McGrath 2014b) and in different languages (McGrath 2015b). However, the instrument raises criticism and concerns, as it fails to include and assess culture-bound strengths and virtues (Lambert et al. 2015) such as honour or shame in the Middle Eastern traditions (Gregg 2005).

1.4 Strengths, Happiness and Mental Health

Research on the relationship between character strengths, as identified through the VIA project, and other personal, situational and health constructs has been growing considerably. Seligman (2002) stated that strengths are essential elements for achieving happiness and “producing authentic positive emotion” (Seligman 2002, p. 138), a suggestion also confirmed by empirical findings (Govindji and Linley 2007; Minhas 2010; Proctor et al. 2011). Studies aiming to further examine this relationship revealed that in fact there are some strengths that predict happiness more reliably than others (Park et al. 2004). Specifically, the strengths of gratitude, hope, zest, love and curiosity, identified as “strengths of the heart” due to being feeling-oriented, have been found to predict happiness consistently as opposed to the “strengths of the mind” (thinking-oriented i.e. appreciation of beauty, creativity, judgment and love of learning) (Park and Peterson 2006; Polak and McCullough 2006).

When it comes to mental health, positive psychology interventions that involve the enhancement of strengths are found to increase well-being and decrease depression effectively, as suggested by a meta-analysis of 51 studies (Sin and Lyubomirsky 2009). Indeed, empirical findings suggest that having a good character through the use of strengths is inversely related to depression, suicidal ideation and substance abuse (Park 2004), whilst the use of strengths can have a buffering effect against stress (Wood et al. 2011), reduce the disability caused by mental disorders (Cloninger 2006) and contribute to their prevention (Park and Peterson 2006, 2008). In this context, Wright and Lopez (2005) proposed that strengths constitute important resources for mental health improvement and as such their enhancement should be incorporated to the health and well-being interventions (Macaskill 2012; Seligman et al. 2005).

Thus, virtues and their implementation through the character strengths are essential to the way towards *eudemonia* (using the Aristotelian approach of happiness), as well as towards an optimum mental health state. This idea was empirically supported by a study of Seligman et al. (2005) who reported enduring higher levels of happiness and lower levels of depression in people who consistently used their strengths on a daily basis.

1.5 Happiness, Strengths and Cultural Context

Despite its unquestionable value, the generalisability of happiness in diverse cultural contexts is challenging, as the great majority of research on the topic relies on measures developed based on Western theoretical backgrounds and contexts (Lu et al. 2001). Uchida et al. (2004) suggest that the way people form their life appraisals cannot be separated from the cultural context they live in. Still, a recent comprehensive review of empirical findings based on 130 nations, included in the World Database of Happiness, revealed that happiness is indeed a comparable concept across different cultural contexts (Veenhoven 2012). Despite this, the majority of research regarding the relationship between happiness and character strengths is USA centric (Proctor et al. 2011), creating serious concerns on whether the consistently strong relationship reported is actually valid across other countries (Peterson et al. 2007).

1.6 Happiness Studies in the Middle East

In the context of Middle East countries for instance, the validity of the happiness concept has been the focus of empirical studies only in the last decade. Abdel-Khalek (2006a, b) carried out two studies using a self-rating single item for global happiness in Kuwaiti samples (i.e. Do you feel happy in general?). Results revealed that the single item scale was indeed a valid measure for the happiness evaluation of this Middle East population, showing high criterion validity, also confirmed by Abdel-Khalek and Lester (2009). Similar findings were reported by Moghnie and Kazarian (2012) with a sample of Lebanese students, after implementing the Subjective Happiness Scale (Lyubomirsky and Lepper 1999), a scale created in a Western context. Their results suggested that happiness can be similarly assessed in cultural contexts different than those of the Western world.

1.7 Happiness and Mental Health in the United Arab Emirates

The United Arab Emirates (UAE) is a Middle Eastern country located in the Persian Gulf which is a unique example of a rapidly growing society, as the discovery of the oil in the region only five decades ago has brought vast changes in all the aspects of the local people's lives in less than a generation. Such changes were due to the exposure of the local people, who are committed to the Islamic tradition, to Western cultural traits brought by the expatriates. In 2013 the country had a population of 9.2 million, with only 1.4 million being local Emirati people. The expatriate population in the UAE consists of people with Arab, Asian (Indian, Pakistani, and Filipino), and Western origin (Tadmouri et al. 2010). Thus, the country provides a unique mosaic of cultural variability and subsequent interchange of values, beliefs and habits between different cultural traditions.

To the date, in UAE there is a paucity of empirical studies on mental health and happiness. Although UAE is amongst the Gulf countries the most proactive in mental health research, still the psychological and sociocultural determinants of mental health remain largely underexplored (Osman and Afifi 2010). Perhaps this is due to the fact that psychology is still taking its first steps in this relatively new country and also due to the high levels of stigma related to mental illness (Al-Karam and Haque 2015).

When it comes to research on happiness, there has been only one empirical study evaluating the life satisfaction levels of the older population using a visual analogue scale (Ghubach et al. 2010) and one qualitative study (D'raven and Pasha-Zaidi 2014), which

despite its insightful contribution on the use of strategies targeting happiness did not include any quantitative assessment. Recently, the UAE was placed at the 14th position in the World Happiness Report (Helliwell et al. 2015) being the highest amongst the other countries in the Gulf region. Remarkably, the UAE Government has just announced the creation of a Ministry of Happiness, aiming at channeling policies and plans to achieve a happier UAE society (McKenzie 2016).

Such facts highlight the importance of happiness in the country and also the need to study the strategies and paths to happiness and mental health for the UAE residents. Additionally, the multicultural population composition of the country provides a unique opportunity for replicating findings from other countries, in order to examine their cross-cultural validity.

1.8 The Present Study

Adding upon the above characteristics of the UAE reality, to the knowledge of the present authors there is no study focusing on the associations of strengths with happiness and mental health in a context of a Middle Eastern country to the date. Therefore, the present study aims to explore the associations of character strengths with happiness and psychological health in a United Arab Emirates context based on a multicultural sample, in an attempt to examine the cross-cultural consistency of such relationship previously reported mainly in Western contexts. It is hypothesised that certain strengths are better predictors of happiness and mental health than others, in line with the results of Park et al. (2004). Also, we suggest that strengths would continue to act as determinants of happiness and mental health after controlling for potential sociodemographic confounders. The study targets an undergraduate group of students as they are at the risk age (18–25) for an onset of mental illness (Kessler et al. 2007) also confirmed by a study in the UAE (Gomathi et al. 2012). Our sample consists of students of various nationalities in order to represent the UAE population composition (Tadmouri et al. 2010). Helping young people to identify and use their strengths can reduce the risk of mental disorders (Bromley et al. 2006) and lead to a happier educational context, life (Seligman 2002) and society.

2 Methodology

2.1 Participants

The initial sample consisted of 242 students opportunistically selected from a British University offshore campus. Those above 25 years old or with missing age data were excluded from our analysis ($N = 17$), and the final sample comprised of 225 undergraduate students (28% male and 72% female), aged 18–25 years ($M = 20.16$; $SD = 1.78$) and mostly single (92%). The participants were from various nationalities, consistent with the demographic variability of the UAE (Tadmouri, et al. 2010). More than half of them were from the Indian peninsula (India, Pakistan, Bangladesh and Sri Lanka: 52.7%, whereas only a small percentage were from the MENA (Middle East-North Africa) region (9%). 92% of them were single, 59.6% of them had been residing in the UAE for more than 5 years, whilst 26.5% had been in the UAE for 1–5 years and 13.9% of them were newly arrived (less than a year). (see also Table 1 for further details).

Table 1 Sociodemographic characteristics

Sociodemographic characteristics	<i>N</i> = 225	Percentage (%)	Mean (SD)
Sex	Men	28	20.16 (1.78)
	Women	72	
Age			
Marital Status	Single	92	
	Married	3.1	
	Other	4.9	
Nationality	South Asian	4.5	
	American	.9	
	European	7.7	
	MENA	9.0	
	Indian Peninsula	52.7	
	Russian	5.0	
	African	19.4	
UAE Residence	Australian	.9	
	1 year and less	13.9	
	From 1, 1 to 5 years	26.5	
Happiness (<i>N</i> = 223)	More than 5 years	59.6	
	Extremely unhappy	5.8	
	Very unhappy	10.3	
	Somewhat unhappy	14.3	
	Neither happy/nor unhappy	35.9	
	Somewhat happy	31.4	
	Very happy	2.2	
Extremely happy	0		
GHQ-12 Total			12.74 (6.6)

2.2 Procedure

This study was carried out at the premises of a British university offshore campus, after obtaining the approval of the University's ethical committee. As a British university, all courses are taught in English and the students have to fulfil the requirement of high English level in order to get access to the University's courses. Thus their level of English language is more than suitable for performing this study in English, although as mentioned above they come from a great range of different countries. Students of various departments were recruited for the study, during the period October–November, 2014. Students were asked to participate in the study voluntarily and once they accepted they were provided with information on the study's purpose. After having signed the informed consent, they were asked to fill in the booklet containing questions on their demographic data and the three instruments (*Global Happiness Scale*, Andrews and Robinson 1991; *GHQ-12*, Goldberg 1972; and *VIA-IS-120*, Park and Peterson 2006) which took them approximately half an hour. All the questionnaires were in English. Finally, they received a debriefing sheet

giving them further details for the study and thanking them for their participation. The participants did not receive any type of reward for their contribution.

2.3 Variables and Instruments

2.3.1 Outcome Variables

2.3.1.1 Happiness as Assessed by the Global Happiness Scale In order to assess happiness, the Global Happiness Scale (Andrews and Robinson 1991) was used. It consists of a single item: “In general, how happy would you say you are?” and measures subjective happiness in a 7-point Likert scale (1 = Extremely Unhappy to 7 = Extremely Happy). This scale has demonstrated adequate reliability and validity (Pavot and Diener 1993). Good convergent and divergent validity have been reported also by studies in the region (Abdel-Khalek 2006a, b).

2.3.1.2 Mental Health as Assessed by the GHQ-12 The 12-item version of the General Health Questionnaire (GHQ-12; Goldberg 1972) was used to evaluate mental health. The 12-item scale is the shortest version of the GHQ and consists of 6 positive and 6 negative rated items. A 4-point Likert-type scale (from 0 to 3) was used. Higher scores indicate worse mental health. The 12 items scale has shown good validity across countries (Goldberg et al. 1997). Reliability analysis in our sample indicated a Cronbach alpha of .88.

2.3.2 Independent Variables

2.3.2.1 Strengths as Assessed by the VIA-IS-120 The Values in Action Inventory of Strengths (VIA-IS-120; Park and Peterson 2006) was used to assess the character strengths. This is a 120-item self-report questionnaire assessing twenty-four strengths (five items per strength, in a 5-point Likert scale (1 = very much like me to 5 = Very much unlike me). The strengths correspond to the VIA classification (Peterson and Seligman 2006) and according to the authors are grouped to the following six virtues: Wisdom and Knowledge (strengths of curiosity, love of learning, judgement, ingenuity, social/personal/emotional intelligence and perspective); Courage (strengths of bravery, perseverance and honesty); Humanity (love and kindness); (d) Justice (including teamwork, fairness and leadership); Temperance (self-control, modesty and prudence); Transcendence (appreciation of beauty, gratitude, hope, spirituality, forgiveness, humour and zest). Higher scores indicate lower possession of strengths. For the present study, factors of virtues as extracted from a Factor Analysis of the twenty -four strengths were used (see the Results section).

2.3.2.2 Sociodemographic Variables Data on sex, age, nationality, marital status and length of time residing in UAE were collected through a sociodemographic questionnaire.

2.4 Statistical Analyses

Statistical analyses were performed using SPSS v21. First, descriptive analyses were carried out in order to observe the participants sociodemographic characteristics and their levels of happiness and mental health. Second, following the approach of McGrath (2015b) supporting a latent unique component for all strengths, we performed a factor analysis of

the VIA-IS with oblimin rotation, to explore the amount of shared variance explained by the extracted factors in our sample. In order to decide for the number of factors to be retained, we used the Montecarlo simulation approach (parallel analysis) for determining the statistically significant Eigenvalues in our analysis (O'Connor 2000). Third, single ordinary least squares regression analyses were conducted with predictor variables entered in separate regressions (strengths and Sociodemographic factors) in order to determine the ones associated with Happiness and Mental Health. (For brevity, such preliminary analyses are not reported here but are available upon request). Fourth, a set of ordinal regressions were performed for examining factors that may function as determinants of happiness. In the first regression, only the strength factors as extracted by the Factor Analysis were entered in the model and in the second regression, strengths and sociodemographic variables (sex, age, nationality, time of residing in Dubai, marital status and school) were entered together in the model in order to check for potential confounders. Fifth, a set of multiple regressions was performed for examining the potential determinants of mental health as measured by the total score of GHQ, first by only including the factors of strengths and second by also including sociodemographic variables as potential determinants.

3 Results

3.1 Levels of Happiness and Mental Health

The levels of happiness and mental health can be seen at Table 1. The participants showed a medium to high level of happiness and also a good mental health status.

3.2 VIA-IS-120 Character Strengths Factors

The parallel analysis conducted for the twenty-four strengths of VIA-IS-120 revealed the existence of four factors with significant Eigenvalues. As determined by the Factor Analysis, such factors together explained 60.7% of the variance and were as follows: (1) Interpersonal Strengths (Eigenvalue = 9.638); (2) Cognitive Strengths (Eigenvalue = 2.015); (3) Transcendence (Eigenvalue = 1.591); and (4) Strengths of Restraint (Eigenvalue = 1.332). The chosen names for the four components followed the examples of previous empirical studies in the field and were based on the grouping of strengths under each component (see McGrath 2014a). The distribution of strengths for each one of the components as well as their reliability indexes can be seen at Table 2.

3.3 Predictors of Happiness

Out of the four strength factors, only Transcendence and Strengths of Restraint were associated with the probability of happiness, as they did not lose their significance when age was entered in the ordinal regression model as a potential confounder. No other sociodemographic variable (sex, nationality, time of residing in Dubai, marital status and school) resulted significant. The results indicate that happiness was positively associated with Transcendence and negatively associated with age and Restraint. This model accounted for 18.1% of the variance, according to the Nagelkerke pseudo R^2 (Table 3). The model showed a highly significant fit ($\chi^2(3) = 42.139; p < .001$).

Table 2 Components of strengths according to the PCA of the VIA-120 strengths

Dimension	Cronbach alpha	VIA-120 Strengths	Load coefficient
Interpersonal strengths	.870	Fairness	.835
		Kindness	.788
		Teamwork	.749
		Leadership	.691
		Humility	.500
		Forgiveness	.398
		Honesty	.349
Cognitive Strengths	.820	Appreciation of beauty	.295
		Creativity	.712
		Bravery	.606
		Perspective	.563
		Judgment	.520
		Social intelligence	.479
		Humor	.463
Transcendence	.870	Love of learning	.228
		Zest	.787
		Hope	.693
		Gratitude	.636
		Curiosity	.605
		Spirituality	.593
		Love	.532
Strengths of Restraint	.740	Prudence	.676
		Perseverance	.468
		Self regulation	.377

Table 3 Strengths and sociodemographic predictors of happiness

Explanatory Variable	Exp (B)	Wald	95% CI	<i>p</i>
Transcendence	.402	34.029	.296–.546	<.001
Strengths of restraint	1.405	4.595	1.030–1.916	.032
Age	.844	5.886	.737–.968	.015

3.4 Mental Health Determinants

The multiple regression analysis conducted with the four strength factors as possible determinants of GHQ revealed that only Transcendence was significantly associated to mental health. When sociodemographic variables were entered to the regression model the analysis revealed that Transcendence significantly predicted mental health together with sex and age [$F(3,221) = 29.98, p < .001$]. Similarly, although in an initial simple regression analysis nationality seemed to be a predictor of mental health [$R^2 = .30$;

$F(1220) = 6.91, p = .009]$, such factor lost its significance when entered together with age, sex and Transcendence. No association was found between mental health and marital status or years of residing in the UAE. The final model accounted for 28% of the mental health variance (Table 4) and suggests that being a man, of younger age and possessing higher levels of the Transcendence strengths indicates a lower risk of having mental health problems.

4 Discussion

The purpose of the study was to explore whether character strengths have an association with happiness and mental health. Specifically, and in order to replicate previous findings from different cultural contexts and ages, we focused on young adults in the context of the UAE. The factor analysis carried out for the VIA-IS-120 in our sample revealed a somewhat different combination pattern of character strengths under the factors of virtues, as compared to the one proposed by the instruments' authors. However, our results seem to confirm the role of character strengths for predicting both young people's happiness and better mental health, highlighting the relationship with specific groups of strengths after also checking for potential sociodemographic confounders. Specifically, we provide evidence for the central role of the character strengths grouped under the virtue of Transcendence, as those are associated with both higher levels of happiness and better mental health, whilst the possession of lower levels of Restraint strengths are associated with higher levels of happiness in our sample of young adults. Additionally, our results support the idea that younger age is linked to both higher levels of happiness and better mental health, whilst, not surprisingly, men display better mental health. In all, our results propose a comprehensive model of promoting happiness and mental health of young adults, through the use of character strengths (Fig. 1).

4.1 Sample Characteristics, Levels of Happiness and Mental Health

Our sample composition, mostly consisting of expatriates, can be considered as representative of the UAE population structure, as eighty-four per cent of the residents in the UAE are non-nationals, in their majority coming from Eastern countries (Tadmouri et al. 2010). Similarly, the higher representation of women as compared to men in our sample follows a trend comparable to the official data on sex prevalence rates in higher education in the UAE (United Nations 2012).

The participants showed a medium level of happiness, perhaps explained by the fact that they were assessed at the beginning of the academic year, a moment when they might have been going through an adaptation process. Alternatively, because the majority of

Table 4 Strengths and sociodemographic predictors of mental health

Predictor	Mental health		
	Model fit $R^2 = .28$		
	β	t	p
Transcendence	.471	8.303	<.001
Sex	.203	3.430	<.001
Age	.212	3.586	.001

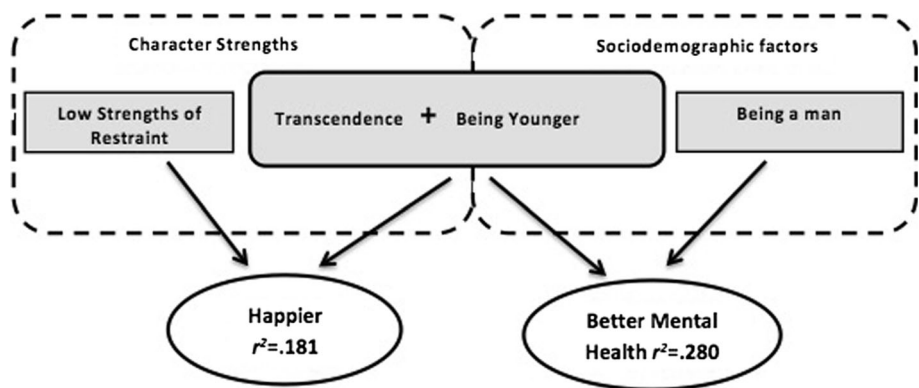


Fig. 1 Character strengths and sociodemographic factors as predictors of happiness and mental health

participants were from Eastern countries it can be suggested that certain cultural traits could have determined their answers, as reporting personal happiness might not be considered adequate (Mathews 2012), being the pursuit of collective and not personal happiness more bound with their cultural values. In fact, the qualitative analysis exploring happiness strategies of UAE university students suggested a preference for use of strategies related to extended family and friends, as opposed to self (D'raven and Pasha-Zaidi 2014). On the other hand, the participants reported a fairly good status of mental health, however, the use of a general scale such as the GHQ did not allow for the identification of any specific mental disorders in our participants.

4.2 Character Strengths as Components of Virtues

In our sample, the VIA-IS-120 factor analysis of strengths revealed four factors that were named based on the strengths composition of the virtues, guided by the example of the previous empirical studies to the date, as found in the review of McGrath (2014a, b). Such components were somehow different to the ones originally proposed by the instruments' authors, confirming the idea that the structure of virtues likely differs across cultural contexts (Peterson and Seligman 2004). Our results are also in line with the assumption that the virtues proposed by the instrument's authors are not directly corresponding to the character strengths, but only linked to them conceptually (MacDonald et al. 2008).

4.3 Character Strengths and Happiness

The most significant predictor of happiness in our sample was the group of strengths under the virtue of Transcendence, including the strengths of gratitude, spirituality, zest, hope, curiosity and love. Our results are in line with previous empirical findings reporting that out of all the character strengths, the "strengths of the heart", referring to zest, hope, love, gratitude and curiosity have been the ones reported consistently as predictors of happiness (Park and Peterson 2006; Peterson and Seligman 2004; Polak and McCullough 2006). In our sample, we found that spirituality that is also bound to such feeling-oriented strengths and is associated with greater happiness. The distinct composition of Transcendence in our sample (inclusion of Spirituality) seems of crucial importance to explain in the light of the sample composition, as our participants are mostly from Eastern countries where

spirituality is highly valued (Greenfield et al. 2003; Hofstede 2001). Spirituality is connected to the belief of a higher purpose of the universe and instills meaning in life (Seligman 2002) guiding the actions of everyday life. Such finding thus is not surprising in our sample, when taking into account the characteristics of our participants, in their majority following Eastern cultural values and religious traditions such as Islam or Hinduism. In the Islamic tradition for instance, spirituality is constantly present in the individual's everyday life through religious practices and happiness is attained through servitude to God (or something omnipotent) and others (Lambert et al. 2015). In fact, Abdel-Khalek (2006b) suggested that religious people are happier, an idea also supported by a recent review of empirical studies (Koenig et al. 2012).

In addition, we found that having zest, referring to being inspired and showing enthusiasm when engaged in everyday tasks, together with holding positive expectations for the future through hope are associated to higher levels of happiness, confirming previous findings (Snyder et al. 2000). In the same way, curiosity as a means of motivation towards seeking novel and fascinating events and personal growth has been associated with greater well-being and meaning in life (Kashdan and Steger 2007; Kesebir and Diener 2013). Similarly, love, defined as the appreciation of close relationships with others together with the expression of gratitude, which contributes to the development of positive social relationships (Emmons and Mishra 2011) are also associated with higher levels of happiness in our sample. Such findings bring empirical support to previous qualitative outcomes suggesting that religion and relationships are the major two elements that promote well-being in UAE students (D'raven and Pasha-Zaidi 2014).

Furthermore, we could suggest that religious beliefs promote bonding and compassion (Parker 2007), two necessary prerequisites for positive affective relationships, which in turn constitutes an essential element of well-being (Ryff and Singer 2000). Our results are also corroborated by empirical applications of strength-based interventions, where the training of strengths such as gratitude, zest and hope was found to enhance life satisfaction, in comparison with the training of other strengths (Proyer et al. 2013).

Contrary to the strengths of Transcendence, the strengths concentrated under the umbrella of Restraint (i.e. prudence, perseverance, self-regulation) seem to predict lower levels of happiness. Given that such strengths are positively associated with a more future-oriented perspective of happiness, such as "pursuing worthwhile goals" (Ryan et al. 2013), perhaps showing perseverance to such goals, when subsequently showing resistance against short-term pleasures through prudence and self-regulation processes might make people feel less happy with their present. In addition, previous findings report persistence as the best predictor of academic achievement (Snyder et al. 2002). In this vein, as our sample consists of university students we also suggest that high levels of such strength might be related to excessive worry for fulfilling their academic obligations and thus making them feel less happy with their life at the present.

4.4 Character Strengths and Mental Health

We also we found evidence that the strengths of Transcendence (i.e. gratitude, spirituality, curiosity, zest, hope and love) predict a better mental health status. Specifically, our results seem to corroborate the suggestion of George et al. (2002) that spiritual beliefs of the world may create a buffering effect for stress experiences by functioning as coping strategies, and thus decrease the chances of suffering from stress-related illness. In fact, Smith et al. (2007) in their meta-analysis suggest the provision of religious-tailored psychological services in order to improve patients' mental health. Similar to spirituality, gratitude also

seems to facilitate the stress coping process by enabling flexible and creative thinking, which is related to better mental health, also established by empirical studies (Macaskill and Denovan 2014; Wood et al. 2008). Our results also confirm previous ideas that possessing zest for living indicates a positive mental health state (Keyes 2007) whereas possessing hope enhances mental health (Macaskill and Denovan 2014) as hope buffers against the negative effects of stress and trauma (Park and Peterson 2009). Additionally, the feeling of love and being loved through warm and trusting relationships has been consistently reported as a protective factor against mental illnesses such as depression and anxiety (Fredrickson et al. 2003; Mauss et al. 2011), whilst the cultivation of curiosity has been effectively included to interventions against such illnesses (Niemic et al. 2012). In the light of such interpretations of our results and given the relatively low percentage of mental health variance explained by the character strengths, it may be that the link between them is mediated by the implementation of effective coping strategies, or else by the enhancement of affective relationships.

4.5 Sociodemographic Factors, Happiness and Mental Health

Besides the role of character strengths on influencing the happiness and mental health in our sample, age was also found to be associated with both outcomes. Indeed, younger people were found to be happier, which might be related to the specific life stage of our participants. The notion of climbing towards more demanding academic grades or even approaching the end of university life and experiencing the transition towards the professional world may result in feelings of unease and concern for the future (Bewick et al. 2010). This perhaps explains why our younger participants seem to be more happy, as well as why they seem to have less possibilities of suffering from mental illness. Furthermore, women in our sample seem to have worse mental health consistent with previous literature on sex differences regarding depression and anxiety (Rosenfield and Mouzon 2013). Moreover, nationality was found to be associated with mental health, consistent with the World Mental Health Atlas (WHO 2005) but not with happiness, in the same line as Proctor et al. (2011) but opposed to Veenhoven (2012). It seems though that other factors related to more personal variables, such as the character strengths, show a stronger association with happiness and mental health, overcoming the role of nationality. Thus the results provide evidence for the cross-cultural validity of such relationships (Shimai et al. 2006); however we can still argue that nationality may be responsible for the somehow distinct composition of Virtues in our sample when compared with findings from other countries, in line with Biswas-Diener (2006), perhaps because of our participants coming predominantly from Eastern countries. Last, length of UAE residence was not associated with happiness or mental health, similarly highlighting the importance of factors other than adaptation to the context for achieving happiness and good mental health.

4.6 Limitations and Future Research

Some limitations need to be taken into account when interpreting our results. First, our study had a cross-sectional design and was held at the beginning of the academic year. A longitudinal comparison with data from the end of the year might have informed us about possible changes in the participants' levels of happiness and mental health status and also about changes regarding the role of character strengths. Second, the fact that all the participants filled the questionnaires in the exact same order (happiness, mental health and strengths) might have caused a response sequencing effect that perhaps has influenced their

answers. However, given the distinct nature of the explored constructs, we expect this effect to have been minor. Third, we decided to use the VIA-IS version of 120 items, whilst the majority of the studies have used the VIA-240. The reason for this choice was the less time that takes for completion, in comparison to the initial scale. Furthermore, the VIA-120 has been found to have high internal consistency (Cronbach $\alpha = .79$) similar to the original scale (VIA Institute on Character 2014). Fourth, the percentage of happiness variance explained by our factors can be considered low and perhaps there are other elements such as self-esteem (Douglass and Duffy 2015) that mediate the relationship between happiness and character strengths. Further studies should address this issue by examining whether interventions targeting young people's self-esteem enhance the associations of character strengths with happiness. Lastly, culture-bound strengths such as altruism and honour have not been included in our design, but should be examined by future studies in order to construct culturally relevant pathways to well-being (Giacaman et al. 2010), perhaps by implementing a qualitative analysis of such pathways.

4.7 Implications

This is the first empirical study to check for the applicability of the VIA framework of character strengths in the United Arab Emirates and also to examine the role that character strengths may play in happiness and mental health enhancement. Besides its contribution to the pre-existing literature on the field of positive psychology, our study has important practical implications to take into account. Specifically, our results corroborate the need for the implementation of positive interventions focused on character strengths for achieving our ultimate goal as professionals, of having happy and fulfilled young people, in line with previous authors (Gander et al. 2013; Ouweneel et al. 2014). Additionally, the lack of differences across nationalities in our sample supports the notion that happiness is indeed a universal phenomenon; however, our results regarding the role of spirituality in our sample, indicate that the way to achieve happiness may actually vary across cultural traditions. Thus, we suggest that the character strengths framework should be adapted according to the “indigenous positive psychology” proposed by Lambert et al. (2015), which is a tailor-made framework that respects and, more importantly, incorporates the unique features of the UAE's cultural context, on the path towards happiness and mental health.

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