



## Research Reports

# The Conceptualization, Measurement, and Role of Humor as a Character Strength in Positive Psychology

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#### **Abstract**

In positive psychology, humor has been identified as one of 24 character strengths considered ubiquitously important for human flourishing. Unlike the other strengths, humor was a late addition to this classification system and its status as a strength continues to be somewhat controversial. Therefore, the first purpose of this study was to explore the associations between humor and several outcome variables of relevance to positive psychology (happiness, routes to happiness, resilience, and morality). The second purpose was to explore how best to conceptualize and measure humor as a character strength by comparing the Values in Action Inventory of Strengths (VIA-IS) Humor Scale with the Humor Styles Questionnaire (HSQ) in their ability to predict the outcome variables. A sample of 176 participants completed questionnaires assessing the humor and positive psychology constructs. The results indicated that the humor measures significantly predicted most of the outcome variables, supporting the importance of humor in positive psychology. Furthermore, although the VIA-IS Humor scale and positive humor styles on the HSQ showed considerable overlap, the negative humor styles added significantly to the prediction of outcome variables beyond these positive humor measures, supporting the importance of assessing maladaptive as well as adaptive uses of humor in research on positive psychology. These findings suggest that the HSQ may be a more useful measure than the VIA-IS Humor scale in future research in this field.

Keywords: humor styles, positive psychology, character strength, well-being

Europe's Journal of Psychology, 2014, Vol. 10(3), 505-519, doi:10.5964/ejop.v10i3.759

Received: 2014-02-02. Accepted: 2014-02-21. Published (VoR): 2014-08-13.

Handling Editor: Nicholas A. Kuiper, University of Western Ontario, London, Canada

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Positive psychology may be described as the scientific study of what makes life worth living (Seligman & Csikszentmihalyi, 2000). One of the most influential and ambitious projects undertaken in this field was the development of the Values in Action Classification of Strengths and Virtues (VIA-CSV; Peterson & Seligman, 2004). The VIA-CSV is intended to be a "manual of the sanities" by describing 24 character strengths that enable human flourishing, subsumed within six overarching virtues that are valued across cultures (wisdom, courage, humanity, justice, temperance, and transcendence). To assess these strengths, Peterson, Park, and Seligman (2005a) developed the VIA Inventory of Strengths (VIA-IS), a questionnaire consisting of 24 subscales.

Humor has been identified as one of the 24 character strengths in the VIA classification. A humorous individual is defined by Peterson and Seligman (2004) as "one who is skilled at laughing and gentle teasing, at bringing smiles to the faces of others, at seeing the lighter side, and at making (not necessarily telling) jokes" (p. 530).

While it is acknowledged that there are many ways in which humor can be used, the VIA-CSV focuses on the types of humor that Peterson and Seligman believe serve a moral purpose by allowing people to directly confront challenges, by maintaining a positive outlook in the face of adversity, and by initiating and maintaining satisfying interpersonal relationships.

The approach taken to measure individual differences in humor in the VIA-IS appears to be similar to that of a number of self-report humor scales developed in the 1980s and 1990s to explore relationships between humor and well-being (e.g., Multidimensional Sense of Humor Scale, Thorson & Powell, 1993; Situational Humor Response Questionnaire, Martin & Lefcourt, 1984; Sense of Humor Questionnaire, Svebak, 1996). Like these early measures, the VIA-IS Humor scale is based on the assumption that humor is inherently a positive personality trait. More recently, however, researchers have questioned whether these scales adequately capture the dimensions of humor most relevant to health and well-being. For example, Kuiper and Martin (1998) presented data from five studies examining the degree to which several of these early self-report humor scales correlated with dimensions of positive personality (e.g., optimism, self-esteem, psychological well-being). The results indicated that these humor scales were generally only weakly correlated with well-being, accounting for less than 6% of the variance in these outcome measures. Thus, despite the popular assumption that a sense of humor is beneficial for well-being, these traditional sense of humor measures showed inconsistent and fairly weak correlations with psychological health.

Based on the limitations of these self-report humor measures, and influenced by the writings of earlier personality theorists such as Allport (1961) and Maslow (1954) who noted that some forms of humor may be healthy while others are unhealthy, Martin and colleagues (2003) began working on a new conceptualization and measurement of humor for research on humor and well-being. They developed the Humor Styles Questionnaire (HSQ), a multi-dimensional measure that assesses four different uses of humor in everyday life. *Affiliative* humor is characterized by sharing non-hostile witty comments, humorous anecdotes, and jokes to make others laugh and enhance relationships. *Self-enhancing* humor involves the use of humor to cope with stress and maintain a cheerful outlook on life in the face of adversity. *Aggressive* humor refers to teasing or witty sarcasm to make fun of others. Finally, *self-defeating* humor consists of excessively self-disparaging humor to make others laugh at one's own expense as a way of ingratiating oneself with others. Although all of these humor styles involve amusement, wit, and mirth, only the first two were assumed to be beneficial to well-being, whereas the other two were seen as potentially detrimental.

In contrast to the VIA-IS Humor scale as well as most of the earlier humor measures, the HSQ defines humor as a strength not only by the *presence* of positive uses of humor but also by the relative *absence* of negative uses. This notion is supported by a considerable amount of subsequent research indicating that (1) the four humor styles together account for more variance in well-being than did the earlier self-report humor scales and (2) the negative styles (especially self-defeating humor) add to the variance explained by positive humor styles (e.g., Cann & Etzel, 2008; Cann, Stilwell, & Taku, 2010; Kuiper, Grimshaw, Leite, & Kirsh, 2004; Martin, 2007). Therefore, it appears to be important to examine negative as well as positive uses of humor when exploring relationships between humor and psychosocial functioning.

Although there is now a voluminous research literature in positive psychology on a range of topics such as gratitude, savoring, and resilience (Snyder & Lopez, 2009), the topic of humor has so far received very limited attention in this field (for exceptions, see Beermann & Ruch, 2009; Müller & Ruch, 2011; see also Maiolino & Kuiper, this issue). This seems unfortunate, given the potential significance of humor to key constructs in positive psychology (McGhee,



2010). The first general goal of this study was therefore to explore the associations between humor (as measured by both the VIA-IS Humor scale and the four subscales of the HSQ) and several constructs that are generally seen as being particularly pertinent to positive psychology: happiness, routes to happiness, resilience, and morality. The second general goal was to compare the HSQ and VIA-IS Humor scale as potential measures of humor as a character strength in positive psychology research.

#### **Happiness**

Happiness is often defined as an individual's subjective sense of well-being, conceptualized in terms of high satisfaction with life, frequent positive affect, and infrequent negative affect (Diener, 1994). Measures of these three constructs were therefore included in the present study to assess the relationships between humor and happiness. Consistent with previous studies (e.g., Martin, Puhlik-Doris, Larsen, Gray, & Weir, 2003), it was expected that the adaptive humor styles and VIA-IS Humor scale would correlate positively with measures of happiness (positive affect, satisfaction with life) and negatively with measures of unhappiness (negative affect), whereas the opposite pattern of correlations would be found with self-defeating humor.

#### **Routes to Happiness**

Peterson, Park, and Seligman (2005b) have proposed three different routes to happiness: pleasure, meaning, and engagement. The pleasure route is based on the doctrine of hedonism (maximizing pleasure and minimizing pain). The meaningful route is consistent with the principle of eudemonia (living in accordance with one's virtues). Finally, the engagement route involves seeking out activities that produce the mental state of flow, which occurs when individuals are fully motivated and absorbed in an activity. To assess these proposed routes, Peterson et al. developed the Orientations to Happiness Questionnaire. Past research has found that the VIA-IS Humor scale is most strongly correlated with the pleasure route to happiness (Peterson, Ruch, Beermann, Park, & Seligman, 2007). However the HSQ has not previously been examined in relation to this measure.

#### Resilience

Resilience has been defined as "positive adaptation or development manifested in the context of adverse experiences" (Masten & Gewirtz, 2006, p. 1). Humor may be one resource within an individual that facilitates the ability to "bounce back" and effectively adapt in the face of stress by means of shifting perspective, distancing oneself from a problem, eliciting social support, increasing positive emotion and/or relieving tension through laughter (Kuiper, 2012; Lefcourt, 2001). We measured resilience in two ways: (1) the unidimensional Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003); and (2) the Mental Toughness Questionnaire (MTQ48; Clough, Earl, & Sewell, 2001), which assesses four components of resilience: confidence, control, commitment, and challenge. Based on the conceptualization of self-enhancing humor as the use of humor to cope with adversity, as well as previous research findings (Veselka, Schermer, Martin, & Vernon, 2010a), we expected that self-enhancing humor would be most consistently correlated with the resilience measures.

#### Morality

Positive psychology researchers describe each of the 24 character strengths as morally praiseworthy, despite limited research evaluating whether the strengths do in fact correlate with moral constructs (Peterson & Seligman, 2004). Beermann and Ruch (2009) explored the association between humor and virtue, and found that items from a number of humor measures covered the whole range from virtue to vice, with most items being perceived as morally neutral. Some past experimental research further suggests that humor may actually be *negatively* related to at least some aspects of morality. Strohminger, Lewis, and Meyer (2011) found that participants who had been



exposed to comedy tended to favor socially unconventional utilitarian solutions to moral dilemmas in contrast to those in emotionally neutral and elevation conditions. For example, those exposed to comedy were more likely to say that one should push a person from a footbridge to stop a trolley car from killing five other people. The authors reasoned that humor involves a sense of diminishment whereby an object, person, or situation is seen as less important than it first appeared, which may cause one to adopt an attitude of disregard toward social norms.

In the present study, we pursued this area further by including measures of moral identity and moral reasoning along with the HSQ and VIA-IS Humor scale. Based on the findings of Beermann and Ruch (2009), we expected that the positive humor styles and VIA-IS Humor scale would be unrelated to these morality measures. In contrast, we expected that the negative humor styles, and particularly aggressive humor, would be associated with lower levels of morality. This hypothesis was based on previous findings of positive correlations between the negative humor styles (particularly aggressive humor) and the "Dark Triad" traits of psychopathy and Machiavellianism, both of which tend to be associated with lower levels of morality (Martin, Lastuk, Jeffery, Vernon, & Veselka, 2012; Veselka, Schermer, Martin, & Vernon, 2010b).

## Comparing the HSQ and VIA-IS Humor Scale

As noted previously, the VIA-IS Humor scale, because it takes a unidimensional approach and assesses only positive humor, may not capture as much of the variance in positive psychology outcomes as the HSQ. We explored this question by investigating whether the HSQ scales, and particularly the negative humor styles, add to the prediction of the various positive psychology outcome measures beyond the VIA-IS Humor measure. Based on previous research with similar types of humor measures, we expected that the VIA-IS Humor scale would correlate positively with the two adaptive humor styles but would be unrelated to the two maladaptive styles. Furthermore, consistent with previous research indicating the importance of measuring maladaptive as well as adaptive styles of humor (e.g., Martin et al., 2003), we expected that the negative humor styles would add to the VIA-IS Humor scale in predicting positive psychology outcomes. Such findings might suggest that researchers should take into account negative as well as positive styles of humor when investigating the role of humor in positive psychology.

## Method

#### **Participants**

The sample was composed of 176 first-year undergraduate students (67% female) enrolled in an introductory psychology course at the University of Western Ontario. Participants were recruited through the department research participant pool and were compensated with partial course credit. The mean age of participants was 18.6 years (SD = 2.16).

#### Measures

Humor Styles Questionnaire (HSQ; Martin et al., 2003) — The HSQ examines four dimensions corresponding to individual differences in the experience and expression of humor in everyday life. Affiliative humor (e.g., "I laugh and joke a lot with my friends") and Self-enhancing humor (e.g., "If I am depressed I can usually cheer myself up with humor") are the two adaptive styles. Aggressive humor (e.g., "If I don't like someone, I often use humor or teasing to put them down") and Self-defeating humor (e.g., "I let people laugh at me or make fun at my expense more than I should") are the potentially detrimental styles. The HSQ consists of 32 items (eight for each scale) rated on a 7-point, Likert-type scale ranging from 1 (totally disagree) to 7 (totally agree). Past research has demonstrated that the HSQ is a reliable and valid measure (Martin, 2007; Martin et al., 2003). In the present study,



internal consistencies (coefficient alpha) for the Afilliative, Self-enhancing, Aggressive and Self-defeating scales were .83, .79, .66, and .84, respectively.

Values in Action Inventory of Strengths – Humor Scale (VIA-IS Humor; Peterson, Park, & Seligman, 2005a) — The 10-item humor subscale of the VIA-IS self-report questionnaire was used to measure the character strength of humor. Participants completed the entire VIA-IS (240 items, 24 subscales) using an on-line administration provided by the test publishers. However, only the humor subscale was of interest in this study. Respondents indicate the extent to which they endorse each statement on a 5-point Likert-type scale ranging from 1 (not like me) to 5 (very much like me). An example item is "Whenever my friends are in a gloomy mood, I tease them out of it." Peterson and colleagues have noted that each of the VIA-IS subscales has good internal consistency and test-retest stability over four months. Reliability data for the present administration were not available from the VIA-IS website administrators.

Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) — In this widely-used measure of resilience, respondents are asked to indicate the extent to which they agree with 25 statements on a scale from 0 (*rarely true*) to 4 (*true nearly all of the time*). Example items include "I like challenges" and "I am able to adapt when changes occur." The CD-RISC has been found to have good psychometric properties (Connor & Davidson, 2003) and in this study the internal consistency (Cronbach's alpha) was .90.

Mental Toughness Questionnaire (MTQ48; Clough, Earl, & Sewell, 2001) — This is a 48 item measure of the ability to effectively withstand stressors, pressures, and challenges in many different environments (e.g., workplace, sports). It contains four subscales assessing the core components of mental toughness: challenge (8 items), commitment (11 items), control (14 items), and confidence (15 items). Commitment measures the extent to which people actively approach and persist with a goal or event they encounter (e.g., "I usually find something to motivate me"). Control refers to the tendency to perceive oneself as having control over the outcomes of events (e.g., "I generally feel in control"). Challenge is defined as an individual's belief that challenge is a regular part of life and should be viewed as an opportunity rather than a threat (e.g., "Challenges usually bring out the best in me"). Confidence is defined as a belief in one's own ability to complete difficult tasks (e.g., "However bad things are, I usually feel they will work out positively in the end"). Participants rate each item on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Previous research has found good reliabilities for the MTQ48 scales. The internal consistencies (Cronbach's alphas) of Challenge, Commitment, Control, and Confidence in this study were .73, .75, .68, and .77, respectively.

Satisfaction with Life Scale (SLS; Diener, Emmons, Larsen, & Griffin, 1985) — The SLS comprises five statements which assess overall cognitive judgments regarding life satisfaction (e.g., "The conditions of my life are excellent"). Participants rate each statement using a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Diener and colleagues found significant correlations between this measure and others assessing well-being. The internal consistency (Cronbach's alpha) in this study was .85.

Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) — The PANAS provides separate scores for positive and negative affect. Respondents are asked to indicate the extent to which they experienced a number of different emotions during a specified time period ("past two weeks" in the present study) on a scale from 1 (very slightly or not at all) to 5 (extremely). Examples of positive affect items include "interested", "excited" and "inspired." Examples of negative items include "upset", "ashamed", and "irritable." The PANAS is

widely used in research and has been shown to have high reliability and good convergent validity with other measures of pleasant and unpleasant moods (Watson et al., 1988). The internal consistencies (Cronbach's alphas) of positive and negative affect in this study were .85 and .84, respectively.

Orientations to Happiness Scale (OtH; Peterson, Park, & Seligman, 2005b) — The OtH consists of 18 items (6 per subscale) measuring three different approaches to happiness: a pleasurable life, a meaningful life, and an engaged life (described previously). Participants are asked to rate the extent to which they endorse each item using a scale from 1 (not at all like me) to 5 (very much like me). Example items include "I love to do things that excite my senses" (Pleasurable Life), "My life has lasting meaning" (Meaningful Life), and "Regardless of what I am doing time passes very quickly" (Engaged Life). Previous research has found that the subscales are reliable and empirically distinct (Peterson et al., 2005b). The internal consistencies (Cronbach's alphas) of the pleasure, meaning, and engagement scales in this study were .78, .78, and .52, respectively.

The Self-Importance of Moral Identity Questionnaire (SIMIQ; Aquino & Reed, 2002) — The SIMIQ consists of two 5-item subscales designed to assess two dimensions of moral identity: Internalization and Symbolization. Internalization relates to a more private moral identity rooted in the core of one's well-being, whereas Symbolization assesses a more public moral identity expressed through one's actions and characteristics. Respondents are asked to visualize someone (self or other) who embodies a set of nine moral characteristics (e.g., "caring", "honest", and "hardworking"). Once they have conjured up a distinct mental image and/or social referent (e.g., "Mother Theresa", "Big Sister in mentoring program", fellow Food Bank volunteer), respondents then rate the extent to which they want to be like that individual using a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). Example items include "Being someone who has these characteristics is an important part of who I am" (Internalization) and "I am actively involved in activities that communicate to others that I have these characteristics" (Symbolization). Previous research has found good reliability for both subscales (Reed & Aquino, 2003). The internal consistencies (Cronbach's alphas) of Internalization and Symbolization in this study were .78 and .81, respectively.

Moral Scenario Questionnaire (MSQ) — The MSQ consists of 12 scenarios to measure moral reasoning. Each scenario involves a situation in which there is an opportunity to engage in morally questionable behavior. Six situations were adapted from Perugini and Leone (2009) and the other six were created for the present study. Participants were asked to rate whether they would engage in the behavior described in the scenario using a scale ranging from 1 (certainly not) to 4 (certainly yes). Higher scores relate to less moral behavior. An example situation, created for the present study, is discovering that one has been given an extra 5 dollars in change by a grocery store cashier and asks whether the participant would keep the money. An example situation, adapted from Perugini and Luigi, is whether a participant would declare a lower personal income in order to receive a university scholarship for a larger amount of money. In this study, the internal consistencies (Cronbach's alpha) for the original six situations and for the six scenarios created for the present study were .70 and .50, respectively. The internal consistency for the 12 scenarios combined in the total MSQ was .71.

## **Procedure**

Participants were tested in groups of 10 to 20 in a room equipped with computer terminals. After signing informed consent, they completed the self-report measures on individual computer screens. The VIA-IS was completed on a website using identification codes provided by the VIA Institute on Character, and the remaining measures were administered in randomized order either before or after the VIA-IS, using a local computer program. Scores for



the VIA-IS were subsequently obtained from the Institute. Completion of all the measures took approximately one hour, after which participants received a debriefing form describing the purpose of the study.

## Results

Table 1 presents the means, standard deviations, and ranges of all the measures used in this study. Correlation analyses indicated that, as expected, the VIA-IS Humor scale was quite strongly positively correlated with the two adaptive humor styles (affiliative humor: r = .63, p < .001; self-enhancing humor: r = .58, p < .001). As for the two negative humor styles, the VIA-IS Humor scale was marginally positively correlated with aggressive humor (r = .16, p < .06), and unrelated to self-defeating humor (r = .13, ns).

Table 1

Means, Standard Deviations, and Ranges for All Measures

Category	Measure	М	SD	Range
Humor	HSQ Affiliative	45.69	7.71	16-56
	HSQ Self-Enhancing	35.45	8.53	16-53
	HSQ Aggressive	28.95	7.40	8-48
	HSQ Self-Defeating	28.72	9.69	9-56
	VIA-IS Humor	3.87	0.58	2-5
Happiness	Positive Affect	34.06	7.08	11-49
	Negative Affect	23.69	7.25	10-42
	Satisfaction with life	24.91	6.53	8-35
OtH	Pleasure	20.53	4.56	12-30
	Meaning	19.51	4.86	7-30
	Engagement	17.13	3.49	9-26
Resilience	MTQ Challenge	28.17	4.53	16-38
	MTQ Commitment	38.04	5.84	21-55
	MTQ Control	44.54	6.23	27-62
	MTQ Confidence	50.77	7.58	21-73
	CD-RISC	69.04	13.30	20-100
Morality	MI Internalization	31.64	3.81	17-35
	MI Symbolization	21.22	6.04	5-33
	Moral Situation Total	33.72	5.13	18-46

Note. HSQ = Humor Styles Questionnaire; AF = Affiliative Humor; SE = Self-enhancing Humor; AG = Aggressive Humor; SD = Self-defeating Humor; VIA-IS = Values in Action Inventory of Strengths; MTQ = Mental Toughness Questionnaire; CD-RISC = Connor-Davidson Resilience Scale; OtH = Orientations to Happiness; MI = Moral Identity.

## **Associations Between Humor and Positive Psychology Outcomes**

To investigate the first general goal of this study, Table 2 displays the correlations between the humor measures (VIA-IS Humor and subscales of the HSQ) and each of the positive psychology-relevant outcome measures.



Table 2
Simple Correlations Between the Humor Scales and Positive Psychology Variables

		Humor Measures					
Category	Measure	VIA-IS Humor	HSQ AF	HSQ SE	HSQ AG	HSQ SD	
Happiness	Positive Affect	.45***	.23**	.34***	.08	07	
	Negative Affect	10	06	03	.27**	.36***	
	Sat. with Life	.43***	.11	.24**	.06	19*	
OtH	Pleasure	.41***	.24**	.18*	.12	03	
	Meaning	.12	05	.16*	24**	06	
	Engagement	.07	05	.13	10	02	
Resilience	MTQ Challenge	.41***	.26**	.33***	.01	03	
	MTQ Commitment	.17*	.05	.21**	16*	26**	
	MTQ Control	.28**	.17*	.28***	05	21**	
	MTQ Confidence	.47***	.30***	.45***	.03	27***	
	CD-RISC	.45***	.32***	.49***	01	12	
Morality	MI Internalization	.25**	.05	.10	45***	20*	
	MI Symbolization	.09	.09	.16*	19*	11	
	Moral Scenarios	02	11	.09	40***	19*	

Note. HSQ = Humor Styles Questionnaire; AF = Affiliative Humor; SE = Self-enhancing Humor; AG = Aggressive Humor; SD = Self-defeating Humor; VIA-IS = Values in Action Inventory of Strengths; MTQ = Mental Toughness Questionnaire; CD-RISC = Connor-Davidson Resilience Scale; OtH = Orientations to Happiness; MI = Moral Identity.

With regard to the measures of happiness, the VIA-IS Humor scale was found to be positively correlated with positive affect and satisfaction with life, but unrelated to negative affect. A similar but somewhat weaker pattern of associations was found with the self-enhancing humor scale on the HSQ, while the affiliative humor scale was only correlated (more weakly) with positive affect. In addition, both the self-defeating and aggressive humor scales revealed positive correlations with negative affect, and self-defeating humor was weakly negatively correlated with satisfaction with life.

With respect to the orientations to happiness, as expected, the humor measures (particularly the positive styles) were most consistently correlated with a life of pleasure, with the VIA-IS Humor scale showing the strongest correlation with this scale. Additionally, self-enhancing humor was weakly positively correlated with a life of meaning, whereas aggressive humor displayed a somewhat stronger inverse association with this happiness orientation. None of the humor measures were correlated with a life of engagement.

In relation to the resilience measures, consistent with predictions, self-enhancing humor appeared to be the most important of the four HSQ humor styles. In particular, it was the only one to significantly correlate (positively) with all four mental toughness dimensions and with the general measure of resilience (CD-RISC). The VIA-IS Humor scale also revealed a pattern of correlations with the resilience measures very similar to those found with self-enhancing humor. Moreover, affiliative humor displayed positive, but somewhat weaker correlations with four of the five resilience measures. In addition, self-defeating humor was negatively correlated with the commitment, control, and confidence scales of the MTQ, and aggressive humor was weakly negatively correlated with commitment.



<sup>\*</sup>p < .05. \*\*p < .01. \*\*\*p < .001.

In the correlations with morality-related variables, of the four humor styles, aggressive humor was most consistently (negatively) correlated with these measures. The other negative humor style, self-defeating humor, was also negatively correlated with MI internalization and the moral scenarios, whereas self-enhancing humor was positively (although weakly) correlated with MI symbolization. Finally, the VIA-IS Humor scale was positively correlated with the MI internalization measure of morality.

#### Comparing the HSQ and VIA-IS Humor Scale

The second general goal of this study was to explore whether the HSQ may be more useful than the VIA-IS Humor scale as a measure of humor as a character strength. We therefore conducted hierarchical multiple regression analyses to investigate whether the adaptive and maladaptive humor styles add to the VIA-IS Humor scale in the prediction of the positive psychology variables of interest in this study. For each of the outcome measures, the VIA-IS Humor measure was entered first as a predictor, followed by the two positive humor styles in a block, and finally the two negative humor styles in the third step.

Table 3

Hierarchical Multiple Regression Analyses Predicting Positive Psychology Variables from VIA-IS Humor, Positive Humor Styles, and Negative Humor Styles

	Positive Psychology	STEP 1	STEP 2	STEP 3  Change in R <sup>2</sup> when HSQ SD & AG are added	
Category	Variables of Interest	VIA-IS Humor R <sup>2</sup>	Change in R <sup>2</sup> when HSQ AF & SE are added		
Happiness	Positive Affect	.20***	.02	.04*	
	Negative Affect	.01	.00	.19***	
	Sat. with Life	.19***	.04*	.10***	
OtH	Pleasure	.17***	.003	.01	
	Meaning	.01	.04*	.06**	
	Engagement	.01	.03	.01	
Resilience	MTQ Challenge	.17***	.01	.02	
	MTQ Commitment	.03*	.04*	.12***	
	MTQ Control	.08**	.02	.08**	
	MTQ Confidence	.22***	.04*	.16***	
	CD-RISC	.20***	.09***	.05**	
Morality	MI Internalization	.07**	.02	.24***	
-	MI Symbolization	.09***	.01	.07**	
	Moral Scenarios	.0001	.03	.18***	

Note. HSQ = Humor Styles Questionnaire; AF = Affiliative Humor; SE = Self-enhancing Humor; AG = Aggressive Humor; SD = Self-defeating Humor; VIA-IS = Values in Action Inventory of Strengths; MTQ = Mental Toughness Questionnaire; CD-RISC = Connor-Davidson Resilience Scale; OtH = Orientations to Happiness; MI = Moral Identity.

As seen in Table 3, the positive humor styles generally do not add much to the VIA-IS Humor scale in the prediction of well-being, suggesting that the VIA-IS Humor scale and positive humor styles are conceptually similar. However, in a few cases, the positive humor styles did add significantly beyond the variance accounted for by the VIA-IS Humor scale. This occurred in the prediction of satisfaction with life, the meaning orientation to happiness, and resilience (i.e., CD-RISC, MTQ Commitment, MTQ Confidence). More interestingly and consistent with our expect-



<sup>\*</sup>p < .05. \*\*p < .01. \*\*\*p < .001.

ations, the negative humor styles continued to add significantly, beyond the VIA-IS Humor scale and positive humor styles, to the prediction of 11 of the 14 outcome variables: positive and negative mood, satisfaction with life, the meaning orientation, three dimensions of mental toughness (commitment, control, and confidence), CD-RISC, and all measures of morality.

## **Discussion**

This study had two main objectives. The first was to explore the relationships between humor and a number of positive psychology outcomes.

## **Happiness**

With respect to happiness variables, the findings support the results of previous research using the HSQ (see Martin, 2007 for a review) indicating that self-enhancing and self-defeating humor are the styles that are most consistently linked (one positively and the other negatively) with emotional well-being. In contrast, affiliative and aggressive humor, as is typically the case, demonstrated somewhat weaker associations. The VIA-IS Humor scale showed a pattern of correlations similar to that of self-enhancing humor.

Both self-enhancing and self-defeating humor have a self-referent focus (Martin et al., 2003). People high on self-enhancing humor tend to use this type of humor to protect the self and regulate emotions by maintaining a humorous outlook on life during times of stress. However, those who use excessively self-disparaging humor to ingratiate themselves with others (self-defeating) may be hiding or denying underlying negative emotions, and may use humor to avoid dealing adaptively with problems. As a result, self-enhancing humor may be particularly beneficial whereas self-defeating humor may be particularly detrimental to well-being (Martin, 2007).

The relatively weaker correlations between affiliative humor and emotional well-being may be due to the fact that the primary purpose of this humor style is presumably to enhance relationships with others (e.g., by increasing cohesiveness, reducing interpersonal tension). Although the resulting improvements in group morale may in turn increase levels of personal happiness, this association is more indirect and therefore, not surprisingly, weaker.

Similarly, aggressive humor has an other-referent focus, but in this case it is used at the expense of relationships with others. People who frequently use aggressive humor tend to lack empathy and social awareness for the potential impact this type of humor has on others (Veselka et al., 2010b). As a result, this style does not appear to be particularly detrimental to personal well-being, but instead may be more problematic for interpersonal outcomes such as relationship satisfaction (e.g., Cann & Etzel, 2008).

#### **Orientations to Happiness**

Regarding the orientations to happiness, consistent with previous research (Peterson et al., 2007), humor (particularly the adaptive styles and the VIA-IS Humor Scale) was positively correlated with the pleasure route to happiness. Humor may be particularly relevant to this orientation to happiness since it focuses on achieving the pleasurable positive emotion of mirth through nonserious social-cognitive play (Martin, 2007).

Previous research has suggested that humor is unrelated to the meaning route to happiness (Peterson et al., 2007). While this conclusion is supported by the VIA-IS Humor scale, it is not consistent with the associations found using the HSQ. In particular, our results indicate that the presence of self-enhancing humor and the absence of aggressive humor are particularly relevant to a life of meaning. Perhaps the use of humor to cope with stress



and avoidance of use of humor to make fun of others are most consistent with the quest for happiness through living a good and meaningful life.

None of the humor measures were correlated with engagement, suggesting that humorous people are not more likely than others to experience flow, which involves becoming absorbed in a task and losing track of time (Csikszentmihalyi, 1990; 1997). This lack of association may be because flow is associated with activities that are undertaken for some serious purpose or goal, whereas humor is a playful, nonserious activity that has no obvious goal other than enjoyment.

#### Resilience

With regard to resilience, the results of the correlation analyses indicate that all mental toughness subscales and the CD-RISC resiliency measure were significantly correlated with at least one humor scale. The VIA-IS Humor scale and self-enhancing humor appeared to be particularly important as they correlated positively with all resilience measures. These results are consistent with the conceptualization of self-enhancing humor as a means of coping with stress and regulating emotion, and also suggest that the VIA-IS Humor scale captures a similar resilience-related aspect of humor. On the other hand, our results also indicate that self-defeating humor is associated with lower levels of resilience, particularly the commitment, control, and confidence components of mental toughness. When used appropriately, humor may be a beneficial way of coping, due to the cognitive shifts inherent in humor which may allow for reappraisal of a stressful event (Lazarus & Folkman, 1984).

#### Morality

Finally, with regard to morality, aggressive humor appears to be the humor style that is most consistently (negatively) correlated with these variables. This finding is consistent with our expectations, and suggests that people who use humor to tease or manipulate others are less likely to define themselves by moral traits including fairness, kindness, and compassion. They are also less likely to respond in socially conventional and moral ways to scenarios placing a more moral response against a less moral option. These results may be explained by the personality traits associated with this humor style. For example, aggressive humor has been found to positively correlate with measures of psychopathy and Machiavellianism (Martin et al., 2012; Veselka et al., 2010b). These traits are characterized by low empathy, high thrill-seeking behavior, and manipulativeness, and have been found to be associated with low levels of morality (Koenigs, Kruepke, Zeier, & Newman, 2012). On the other hand, the VIA-IS Humor scale was positively correlated with the MI Internalization measure of morality, indicating that this measure of humor does relate positively to a private moral identity rooted in the core of one's well-being. Thus, the VIA-IS Humor measure does appear to capture aspects of humor that are morally praiseworthy, as conceptualized in the VIA classification of character strengths (Peterson & Seligman, 2004).

## Comparing the VIA-IS Humor and HSQ Measures

The second main objective of our study was to compare the utility of the VIA-IS Humor scale and the four subscales of the HSQ as measures of humor as a strength in positive psychology. Correlations between the VIA-IS Humor scale and the four HSQ scales revealed that the VIA-IS scale correlates positively with the adaptive humor styles, is somewhat contaminated with aggressive humor, and is unrelated to self-defeating humor. Therefore, consistent with the positive humor styles, the VIA-IS Humor scale appears to capture forms of humor that are used to bond with others, reduce interpersonal tension, and cope with stress. However, this measure does not appear to capture the relative absence of excessively self-disparaging and avoidant humor as assessed by the self-defeating humor scale. In addition, although intended to measure only healthy uses of humor, this measure appears to assess



some element of sarcasm, teasing, or put-down humor, as shown by a weak positive correlation with the aggressive humor scale on the HSQ.

Consistent with our hypotheses, the results of our hierarchical multiple regression analyses indicate that, while affiliative and self-enhancing humor may not add much to the VIA-IS Humor scale in the prediction of many variables, in some cases they do seem to have additional predictive power. More interestingly and consistent with our expectations, the negative humor styles continued to add significantly, beyond the VIA-IS Humor scale and positive humor styles, to the prediction of most of the positive psychology variables: positive and negative affect, satisfaction with life, the meaning orientation, three dimensions of mental toughness (commitment, control, and confidence), CD-RISC, and all measures of morality. These results support the view that the relative absence of negative humor may be just as important as the presence of positive styles in predicting well-being. Moreover, important information pertaining to the relation between humor and well-being could be lost by failing to measure negative humor styles in addition to positive styles. Therefore, with reference to the important outcomes in positive psychology, capturing both positive and negative humor appears to be a more fruitful approach to assessing humor as a character strength than capturing positive uses alone.

#### Limitations

An important limitation of this study is the use of a correlational methodology. Although it is generally assumed that humor has a causal effect on well-being, this approach does not permit researchers to determine the direction of causality between sense of humor and positive psychology outcomes. It is therefore unknown whether the use of various types of humor *causes* people to experience more or less well-being, or whether different types of humor use emerge as a *consequence* of one's level of well-being, or indeed whether some third variable causes both of them. Further research using experimental or longitudinal designs is needed to determine the direction of causality in the observed relationships between positive psychology outcomes and humor styles.

Another limitation of this study is that the assessment of humor and positive psychology outcomes relied exclusively on self-report questionnaires. This type of methodology is often subject to biases, such as the propensity to respond in socially desirable ways. As a result, desirable behaviors may be over-reported and unfavorable behaviors underreported by those with a high need for approval, potentially resulting in spurious correlations between variables. Future research should make use of peer ratings or observational data to supplement this self-report methodology.

#### Conclusion

In summary, the present findings suggest that the HSQ may be a more useful measure of humor as a character strength than the VIA-IS Humor scale, because it assesses negative as well as positive styles of humor. The findings also provide support for the view that different styles of humor correlate in interesting ways with a number of variables that are relevant to positive psychology. Although researchers in the field of positive psychology have tended to ignore humor in the past (McGhee, 2010), this study suggests that further research in this area is warranted.

#### **Funding**

The authors have no funding to report.



#### **Competing Interests**

The authors have declared that no competing interests exist.

#### **Acknowledgments**

The authors have no support to report.

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