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PERSONALITY AND  
INDIVIDUAL DIFFERENCES

Personality and Individual Differences 43 (2007) 341–351

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## Character strengths in the United Kingdom: The VIA Inventory of Strengths

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Received 24 April 2006; received in revised form 25 November 2006; accepted 5 December 2006

Available online 30 January 2007

### Abstract

The development of a classification of strengths, the Values in Action Inventory of Strengths, has done much to advance research into strengths of character. Using an Internet sample of 17,056 UK respondents, we present data on the character strengths of a large UK sample. Women typically scored higher on strengths than did men. However, four of the top five “signature strengths” of the UK men and women overall were the same (open-mindedness, fairness, curiosity, and love of learning). Strengths typically showed small but significant positive associations with age, with the strongest associations with age between curiosity and love of learning (strengths of wisdom and knowledge), fairness (a strength of justice), and

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forgiveness and self-regulation (strengths of temperance). The discussion addresses potential limitations and suggests pertinent directions for future research.

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*Keywords:* Character strengths; UK sample; VIA Inventory of Strengths

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## 1. Introduction

The comprehensive study of character strengths is a new initiative for psychological research, but one that has engaged an increasing number of researchers and practitioners. Individual strengths – for example, hope, optimism, creativity, vitality – have been the subject of research attention for many years, but have been treated in isolation, that is, as unrelated individual difference variables. However, the advent of the positive psychology movement has led to the perspective that strengths can be understood as a collective entity that share key defining characteristics, and can be understood in relation to each other as part of a larger defining framework.

The absence of an integrated concept of strengths from mainstream psychology is an omission that can be traced to Gordon Allport's seminal definition of personality: "Character is personality evaluated, and personality is character devaluated. Since character is an unnecessary concept for psychology, the term will not appear again in this volume..." (Allport, 1937, p. 52).

Given that strengths are understood from this perspective of *character*, Allport's definition excluded their consideration from psychological inquiry. However, this exclusion has recently been questioned, with new evidence indicating that virtue is a function of personality rather than moral reasoning and cognitive development (Cawley, Martin, & Johnson, 2000).

A major early initiative of the positive psychology movement was to develop a classification of strength and virtue that would begin to organise what was known about these constructs. Through numerous iterative rounds of brainstorming; extensive literature searches of the psychology, philosophy, and youth development literatures; reviews of historical inventories of strengths and virtues; consideration of the goals of character education programs and social work interventions from a strengths-based perspective; and discussion with conference participants, among numerous other strategies (Peterson & Seligman, 2004, p. 15), dozens of candidate character strengths were identified to be considered for inclusion within the classification. These candidate strengths were then assessed against 10 criteria that appeared to be common features across the candidate strengths (see Peterson & Seligman, 2004, pp. 16–28). Although the criteria are neither necessary nor sufficient conditions for character strengths, they are considered to be pertinent features that, taken together, capture a "family resemblance" (cf. Wittgenstein, 1953).

The 24 strengths identified by this exhaustive process are believed to represent the underlying universe of strengths, although Peterson and Seligman (2004) are also explicit that they do not claim the classification to be final or definitive; revisions may be made in light of subsequent empirical and theoretical developments. In parallel, an holistic measure that assesses each of

the 24 strengths has been developed, the Values in Action Inventory of Strengths (VIA-IS)<sup>1</sup>. This is a 240-item measure of the 24 strengths (10 items per strength), that has been made freely available online since late 2001. To date, more than 400,000 participants have completed the VIA-IS.

Research is now beginning to emerge that has used the VIA-IS as a means of measuring the 24 character strengths effectively but succinctly. For example, in a comparison of scores from American participants on the VIA-IS before the terrorist attacks of September 11, 2001, and one month and two months later, [Peterson and Seligman \(2003\)](#) found that gratitude, hope, kindness, leadership, love, spirituality and teamwork scores all increased significantly one month after 9/11, with these increases being sustained two months after 9/11. They noted that these strengths incorporated the three key theological virtues identified by St. Paul (faith, hope, and charity [love]), and suggested that these findings were suggestive of changes in core cultural emphases following the 9/11 terrorist attacks, whereas secular strengths were less likely to change.

Other research has suggested that recovery from illness may play a salutogenic role in the development of certain character strengths. [Peterson, Park, and Seligman \(2006\)](#) found that people who had recovered from serious physical illness (e.g., diabetes, cancer, cardiovascular disease) reported significantly higher scores for appreciation of beauty, bravery, curiosity, fairness, forgiveness, gratitude, humour, kindness, love of learning, and spirituality, than did participants who had never had a serious physical illness, with effect sizes that were small but consistent.

Life satisfaction has also been reliably and robustly associated with hope, vitality, gratitude, love and curiosity ([Park, Peterson, & Seligman, 2004](#)), even when controlling for potential confounds of age, gender, and the US citizenship. Further, analyses showed that higher scores on the strength were associated with greater life satisfaction for 21 of 24 strengths (with the exceptions being appreciation of beauty, creativity, and modesty), and that the relationship between strengths and life satisfaction was monotonic, that is, having extremely high scores for any given strength did not diminish life satisfaction.

Given that strengths research is still in its very early days, the hypotheses of the current study are exploratory. We chose to focus our attention on age and gender for two reasons. First, considerable research in lifespan development has focused on mean level changes in personality. Within psychology, humanistic conceptions have associated aging with the potential for self-actualisation and growth ([Erikson, 1959](#); [Maslow, 1970](#)). In contrast, a large amount of research using the big five personality traits has found high levels of stability between age groups, regardless of whether this is measured cross-sectional or longitudinally, and assesses change as test–retest correlations or rank order stability ([McCrae & Costa, 1990](#)). In this paper, we examine whether there are mean level changes across different age groups in character strengths, given that character strengths represent exactly the kind of traits that may be expected to change as a result of self-actualisation processes described by [Erikson \(1959\)](#) and [Maslow \(1970\)](#).

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<sup>1</sup> The Values-in-Action Institute is a non-profit organisation dedicated to the development of a scientific knowledge base of human strengths, established by the Manuel D. and Rhoda Mayerson Foundation in the United States. The Values-in-Action Institute supported the development of the VIA Inventory of Strengths, from which it derives its name. We are pleased to acknowledge the support of the Values-in-Action Institute.

Second, we examine gender differences. It is now recognised that sex differences may arise as a result of biosocial interactions, whereby males and females are biologically predisposed to perform certain roles (Wood & Eagly, 2002). We were interested to explore these in relation to character strengths. For example, did women endorse strengths such as kindness and love more highly, that may be associated with their evolutionary role in nurturing the young (Eagly & Wood, 1999)? Or did men endorse strengths such as bravery and persistence more highly, that may be associated with their evolutionary role as hunter-gatherers (Eagly & Wood, 1999)? These two sets of questions provided the focus for our analyses.

## 2. Method

### 2.1. Participants

Participants were 17,056 UK respondents (6332 men, 10,724 women) who completed the VIA-IS online between September 2002 and March 2005. They were aged between 18 and 20 years (2.4%); 21 and 24 years (6.5%); 25 and 34 years (27.4%); 35 and 44 years (30.9%); 45 and 54 years (23.2%); 55 and 64 years (8.5%), and 65 years or older (1.2%). Participants indicated that they were educated to the level of a Bachelor's degree (38.9%), postgraduate education (34.3%), or had completed some college education (14.3%). Participants described their occupations as business managers or other professionals, including for example teachers, nurses, pharmacists, opticians, and social workers (34.8%); administrative personnel or other managers and professionals (29.4%); chief executives, doctors, lawyers, dentists or owners of large businesses (10.5%); students or people with no occupation (8.6%); and clerks, secretaries, salespeople, or administrative assistants (7.4%). Regrettably, data on ethnic background were not collected as part of the online registration process and so are not available. Compared to the British general population, our sample included a higher proportion of women (50.99% in the UK population), was broadly comparable in terms of age distribution of the adult population but included lower numbers of older people (>65 years = 19% in the UK population; Office for National Statistics, 2003), and was better educated (16% of the UK population hold a degree; Department for Education & Skills, 2002).

### 2.2. Measure

The VIA Inventory of Strengths (VIA-IS) is a 240-item measure of character strengths, with each of 24 character strengths assessed by 10 items. The inventory is typically administered online, with an administration time of around 30–40 min. Participants were instructed to answer each item in relation to “*whether the statement describes what you are like*”, and responses are fully anchored on a five point scale from (1 = *very much unlike me*; 5 = *very much like me*). Sample items include “*I find the world a very interesting place*” (curiosity) and “*I always let bygones be bygones*” (forgiveness). Scores for each of the 24 strengths have a potential range of 10 through 50, with higher scores indicating a greater endorsement of the strength, although the mean subscale scores are reported below. The typical scoring for the measure is ipsative, with participant feedback giving details of the respondents' top five “signature strengths”, with these five strengths being ranked relative to the other 19 strengths of the classification.

Cronbach's alpha for all scales are  $\alpha > .70$ , with test–retest correlations over four months indicating good test–retest reliability, all  $r_s \sim .70$ . Scale scores are however negatively skewed (mean scores typically range from 3.5 to 4.0 on a potential 1–5 range), although they are still variable (standard deviations range from .5 to .9) (Park et al., 2004; Peterson et al., 2006). Internal consistency reliabilities, means and standard deviations in this sample were consistent with those reported elsewhere (see below).

### 3. Procedure

Participants registered to complete a range of questionnaires at an online research site associated with Professor Martin Seligman at the University of Pennsylvania. The site was established as an online resource to support readers of Seligman's (2002) book *Authentic Happiness*, but has also been made available more widely. Upon registration, participants were free to complete a variety of measures of happiness, strengths, and various other psychological constructs, and to receive feedback on their responses to these measures. Participants were not paid for their participation, nor did participants need to pay to access the website, to complete the questionnaires, or to receive the feedback reports from them. Participants in the present sample completed the VIA-IS online between September 2002 and March 2005. Participants indicated their country of residence upon registration, and the current sample comprises the UK respondents whose responses were extracted from the overall research database; the UK participants were not specifically guided to the site for this project.

### 4. Data analyses

The mean scores for each of the 24 strengths assessed by the VIA-IS are reported below, categorised by gender and age group. These scores provide comparative data for future researchers on the character strengths reported by a large UK sample. Multivariate analyses of variances report differences between the strengths as a function of gender. Correlation analyses show the associations between strengths and age.

### 5. Results

Table 1 presents the mean scores and standard deviations for each of the 24 strengths assessed by the VIA-IS, categorised by age group and gender within age group. The mean scores, on a potential 1–5 scale, range from 2.71 (Spirituality: Males, Age 25–34 years) through 4.11 (Curiosity: Females, 55–64 years), with 359 mean scores between 3 and 4, indicating some degree of negative skew, as has been reported elsewhere (Peterson et al., 2006). Notably, of the 336 mean scores reported (24 strengths  $\times$  7 age groups  $\times$  2 gender), only 12 mean scores were lower than 3, and only 11 mean scores were higher than 4. Standard deviations ranged from .44 (Integrity: Females, 45–54 years) through .97 (Spirituality: Males, 55–64 years), which is consistent with data from the US respondents on the VIA-IS (Peterson et al., 2006).

Table 1  
Means and standard deviations for the VIA-IS character strengths, by gender and age group

Strength	18–20 years		21–24 years		25–34 years	
	M	F	M	F	M	F
Creativity	3.70 (.66)	3.51 (.62)	3.77 (.61)	3.56 (.65)	3.79 (.65)	3.56 (.68)
Curiosity	3.59 (.56)	3.69 (.57)	3.77 (.63)	3.76 (.59)	3.78 (.60)	3.81 (.57)
Open-mindedness	3.81 (.55)	3.79 (.50)	3.95 (.48)	3.85 (.51)	3.94 (.49)	3.90 (.50)
Love of learning	3.49 (.64)	3.57 (.62)	3.69 (.64)	3.75 (.62)	3.79 (.60)	3.84 (.58)
Perspective	3.59 (.53)	3.59 (.54)	3.64 (.55)	3.59 (.56)	3.61 (.57)	3.59 (.54)
Bravery	3.40 (.64)	3.49 (.65)	3.46 (.61)	3.47 (.61)	3.49 (.63)	3.52 (.60)
Persistence	3.06 (.71)	3.35 (.69)	3.30 (.74)	3.40 (.68)	3.27 (.73)	3.43 (.67)
Integrity	3.56 (.56)	3.75 (.51)	3.63 (.53)	3.74 (.47)	3.68 (.50)	3.80 (.47)
Vitality	3.22 (.64)	3.33 (.63)	3.23 (.76)	3.36 (.64)	3.25 (.72)	3.34 (.64)
Love	3.43 (.69)	3.72 (.63)	3.46 (.70)	3.85 (.61)	3.56 (.67)	3.84 (.59)
Kindness	3.69 (.57)	3.94 (.52)	3.72 (.56)	3.97 (.49)	3.68 (.53)	3.90 (.48)
Social intelligence	3.50 (.62)	3.66 (.57)	3.56 (.60)	3.71 (.55)	3.57 (.61)	3.73 (.54)
Citizenship	3.46 (.55)	3.57 (.57)	3.50 (.60)	3.60 (.51)	3.46 (.54)	3.57 (.51)
Fairness	3.69 (.54)	3.81 (.51)	3.75 (.60)	3.85 (.48)	3.82 (.52)	3.90 (.47)
Leadership	3.43 (.52)	3.58 (.58)	3.51 (.53)	3.62 (.51)	3.54 (.54)	3.65 (.51)
Forgiveness	3.38 (.73)	3.44 (.70)	3.46 (.74)	3.49 (.67)	3.47 (.69)	3.49 (.63)
Humility	3.08 (.65)	3.26 (.56)	3.23 (.62)	3.21 (.60)	3.18 (.62)	3.25 (.61)
Prudence	3.09 (.63)	3.20 (.60)	3.22 (.60)	3.27 (.57)	3.20 (.57)	3.33 (.56)
Self-regulation	3.09 (.62)	3.01 (.60)	3.18 (.62)	3.03 (.58)	3.15 (.62)	3.09 (.59)
Appreciation of beauty	3.38 (.77)	3.65 (.65)	3.60 (.68)	3.70 (.67)	3.53 (.67)	3.73 (.64)
Gratitude	3.32 (.61)	3.59 (.57)	3.40 (.65)	3.66 (.57)	3.38 (.63)	3.64 (.58)
Hope	3.34 (.68)	3.40 (.68)	3.38 (.73)	3.40 (.70)	3.33 (.74)	3.36 (.67)
Humour	3.76 (.62)	3.72 (.64)	3.73 (.64)	3.73 (.61)	3.74 (.62)	3.67 (.60)
Spirituality	2.89 (.81)	2.89 (.85)	2.77 (.88)	2.90 (.84)	2.71 (.90)	2.88 (.83)

  

Strength	35–44 years		45–54 years		55–64 years		65 years or more	
	M	F	M	F	M	F	M	F
Creativity	3.80 (.67)	3.59 (.71)	3.79 (.70)	3.63 (.73)	3.83 (.67)	3.64 (.71)	3.74 (.67)	3.53 (.74)
Curiosity	3.82 (.58)	3.87 (.58)	3.90 (.58)	4.00 (.56)	4.03 (.56)	4.11 (.54)	4.05 (.60)	4.09 (.71)
Open-mindedness	3.93 (.50)	3.92 (.49)	3.97 (.50)	3.92 (.50)	3.99 (.49)	3.92 (.52)	3.97 (.50)	3.94 (.55)
Love of learning	3.76 (.63)	3.88 (.59)	3.82 (.62)	3.95 (.57)	3.92 (.48)	4.06 (.54)	4.00 (.55)	4.06 (.57)
Perspective	3.61 (.53)	3.60 (.52)	3.63 (.53)	3.64 (.52)	3.70 (.54)	3.66 (.54)	3.65 (.55)	3.55 (.57)
Bravery	3.51 (.62)	3.58 (.61)	3.51 (.62)	3.61 (.60)	3.60 (.58)	3.68 (.60)	3.62 (.56)	3.62 (.63)
Persistence	3.36 (.71)	3.46 (.68)	3.42 (.70)	3.48 (.66)	3.53 (.68)	3.58 (.65)	3.49 (.68)	3.50 (.73)
Integrity	3.73 (.48)	3.83 (.45)	3.78 (.47)	3.86 (.44)	3.82 (.45)	3.84 (.50)	3.81 (.47)	3.88 (.50)
Vitality	3.30 (.71)	3.37 (.69)	3.35 (.71)	3.46 (.69)	3.55 (.70)	3.58 (.65)	3.55 (.67)	3.54 (.75)
Love	3.56 (.61)	3.78 (.61)	3.60 (.63)	3.85 (.60)	3.70 (.62)	3.86 (.60)	3.72 (.57)	3.73 (.72)
Kindness	3.68 (.53)	3.90 (.50)	3.72 (.53)	3.94 (.48)	3.83 (.54)	3.97 (.53)	3.89 (.52)	3.93 (.55)
Social intelligence	3.53 (.59)	3.72 (.54)	3.51 (.60)	3.74 (.54)	3.56 (.61)	3.74 (.51)	3.47 (.60)	3.65 (.62)
Citizenship	3.43 (.55)	3.56 (.52)	3.48 (.57)	3.60 (.53)	3.52 (.56)	3.56 (.57)	3.50 (.57)	3.45 (.63)
Fairness	3.87 (.49)	3.96 (.45)	3.93 (.48)	4.02 (.44)	3.97 (.48)	4.02 (.48)	3.99 (.46)	4.03 (.48)
Leadership	3.60 (.54)	3.70 (.51)	3.67 (.55)	3.75 (.53)	3.74 (.54)	3.75 (.58)	3.68 (.57)	3.58 (.63)
Forgiveness	3.50 (.65)	3.53 (.64)	3.57 (.70)	3.65 (.64)	3.66 (.67)	3.69 (.65)	3.59 (.74)	3.72 (.71)
Humility	3.20 (.62)	3.24 (.60)	3.25 (.61)	3.28 (.60)	3.23 (.61)	3.21 (.63)	3.20 (.63)	3.30 (.59)
Prudence	3.26 (.54)	3.34 (.55)	3.33 (.56)	3.36 (.53)	3.37 (.57)	3.36 (.55)	3.41 (.55)	3.34 (.57)
Self-regulation	3.18 (.59)	3.14 (.61)	3.26 (.59)	3.19 (.58)	3.36 (.61)	3.27 (.60)	3.36 (.66)	3.41 (.60)

Table 1 (continued)

Strength	35–44 years		45–54 years		55–64 years		65 years or more	
	M	F	M	F	M	F	M	F
Appreciation of beauty	3.52 (.67)	3.72 (.65)	3.53 (.68)	3.77 (.64)	3.68 (.64)	3.85 (.60)	3.58 (.69)	3.84 (.58)
Gratitude	3.41 (.60)	3.66 (.58)	3.47 (.62)	3.76 (.57)	3.62 (.60)	3.83 (.56)	3.73 (.57)	3.88 (.61)
Hope	3.29 (.73)	3.31 (.69)	3.30 (.71)	3.36 (.68)	3.42 (.73)	3.40 (.65)	3.45 (.64)	3.36 (.74)
Humour	3.64 (.61)	3.63 (.63)	3.63 (.66)	3.64 (.65)	3.67 (.66)	3.59 (.64)	3.68 (.61)	3.53 (.70)
Spirituality	2.76 (.89)	2.94 (.87)	2.82 (.94)	3.04 (.91)	2.93 (.97)	3.07 (.95)	2.79 (.94)	2.90 (.91)

Note. Figures given are means and standard deviations (in brackets), reported by gender (M, Male; F, Female) and age group.

Table 2

Internal consistency reliabilities ( $\alpha$ ), means, standard deviations, and gender differences on the VIA-IS

Strength	$\alpha$	Males	Females	$F(1, 17,054)$	$\eta^2$
Creativity	.89	3.79 (.67)	3.59 (.70)	337.89***	.019
Curiosity	.84	3.85 (.59)	3.89 (.58)	17.32***	.001
Open-mindedness	.80	3.95 (.50)	3.91 (.50)	28.08***	.002
Love of learning	.83	3.79 (.62)	3.88 (.59)	79.86***	.005
Perspective	.80	3.63 (.54)	3.61 (.53)	4.02**	.000
Bravery	.82	3.51 (.62)	3.57 (.61)	31.63***	.002
Persistence	.88	3.36 (.72)	3.46 (.67)	77.49***	.005
Integrity	.75	3.73 (.49)	3.82 (.46)	132.71***	.008
Vitality	.86	3.33 (.72)	3.40 (.67)	40.62***	.002
Love	.80	3.58 (.64)	3.82 (.60)	614.31***	.035
Kindness	.81	3.71 (.54)	3.92 (.49)	700.06***	.039
Social intelligence	.80	3.54 (.60)	3.73 (.54)	451.19***	.026
Citizenship	.78	3.47 (.56)	3.57 (.53)	163.31***	.009
Fairness	.79	3.87 (.51)	3.95 (.47)	104.33***	.006
Leadership	.80	3.61 (.55)	3.69 (.52)	86.75***	.005
Forgiveness	.88	3.52 (.69)	3.55 (.65)	7.44**	.000
Humility	.80	3.21 (.62)	3.25 (.61)	18.22***	.001
Prudence	.74	3.27 (.57)	3.33 (.55)	50.68***	.003
Self-regulation	.72	3.21 (.61)	3.14 (.60)	64.23***	.004
Appreciation of beauty	.84	3.54 (.68)	3.74 (.64)	366.35***	.021
Gratitude	.84	3.44 (.62)	3.69 (.58)	686.84***	.039
Hope	.84	3.32 (.73)	3.35 (.68)	6.36**	.000
Humour	.87	3.67 (.63)	3.65 (.63)	5.64**	.000
Spirituality	.89	2.78 (.91)	2.95 (.87)	134.97***	.008

Note. The  $F$  tests and  $\eta^2$  effect sizes are for multivariate analyses of variance with gender as the grouping variable (Male  $n = 6332$ ; Female  $n = 10,724$ ).

- \*  $p < .05$ .
- \*\*  $p < .01$ .
- \*\*\*  $p < .001$ .

We used multivariate analysis of variance to assess possible gender differences on scores for each of the 24 strengths, and these are reported in Table 2. Where gender differences were

Table 3  
Character strengths rank ordered by gender

Rank	Males	Mean	Females	Mean
1	Open-mindedness	3.95	Fairness	3.95
2	Fairness	3.87	Kindness	3.92
3	Curiosity	3.85	Open-mindedness	3.91
4	Love of learning	3.79	Curiosity	3.89
5	Creativity (4=)	3.79	Love of learning	3.88
6	Integrity	3.73	Love	3.82
7	Kindness	3.71	Integrity (6=)	3.82
8	Humour	3.67	Appreciation of beauty	3.74
9	Perspective	3.63	Social intelligence	3.73
10	Leadership	3.61	Leadership	3.69
11	Love	3.58	Gratitude (10=)	3.69
12	Social intelligence	3.54	Humour	3.65
13	Appreciation of beauty (12=)	3.54	Perspective	3.61
14	Forgiveness	3.52	Creativity	3.59
15	Bravery	3.51	Citizenship	3.57
16	Citizenship	3.47	Bravery (15=)	3.57
17	Gratitude	3.44	Forgiveness	3.55
18	Persistence	3.36	Persistence	3.46
19	Vitality	3.33	Vitality	3.40
20	Hope	3.32	Hope	3.35
21	Prudence	3.27	Prudence	3.33
22	Self-regulation	3.21	Humility	3.25
23	Humility (22=)	3.21	Self-regulation	3.14
24	Spirituality	2.78	Spirituality	2.95

*Note.* Strengths are rank ordered by gender according to the mean scores from the British general population ( $n = 17,056$ ). Where scores were of equal means, the score with the smaller standard deviation was allocated the higher rank.

found, they were typically such that women scored higher than men on interpersonal strengths, such as kindness, love, and social intelligence. However, the same pattern was also found for appreciation of beauty and gratitude, although again the effect sizes were small ( $\eta^2 = .01$ – $.04$ ). The only exception to this pattern was that men scored higher than women on creativity. Other gender differences were so small as to be essentially meaningless, as indicated by the effect sizes ( $\eta^2 < .01$ ), and it is unlikely that they would have been detected, had it not been for the large sample size. For ease of reference, the rank ordered strengths for men and women are presented in Table 3. There was considerable consistency between the signature strengths of both men and women: open-mindedness, fairness, curiosity, and love of learning were in the top five signature strengths for both men and women, and the rank order correlation between them was  $\rho = .89$ ,  $p < .001$ .

In order to assess associations between strengths and age, we used Pearson's correlation. These findings are reported in Table 4. Strengths scores tended to increase with age, although the trend was negative for humour, and the correlations were typically very small ( $< .10$ ). The strongest correlations with age were found with strengths of wisdom and knowledge (curiosity, love of learning), strengths of temperance (forgiveness, self-regulation), and a strength of justice (fairness).



Table 4  
Correlations between character strengths and age

Strength		Age
1	Creativity	.04
2	Curiosity	.16
3	Open-mindedness	.05
4	Love of learning	.12
5	Perspective	.04
6	Bravery	.07
7	Persistence	.08
8	Integrity	.08
9	Vitality	.10
10	Love	.02
11	Kindness	.02
12	Social intelligence	–.01
13	Citizenship	–.00
14	Fairness	.12
15	Leadership	.09
16	Forgiveness	.10
17	Humility	.02
18	Prudence	.07
19	Self-regulation	.11
20	Appreciation of beauty	.04
21	Gratitude	.09
22	Hope	.00
23	Humour	–.05
24	Spirituality	.05

Note. All correlations of  $r < .02$  are non-significant. Correlations of  $r = .02, p < .05$ . Correlations of  $r = .03$  and above,  $p < .001$ . All two-tailed tests, and all  $n = 17,056$ .

## 6. Discussion

This report presents data on the VIA Inventory of Strengths from a large UK sample. Analyses showed that the means and standard deviations for this sample, when segmented by gender and age group, were consistent with those reported for the US samples (cf. Park et al., 2004; Peterson et al., 2006), just as the rank ordering of strengths in this sample was largely consistent with findings across other nations, and may be taken as potentially being indicative of a universal human nature (Park, Peterson, & Seligman, 2006).

Analyses of gender differences showed that women typically reported higher scores on the strengths measures than did men, with the exception of creativity. However, these effects were very small, and four of the five signature strengths reported overall by men and women were the same (open-mindedness, fairness, curiosity, and love of learning). Scores for kindness and love were higher for women, and showed the strongest effect sizes for gender differences (together with gratitude). This supports the nurturing hypothesis (Eagly & Wood, 1999), although we did not find evidence that men scored higher on bravery and persistence (where in fact women scored higher). Overall though, there were arguably more similarities than differences between genders, so gender differences in character strengths should not be overstated.

Strengths were generally positively associated with age, with the strongest effects being found for curiosity and love of learning (strengths of wisdom and knowledge), fairness (a strength of justice) and forgiveness and self-regulation (strengths of temperance). These effects were small, although consistent, and suggest that there may be a trend for character development over the lifespan, as suggested by authors such as Erikson (1959) and Maslow (1970).

Data collected via the Internet suffers from a number of preconceptions, but it has also been shown that Internet samples tend to be relatively diverse with regard to gender, socio-economic status, geographic region, and age, and that Internet findings generalise across presentation formats, are not adversely affected by non-serious or repeat responders, and are consistent with findings from traditional paper-and-pencil methods (Gosling, Vazire, Srivastava, & John, 2004). A major advantage of Internet data collection, and one exploited here, is the ability to collect large sample sizes both efficiently and effectively, and to sample more widely than from the college student samples that are typical of much psychological research. For the current study, the age, educational level, and occupational status of our sample were much more heterogeneous, and the gender representation more balanced, than we would have been able to obtain through more traditional recruitment methods.

A second, more minor criticism is in relation to the sample composition. As is often the case with Internet samples, respondents can be skewed towards people who are better educated and have a higher socio-economic status, simply by virtue of the fact that they are more likely to have Internet access and to be Internet users. This is true of the current sample, and it is possible that the endorsement of curiosity, love of learning, and open-mindedness – strengths that are likely to be endorsed by people with greater levels of education – may not be reflective of the broader population.

The VIA-IS provides a reliable assessment of 24 character strengths across a consistent question and response format. The measure allows researchers to assess each of the 24 strengths in relation to each other, and for many of the strengths, provides the first specific self-report measure of the strength available. On this basis, the VIA-IS now appears to be a valuable addition to the repertoire of researchers and practitioners who are interested in the effective assessment of character strengths.

With the advent of this measurement tool, a number of research questions appear especially pertinent. How are the 24 strengths associated with five-factor (e.g., John & Srivastava, 1999) and six-factor (e.g., HEXACO; Lee & Ashton, 2004) models of personality? Does the measurement of character strengths add incremental validity beyond the traditional measurement of personality? Are strengths associated with subjective and psychological well-being? Do strengths predict goal attainment or occupational performance? With the field of systematic strengths research in its infancy, the questions for future inquiry are many and varied, but with the VIA-IS, researchers may now consider that they have the tools to begin to answer them.

## **Acknowledgements**

We thank Patty Newbold for her help in managing the data on which this report is based. We also acknowledge the Manuel D. and Rhoda Mayerson Foundation in establishing the Values in Action Institute, which supported the development of the VIA-IS.

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