CHAPTER 3

THE STUDY OF CHARACTER STRENGTHS AND WELL-BEING

Mediha KORKMAZ[1]

A CLASSIFICATION MODEL FOR CHARACTER STRENGTHS AND VIRTUES IN POSITIVE PSYCHOLOGY

Research in psychology often attempts to reveal, understand, and intervene in individuals' depression, stress, traumatic life events, anger and aggression, lack of communication, and many more within a problem-centered approach. To put it another way, the discipline engages in developing and implementing solution-based strategies within an abnormal behavior perspective to problem areas of typical human behaviors. The presence of mental health diagnostic manuals (e.g., the Diagnostic and Statistical Manual of Mental Disorders (DSM)) may be considered a hallmark of such a perspective (Peterson & Seligman, 2004). The positive psychology approach put forward by Martin E.P. Seligman (1998), on the other hand, emphasizes the importance of how to maintain a happier and more joyful life by revealing one's positive and robust characteristics that make life worth living, instead of focusing on problematic, negative, and weak traits of individuals. Seligman and Csikszentmihalyi (2000) air that positive psychology involves repairing pathologies in life, as well as functioning to be a launcher or complement of a change in structuring of individual positive characteristics.

Peterson and Seligman (2004) put forward positive traits within character strengths and virtues and emphasized the characteristics of a strong character among the ultimate goals of positive psychology. Character is the moral worth of personality (Park & Peterson, 2008). Temperament, character, and personality are interrelated but diverse psychological constructs; while temperament roots in one's biological structures, character embodies the impacts of social and cultural environments. Personality, on the other hand, is conceived of as dynamic interactions between temperament and character. Thus, character strengths have an aspect open to learning under the influence of culture and environment. The combination of these morally valuable character strengths creates a superstructure

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[1] Assoc. Prof., Ege University, Department of Psychology, mediha.korkmaz@ege.edu.tr,

called virtues. While virtues represent morally-accepted positive, abstract characteristics, character strengths are identified with psychological processes and mechanisms (Peterson, Park & Sweeney 2008). Peterson and Seligman (2004) introduced the definition of "Values in Action (VIA)" for character strengths to become observable in behavior. While creating a classification of character strengths and virtues, the authors explored the texts of moral, religious, and philosophical teachings that are still alive today (e.g., ancient Greece, Islam, Confucianism, Taoism, Buddhism, Hinduism, Judeo-Christianity). They also established the psychological components of character and virtues by nourishing them with the well-established psychology literature covering Maslow's "Hierarchy of Needs," Erikson's "Psychosocial Development Model," Kohlberg's "Theory of Moral Development," Gardner's "Theory of Multiple Intelligences" and "Big Five Model," Schwartz's "Theory of Basic Values," and Buss's "Evolutionary Psychology Approach" (Dahlsgaard, Peterson, & Seligman, 2005; Peterson & Seligman, 2004).

The theoretical classification for character strengths is also a model of "virtue," as well as a model of the hierarchical structure of positive traits since virtue is the core of the character (Peterson & Seligman, 2004). They initially identified 24 different character strengths for VIA, which is a purely theoretical classification model that was not based on empirical evidence and represents character strengths, and asserted these strengths could belong to 6 fundamental virtues: Wisdom/Knowledge, Courage, Humanity, Transcendence, Justice, and Temperance (Peterson & Seligman, 2004).

Indeed, Peterson and Seligman (2004) determined clear and observable criteria to define a trait as a character strength. Briefly, i) character strengths should contribute to the satisfaction of the individual and others in certain domains their lives and should be satisfying regardless of instant pleasures; ii) character strengths have the power to produce desirable outcomes, but these strengths are morally valuable even when there is no such apparent benefit situation; iii) one's character strengths do not reveal a feeling of inferiority or deficiency in others since character strengths are accessible to everyone and benefit everyone if they are created appropriately in the environment where they blossom; iv) character strengths should be traits that are stable and, to a certain extent, generalizable in one's feelings, thoughts, and behavior; v) character strengths should be measurable. vi) each character strength should be distinguishable; vii) there are some social examples of character strengths; these can be actual figures, people who are later attributed specific characteristics, or entirely fictional ones.

Overall, the previous research designed and established a hierarchical classification model for 6 virtues represented by 24 different character strengths.

Character strengths and virtues discussed in detail by Peterson and Seligman (2004) and Park, Peterson and Seligman (2004) can be summarized as follows.

1. Wisdom and Knowledge: The virtue of wisdom represents the "*cognitive*" powers; it serves one's well-being with cognitive powers as well as the acquisition and use of knowledge. Wisdom consists of five character strengths: *Creativity, Curiosity, Love of Learning, Judgment, and Perspective*.

Creativity-Originality defines designing and exhibiting behavior in innovative and productive ways and includes artistic creativity. *Curiosity* refers to the state of searching, discovering, and getting inspired from a subject for one's own interest. *Love of Learning* includes acquiring new skills and knowledge. One can access information by themselves or through a formal learning method. In addition to being similar to curiosity, it is a more comprehensive strength and includes regularity related to learning. *Judgment* refers to thinking through the concepts that are the subject of thought and not reaching a result at once. It reflects being able to express one's thoughts and change one's mind by objectively evaluating all data. *Perspective* covers being able to explore life events and give wise advice in a way that makes sense to oneself and others.

2. Courage: It is the virtue factor covering the "*emotional*" character strengths that enable reaching specific goals against obstacles. The virtue of Courage encompasses the powers of *Valor-Bravery, Industriousness-Persistence, Integrity-Honesty*, and *Zest*.

Valor-Bravery indicates not giving up in the face of obstacles, difficulties, and pain. It is not acting in the way one wants but acting by what one believes. *Industriousness-Persistence* includes the ability to complete the work despite all kinds of obstacles, difficulties, and challenges and enjoy this situation. *Integrity-Honesty* covers being able to tell the truth, asserting oneself in an authentic and real way, and taking responsibility for one's own feelings and behavior. *Zest* corresponds to approaching life events with excitement and energy, doing something willingly, feeling adventurous, lively, and active.

3. Humanity: It is the virtue factor that includes the "*interpersonal*" character strengths based on approaching toward and gleaning information from others. Interpersonal strengths are utilized to uncover the nature of close and one-to-one relationships. It encompasses *Kindness, Capacity of Love*, and *Social Intelligence*.

Kindness indicates benevolence and a good-willed approach to people and encompasses helping, regarding, and caring for others. *Capacity of Love* represents sharing, valuing others, and being close to people. *Social Intelligence* is built on being aware of people and one's own feelings and desires and being able to act in accordance with different social situations.

4. Justice: It represents the "*civilian*" powers enabling the community (individual-group) life to be healthier and more functional. The virtue of Justice incorporates the powers of *Fairness-Equity, Citizenship-Teamwork*, and *Leadership*.

Impartiality/Fairness-Equity involves approaching people with fairness and a tendency to be fair and giving everyone an equal chance without letting personal feelings affect decisions on others. *Citizenship-Teamwork* expresses the ability to work smoothly within and the commitment to a group or team. *Leadership* includes encouraging a group, establishing good relations with group members, and organizing and realizing the group's activities.

5. Temperance: It is the virtue factor preventing one from experiencing excesses in certain areas. These are positive powers "*protecting against extremism*:" *Forgiveness, Modesty, Prudence*, and *Self-regulation*.

Forgiveness refers to forgiving people's mistakes, accepting their shortcomings, giving people a second chance, and not being full of revenge. *Modesty* indicates not seeing oneself as more exclusive than others, not attracting too much attention, and allowing others to talk about their own achievements. *Prudence* involves being careful about own choices, not taking unnecessary risks, and avoiding words and actions that may cause regrets later. *Self-regulation* includes controlling one's own feelings and acts, providing self-discipline, regulating one's own desires and emotions.

6. Transcendence: It embodies character strengths connecting individuals to a larger universe and enabling them to transcend themselves to gain meaning in life. These strengths are *Appreciation of Beauty, Gratitude, Hope, Humor*, and *Spirituality*.

Appreciation of Beauty refers to being able to recognize and appreciate beauty, perfection, and skills and products of diverse domains in life. *Gratitude* includes being able to acknowledge and thank the good things that happen in one's life. Taking time to reflect on gratitude is part of this character strength. *Hope* is the power to believe in and make efforts to reach a promising future. This character strength belongs to those believing that a good future merely relies on them and looking forward to the future with optimism. *Humor* corresponds to laughing and approaching the difficult parts of life with humor. It is common in people who can make people laugh, see the good in things, and make jokes. *Spirituality* matches believing in the existence of ultimate purposes and great meaning in the universe. People with a robust spirituality are those knowing their place in the scheme of the big and meaningful universe and having knowledge about structuring life and finding peace.

Peterson and Seligman (2004) developed the Values in Action – Inventory of Strengths (VIA-IS) at a purely theoretical level to enable empirical testing of the above-mentioned model with 6 virtues and 24 character strengths. Initially, the VIA-IS was composed of 240 items in total for adults, 10 positive statements per character strength. Then, the VIA-Youth Form consisting of 198 items was introduced for children and the young in the following years (Park & Peterson, 2006). So far, these VIA forms have been translated into different languages (for example, Danish. German, Spanish, French, Urdu, Farsi and Portuguese) and used in many empirical studies (Niemic, 2013).

The present study utilized the Turkish Character Strengths Inventory (TCSI) developed by Korkmaz, Cömert, and Gürlük (2021) based on Peterson and Seligman's (2004) VIA classification model. Ultimately, the research aimed to explore the links between character strengths and virtues and life satisfaction, psychological resilience, subjective happiness, and positive-negative affect. In addition, it was also explored whether character strengths significantly differ by gender.

PREVIOUS RESEARCH ON THE ASSOCIATIONS OF CHARACTER STRENGTHS WITH WELL-BEING AND GENDER

The ultimate goal of positive psychology is to contribute to individuals' reaching a greener pasture and subjective well-being, namely happiness (Park & Peterson, 2008; Seligman, 2002). Subjective well-being includes one's judgments about their life based on their positive and negative mood (Diener, 2000). It consists of life satisfaction, denoted as a cognitive component referring to one's satisfaction with their life, and an emotional component where one evaluates their positive and negative affect (Diener, 2000; Pavot & Diener, 2008). Below is a review of the previous research exploring the associations between the findings through the long and short forms of the VIA-IS and life satisfaction, well-being, positive-negative emotions and comparing these findings by some demographic variables such as age and gender.

The idea that character strengths may have a complementary role in one's happiness experiences led a number of studies to investigate the relationships between character strengths and life satisfaction. Park, Peterson, and Seligman (2004) claimed that the strengths of hope, zest, gratitude, curiosity, and capacity of love are those demonstrating the most significant and consistent correlations with life satisfaction. In their study, Peterson et al. (2008) compared the correlations between life satisfaction and character strengths in Ameriacan and Swiss adult samples and found that zest, hope, and capacity of love showed the most robust

associations with life satisfaction in both samples. In another study, Ruch et al. (2010) suggested that character strengths in German-speaking adults showed a moderate positive correlation (.44) with life satisfaction. Littman-Ovadia and Lavy (2012) also explored the relationships between character strengths and life satisfaction, subjective well-being (SWB), positive-negative affect. The results showed that only spirituality did not correlate with positive affect. Yet, the character strengths yielded moderate correlations with SWB (hope, gratitude, zest, and curiosity), life satisfaction (zest, hope, curiosity, perspective, self-regulation, and gratitude, and positive affect (zest, curiosity, love of learning, hope, and perspective). Martinez-Marti and Ruch (2014) found that life satisfaction was more strongly associated with hope, zest, capacity of love, and social intelligence, but there were no relationships between life satisfaction and modesty, spirituality, equity, and prudence. Similarly, Azanedo, Fernandez-Abascal, and Barraca (2014) suggested that the correlations between life satisfaction and all character strengths were significant while it was moderately correlated with hope, zest, gratitude, capacity of love, and curiosity. They also found moderate relationships between positive affect and zest, hope, curiosity, creativity, perspective, persistence, gratitude, and social intelligence and that all correlations between positive affect and character strengths (except for modesty) were significant. In a study with a sample of teachers, life satisfaction was robustly correlated with hope, zest, curiosity, gratitude, and capacity of love (Gradisek, 2012). Besides, a meta-analysis study (Bruna, Brabete, & Alvarado, 2018) reported that the strengths with a strong relationship (above .50) with life satisfaction were hope and zest, while those with moderate link (around .30) with it were gratitude, capacity of love, curiosity, perspective, and persistence. On the other hand, the authors found weak relationships between life satisfaction and modesty, prudence, and self-regulation.

The relevant literature hosts other studies exploring whether character strengths differ by demographic characteristics, including age, gender, and educational background. Particularly, when character strengths significantly differ by gender, then it is more likely to develop different interventions by the prominent character strengths of females or males (Heintz, Kramm, & Ruch, 2019). In general, it was previously documented that females score higher on character strengths than men. Seligman and Peterson (2004) and Shimai et al.(2006) found that females significantly got higher "capacity of love" and "kindness" scores compared to men. Linley et al. (2006) also found that males and females significantly differed across all 24 strengths. Considering the effect sizes of the findings, the authors concluded that females scored higher on capacity of love, kindness, social intelligence, appreciation of beauty, and gratitude, while

males scored higher on creativity. In different studies, females scored higher on capacity of love, kindness, appreciation of beauty, gratitude (Ruch et al. 2010); capacity of love, appreciation of beauty, and gratitude (Littman-Ovadia & Lavy, 2012); capacity of love, kindness, gratitude, forgiveness, appreciation of beauty, prudence, fairness, and leadership (Karris & Craighead, 2012). Yet, males got higher scores on creativity, judgment, perspective, and leadership (Ruch et al., 2010); creativity (Littman-Ovadia & Lavy, 2012); creativity, bravery, and self-regulation (Karris & Craighead, 2012). In addition, Azanedo et al. (2014) reported that while females were better on capacity of love, gratitude, and kindness, males got higher scores on creativity. In their meta-analysis study, Heintz et al. (2019) concluded that 17 of 24 character strengths significantly differed by gender, but the effect sizes of the findings were negligible. They reported that females scored higher on only capacity of love, kindness, apprepciation of beauty, and gratitude than males (Heintz et al. 2019).

METHOD

Participants

The sample was composed of conveniently selected 102 females (55.4%) and 82 males (44.6%) and asked to fill out the self-report instruments. Although 5 participants could not provide accurate information about their age, the sample was aged between 19-75 years (M = 42.20, SD = 11.95). Regarding educational attainment, 2.7% had primary school education, 8.7% had secondary school education, 17.9% had high school education, 46.7% had undergraduate education, and 23.4% had postgraduate education (a participant did not specify their educational background). While 25.5% were single, 68.5% were married, and 5.4% were widowed (a participant did not specify their marital status). Finally, 63.6% of the participants reported being employed.

INSTRUMENTS

Turkish Character Strengths Inventory-TCSI

Korkmaz, Cömert, and Gürlük (2021) created the Turkish Character Strengths Inventory (TCSI) based on Seligman and Peterson's (2004) theoretical classification model for 6 virtues and 24 character strengths. The item pool of the TCSI was developed utilizing VIA-IS-related items in the International Personality Item Pool (IPIP), which offers open access to researchers (https://ipip.ori.org/index.htm), as well as the items generated by Du Plessis and Du Bruin (2015) and the authors themselves. The draft item pool, consisting of 345 items in total, was translated

into Turkish by 5 psychologists and evaluated by a specialist in English Language and Literature regarding the item's linguistic congruence. Then, the research team reviewed the items and settled a 5-point Likert-type (1: Not at all; 5: Completely true for me) scale form consisting of different numbers of items within each subscale of character strengths. The psychometric properties of the inventory were tested with both a young adult sample composed of 568 participants (age range: 17-24 years) and an adult sample consisting of 714 participants (age range: 25-73 years) (Korkmaz et al. 2021).

For the adult sample, the TCSI consists of a total of 283 items, ranging from 8 to 13 items for each character strength subscale. The findings on the item and factor analyses yielded relevant evidence for the theoretical model (VIA classification) behind 24 characters representing 6 virtues on the scale. The mean Cronbach's alpha value of the character strength subscales was calculated to be .82 for the adult sample. The findings related to internal consistency and test-retest reliability of TCSI (Korkmaz et al. 2021) are summarized as follows:

Cronbach's alpha values were calculated for the 24 character strengths as follows: *Wisdom*: Originality (α = .88), Curiosity (α = .84), Love of Learning (α = .83), Judgment (α = .77), and Perspective (α = .86); *Courage*: Valor (α = .84), Persistence (α = .89), Honesty (α = .78), and Zest (α = .86). *Humanity*: Kindness (α = .78), Capacity of Love (α = .69), and Social Intelligence (α = .73); *Justice*: Citizenship (α = .79), Equity (α = .72), and Leadership (α = .86); *Temperance*: Forgiveness (α = .84), Modesty (α = .80), Prudence (α = .73), and Self-regulation (α = .69); *Transcendence*: Appreciation of Beauty (α = .82), Gratitude (α = .92), Hope (α = .81), Humor (α = .90), and Spirituality (α = .95). The TCSI was re-administered to 57 adult participants following 3-5 months of the initial data collection. Then, the authors calculated the test-test reliability coefficient for each character strength within 6 virtue factors. The values ranged between .58 and .68 in the Wisdom factor, between .73 and .81 in the Courage factor, between .55 and .74 in the Justice factor, between .59 and .63 in the Humanity factor, between .60 and .79, and between .63 and .91 in the Transcendence factor.

Overall, both reliability and factor analyses confirmed that each of the 24 character subscales on the TCSI is represented within its own virtue factor, as in the VIA classification. While one's character strengths can be evaluated based on the subscale score, their virtue characteristics can be revealed by summing relevant subscale scores (Korkmaz et al. 2021).

Satisfaction with Life Scale-SWLS:

The scale developed by Diener et al. (1985) provides a general assessment of one's life satisfaction. The SWLS consists of 5 items, scored on a 7-point Likert-type (1 = Strongly disagree, 7 = Strongly agree) scale, and a high score on the scale indicates high life satisfaction. The authors calculated the test-retest reliability coefficient to be .82 and Cronbach's alpha coefficient to be .87 for the single-factor structure of the scale explaining 66% of the variance (Diener et al., 1985).

Yetim (1991) adapted the scale into Turkish with adult and university student samples. For the adult sample, the reliability analyses yielded a KR-20 internal consistency coefficient of .73 and a split-half reliability coefficient of .74.

Positive and Negative Affects Schedule-PANAS:

The tool developed by Watson, Clark, and Tellegen (1988) measures positive and negative affect as an emotional component of subjective well-being in two separate subscales. The PANAS consists of 20 items (10 positive, 10 negative) scored on a 5-point Likert-type (1 = Very slightly or not at all, 5 = Extremely) scale regarding the degree to which one feels the relevant emotional state in the past week. Two separate scores are utilized for positive and negative affect; high scores indicate a high level of experience related to that state (Watson et al. 1988).

Gençöz (2000) adapted the PANAS into Turkish on a sample of university students using the time adverbial "last week." In the adaptation study, the two-factor structure of the tool was confirmed. Cronbach's alpha coefficient and test-retest reliability were calculated to be .83 and .40 for negative affect and .86 and .54 for positive affect, respectively (Gençöz, 2000).

Subjective Happiness Scale-SHS:

Developed by Lyumborski and Lepper (1999), the SHS measures one's subjective happiness level. The SHS is a 4-point Likert-type scale and consists of 4 items. The psychometric properties of the scale were examined on 14 different samples consisting of young people and adults. Accordingly, Cronbach's alpha coefficients were reported to be between .79 and .94. Besides, its test-retest reliability was explored on five different samples with variable time intervals between 3 weeks and one year and found to be between .55 and .90 (Lyumborski & Lepper, 1999).

Doğan and Totan (2013) carried out the Turkish validity and reliability study of the scale on two different samples of undergraduate students and the general population. In their study, the researchers obtained a single-factor structure

explaining 53.94% and 57.20% of the total variance for undergraduate students and the general population, respectively. For reliability concerns, they calculated Cronbach's alpha coefficients of the scale to be .65 for undergraduate students and .70 for the general population (Doğan & Totan, 2013).

Brief Resilience Scale-BRS:

It was designed by Smith et al. (2008) to measure resilience, the ability to recover from undesirable events and return to the flow of life. The BRS consists of 6 items scored on a 5-point Likert-type scale (1 = Strongly disagree 5 = Strongly agree). Its psychometric properties were tested on four different samples of undergraduate students and adults (with heart diseases and fibromyalgia). Accordingly, Cronbach's alpha coefficients of the scale were calculated to be between .80 and .91 for these samples (Doğan, 2015). Besides, the test-retest reliability coefficient was found to be .69 on a sample of 68 undergraduate students (1 month) and .62 on a sample of 112 people with heart diseases (3 months) (Smith et al. 2008).

Doğan (2015) adapted the scale into Turkish on a sample of undergraduate students and reported its Cronbach's alpha coefficient as .83. In the adaptation study, the findings from the factor analyses confirmed its single-factor structure explaining 54% of the variance.

Warwick-Edinburgh Mental Well-Being Scale-WEMWBS:

A group of researchers from the University of Warwick and the University of Edinburgh created the 14-item 5-point Likert-type scale to measure the level of mental well-being. Tennant et al. (2007) conducted its validity and reliability study on samples of undergraduate students and adults. On the student sample, Cronbach's alpha and test-retest reliability coefficients were found to be .89 and .83, respectively, whereas the alpha value was calculated to be .91 on the adult sample.

Keldal (2015) recruited participants aged 16-70 years to the Turkish adaptation study of the scale. The researcher confirmed its single-factor structure explaining 51% of the variance and calculated its Cronbach's alpha coefficient to be .92

RESULTS

Character Strengths by Gender and Age

A one-Way MANOVA was performed to reveal the differentiation of the participants' scores on the 24 character strength subscales by their gender. The results of the Box-M test confirmed homogeneity of variance (M=356.364, F[300, 91614.163] = 1.022, p > .05). The findings yielded a significant Wilk's Lambda value in the model, Wilk's λ=.74, F(24, 159) = 2.271, *partial $\eta2$*=.26, *p*<.01, which means that the participants

significantly differed in character strengths by gender. Table 1 presents the means, standard deviations, and MANOVA results of character strengths by gender.

As in Table 1, it was found that the females got higher scores on the character strengths of Appreciation of Beauty, Capacity of Love, Gratitude, Kindness, and Spirituality than the male participants. In addition, paired comparisons revealed that the females significantly differed from the males on Appreciation of Beauty ($p < .01$), Capacity of Love ($p < .05$), Gratitude ($p < .01$), Kindness ($p < .001$), and Spirituality ($p < .05$). On the other hand, the females scored higher on 17 of 24 subscales than the males, but the male participants got higher scores on Originality, Valor, Zest, and Curiosity, despite no statistically significant difference.

Regarding the associations between character strengths and age (Table 1), there were significant positive correlations between age and Spirituality ($r = .36$), Prudence ($r = .30$), Self-regulation ($r = .29$), Equity ($r = .27$), Gratitude ($r = .23$), Honesty ($r = .17$), and Modesty ($r = .17$). In other words, one may have greater the said character strengths with age. However, it can be claimed that the character strength of Humor tends to perish with age since there was a significant negative correlation between these variables ($r = -.17$). Finally, other character strengths were not found to be associated with age.

Table 1. Participants' character strengths by gender and age					
Strengths	Age (n=182)	Females (n=102) M/SD	Males (n=82) M/SD	F (1.182)	η2
Appreciation. of Beauty	.04	4.28(.51)	4.05(.49)	9.08**	.048
Capacity of Love	.06	4.27(.46)	4.12(.47)	4.83*	.026
Citizenship	.12	4.01(.54)	3.92(.53)	1.06	.006
Curiosity	-.12	3.72(.61)	3.84(.54)	1.84	.010
Equity	.27**	4.54(.40)	4.43(.39)	3.67	.020
Forgiveness	.13	3.87(.61)	3.73(.72)	2.21	.012
Gratitude	.23**	4.28(.71)	3.98(.75)	7.26**	.038
Hope	.14	3.98(.69)	3.95(.56)	.06	.000
Humor	-.17*	3.76(.83)	3.72(.69)	.08	.000
Persistence	-.12	4.07(.68)	4.11(.54)	.19	.001
Honesty	.17*	4.38(.44)	4.30(.43)	1.26	.007
Judgment	.10	4.23(.47)	4.21(.40)	.05	.000
Kindness	.14	4.41(.44)	4.10(.54)	18.77***	.093

Leadership	.05	3.68(.76)	3.62(.60)	.33	.002
Love of Learning	-.11	4.18(.59)	4.19(.44)	.01	.000
Modesty	.17*	4.03(.56)	3.87(.67)	3.31	.018
Originality	-.02	3.98 (.65)	4.07(.49)	.99	.005
Perspective	.03	4.23(.58)	4.20(.46)	.09	.000
Prudence	.30**	3.96(.54)	3.83(.51)	2.40	.013
Self-regulation	.29**	3.72(.59)	3.74(.54)	.04	.000
Social Intelligence	-.07	4.12(.61)	4.08(.43)	.23	.001
Spirituality	.36**	3.69(1.08)	3.31(1.22)	5.17*	.028
Valor	.09	3.88(.65)	3.97(.53)	.97	.005
Zest	.05	3.66(.71)	3.66(.61)	1.41	.008

$p^*<.05; p^{**}<.01; p^{***}<.001$

The Relationships between Character Strengths and Life Satisfaction, Psychological Resilience, Happiness, Mental Well-Being, and Positive-Negative Affect

The links between character strengths and life satisfaction, psychological resilience, subjective happiness, mental well-being, and positive-negative affect were investigated through Pearson's correlation analysis (Table 2).

Accordingly, 22 character strengths, except for Modesty and Spirituality, showed significant moderate correlations with mental well-being. Interestingly, Modesty and Spirituality did not also show significant relationships with life satisfaction, psychological resilience, positive-negative affect, and subjective happiness

While Zest was positively correlated with positive affect ($r = .51$), it was vice versa with negative affect ($r = -.48$). Besides, mental well-being was positively related to Perspective ($r = .57$), Honesty ($r = .57$), Social Intelligence, and Zest ($r = .55$). Moreover, it can be claimed that subjective happiness increases with greater Zest ($r = .48$), Honesty ($r = .44$), and Hope ($r = .41$ resilience was found to stand out in one with Valor ($r = .36$). In general, character strengths were more robustly associated with mental well-being), yet it was not associated with Spirituality and Modesty. Psychological, subjective happiness, and positive affect. Finally, resilience was most associated with Valor, Social Intelligence, Zest, Capacity of Love, Perspective, and Humor (Table 2).

While psychological resilience did not show significant relationships with Justice, Temperance, and Transcendence, there were significant links between all

virtue factors and life satisfaction, subjective happiness, mental well-being, and positive affect. Virtues were found to have higher correlations with mental well-being (e.g., Courage and Humanity), while positive affect was associated with Courage the most (Table 3).

Table 2. Associations between character strengths and life satisfaction, resilience, subjective happiness, mental well-being, and positive-negative affect

Strengths	SWLS (n=109)	BRS (n=109)	SHS (n=126)	WEMWBS (n=120)	PA (n=123)	NA (n=124)
Originality	.15	.20*	.17	.39**	.26**	-.11
Curiosity	.08	.22*	.12	.20*	.17	-.07
Love of learning	.13	.08	.20*	.34**	.26**	-.20*
Judgement	.24*	.18	.27**	.52**	.34**	-.08
Perspective	.26**	.27**	.32**	.57*	.28**	-.11
Valor	.24*	.36**	.26**	.45**	.32**	-.22*
Persistence	.22*	.24*	.36**	.50**	.49**	-.20*
Honesty	.19	.16	.44**	.57**	.36**	-.31**
Zest	.27**	.29**	.48**	.55**	.51**	-.37**
Citizenship	.30**	.07	.33**	.27**	.20*	-.35**
Equity	.21*	.23*	.23**	.32**	.14	-.21*
Leadership	.32**	.09	.28**	.40**	.38**	-.20*
Capacity of love	.35**	.28**	.40**	.42**	.24**	-.28**
Kindness	.14	.07	.30**	.30*	.14	-.11
Social intelligence	.25**	.32**	.35**	.55**	.20*	-.13
Forgiveness	.24*	.14	.19*	.29**	.17	-.03
Prudence	.15	.04	.24**	.34**	.14	-.09
Self-regulation	.30**	.26**	.28**	.36**	.33**	-.17
Modesty	-.07	.02	.04	.15	-.08	.07
Appreciation of beauty	.08	.08	.11	.31**	.15	-.05
Gratitude	.24*	.09	.22*	.23**	.09	-.11
Hope	.33**	.19	.41**	.48**	.30**	-.21*
Humor	.19*	.26**	.19*	.28**	.15	-.20*
Spirituality	.03	-.07	.13	.17	.12	-.07

Note: SWLS: Satisfaction with Life Scale, PA: Positive Affect, NA: Negative Affect, BRS: Brief Resilience Scale, SHS: Subjective Happiness Scale, WEMWBS: Warwick-Edinburgh Mental Well-Being Scale; *p < .05; **p < .01

Table 3. Relationships between 6 virtues and life satisfaction, resilience, subjective happiness, mental well-being, and positive-negative affect

Virtues	SWLS (n=109)	BRS (n=109)	SHS (n=126)	WEMWBS (n=120)	PA (n=123)	NA (n=124)
Wisdom	.20*	.22*	.25**	.47**	.30**	-.13
Courage	.26**	.31**	.44**	.60**	.50**	-.32**
Humanity	.30**	.28**	.42**	.51**	.23*	-.21*
Justice	.35**	.15	.36**	.43**	.33**	-.32**
Temperance	.22*	.16	.26**	.39**	.19*	-.07
Transcendence	.23*	.12	.27**	.36**	.21*	-.16

Note: SWLS: Satisfaction with Life Scale, PA: Positive Affect, NA: Negative Affect, BRS: Brief Resilience Scale, SHS: Subjective Happiness Scale, WEMWBS: Warwick-Edinburgh Mental Well-Being Scale; *$p < .05$; **$p < .01$

The Predictive Value of Character Strengths and Virtues on Mental Well-Being

Since mental well-being (dependent variable) was correlated with character strengths and virtues (independent variables) the most, a multiple regression (stepwise) was performed to uncover the predictive value of these variables on mental well-being. First, it was found that Bravery and Humanity virtues significantly predicted mental well-being and explained 52% of the total variance (R^2 = .52, $F(2, 116)$ = 63.934, $p < .000$) Then, character strengths of these virtues (Valor, Persistence, Zest, Honesty, Kindness, Capacity of Love, and Social Intelligence) were included a regression model (stepwise). The findings revealed a significant regression equation explaining 60% of the total variance (R^2 = .597, $F(5,113)$ = 33.447, $p < .000$) Accordingly, it was found that mental well-being was significantly predicted by Zest (β = .833 t = 4.654, $p < .000$), Honesty (β = .325, t = 3.841 $p < .000$), Capacity of Love (β = .172, t = 2.277, $p < .05$), Kindness (β = − .214, t = − 2.676, $p < .01$) and Social Intelligence (β = .202, t = 2.276, $p < .05$).

Discussion and Conclusion

Character strengths, an essential aspect of positive psychology, are conceptualized in a model where they are associated with a number of desirable outcomes such as life satisfaction, subjective well-being, happiness, positive affect, and resilience. Character strengths, therefore, contribute to one's ability to achieve well-being and happiness (Park & Peterson, 2008).

The present study explored the associations of character strengths and virtues with life satisfaction, subjective happiness, mental well-being, resilience, and

positive-negative affect. The findings suggested that life satisfaction had the highest correlations with Capacity of Love, Hope, Leadership, Self-regulation, Persistence, Zest, and Perspective, overlapping more what was previously concluded by Litman-Ovadia and Lavy (2012). Hope, Zest, and Capacity of Love are the strengths that were found to be correlated with life satisfaction the most in the literature (Bruno et al., 2018; Peterson & Seligman, 2004; Peterson et al., 2008; Martinez – Marti & Ruch, 2014; Azanedo et al. 2014; Gradisek, 2012), which is documented in this study. Besides, Zest, Persistence, Leadership, Honesty, Judgment, Self-regulation, and Valor had significant relationships with positive affect, and these findings match more the results of Azanedo et al. (2014). Moreover, Zest, Honesty (emotional strengths), Capacity of Love, Kindness, and Social Intelligence (interpersonal strengths) were the best predictors of mental well-being.

In this study, it was also explored whether character strengths differ by gender. Accordingly, Appreciation of Beauty, Capacity of Love, Gratitude, Kindness, and Spirituality showed significant differences in favor of females. These findings are also consistent with many studies having found gender differentiation in character strengths (Heintz et al. 2019; Linley et al., 2007; Ruch et al., 2010). In addition, the previous findings where males scored higher in Originality were supported by the present findings (Linley et al., 2007; Litman-Ovadia & Lavy, 2012; Karris & Vraighead, 2012; Ruch et al., 2010).

Finally, the correlations between character strengths and age were also investigated in the study. Ultimately, the results showed Spirituality, Prudence, Self-regulation, Equity, and Gratitude to be more prominent with age, whereas there was a negative correlation between Humor and age. In other words, one may become more cautious, self-controlled, fair, grateful, and faithful as they get older. These results overlap the findings of Ruch et al. (2010).

Overall, the results may be a hallmark that character strengths described as universal by Peterson and Seligman (2004) may show differences as well as similarities across cultures. Park, Peterson and Seligman (2006) and McGrath (2015) investigated the cross-cultural similarities of VIA-IS measurements of 54 and 75 nations, respectively. McGrath (2015) reported that the top 5 strengths demonstrating cross-cultural similarity are Honesty, Equity, Kindness, Judgment, and Curiosity. However, further studies exploring measurement invariance may be needed to ensure the validity of these similarities between cultures. Similarly, it would also not be prudent to air exact implications about gender differences in character strengths unless settling measurement invariance.

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