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# Spirituality with and without Religion—Differential Relationships with Personality

**Tatjana Schnell**

Institute of Psychology, Innsbruck University, 52 Innrain, Innsbruck 6020, Austria

E-mail: [tatjana.schnell@uibk.ac.at](mailto:tatjana.schnell@uibk.ac.at)

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## Summary

This study contributes to the exploration of self-rated spirituality by anchoring self-ratings of spirituality and religiosity in an integrative model of personality. For the measurement of personality dispositions and characteristic adaptations, the NEO Personality Inventory Revised (NEO-PI-R, German version) and the Sources of Meaning and Meaning in Life Questionnaire (SoMe) have been administered to a sample ( $N = 135$ ) of German-speaking students. A three-step study design is employed. First, previous findings on associations between personality and religiosity/spirituality are replicated and supplemented. Second, sources of meaning are shown to explain a considerably higher amount of unique variance in religiosity and spirituality than do personality dispositions. Third, two types of spirituality—*religious-and-spiritual* and *spiritual-but-not-religious*—are identified and distinguished on the basis of personality traits. The *spiritual-but-not-religious* type shows significantly higher degrees of Neuroticism, and lower degrees of Agreeableness. Possible interpretations and lines of future research on ‘spirituality without religion’ are sketched out.

## Keywords

spirituality, religiosity, personality, Big Five, sources of meaning, Sources of Meaning and Meaning in Life Questionnaire (SoMe), vertical self-transcendence, horizontal self-transcendence

## Introduction

Increasingly more people in Western culture are using the term *spiritual* to describe their existential orientation. As a fuzzy and broad concept, the term lends itself to the expression of a certain desire for transcendence, albeit undefined and open for personal, even idiosyncratic, adaptation. To interpret this semantic preference, drawing on paralleling societal trends can be fruitful.

With the *subjective turn* (Heelas and Woodhead, 2005) and widespread access to the plurality of world-views, churches are considered to have lost a monopoly on meaning (Gabriel, 2005). Individuals have substituted traditional rituals and creeds with personalized ways of relating to an absolute (Schnell, 2009a). Authority for belief systems has shifted from the ‘Church without’ to the ‘God within’ (Barker, 2004)—validated not by coherence with truth claims but rather experientially (Schnell, 2008a, 2011b). For many, these internal processes seem to be better represented by the term *spirituality* than by the term *religiosity*, which is all too often attributed to institutionalized, formalized and even compromised forms of religion (Zinnbauer et al., 1997). Nevertheless, more than half of the population (55%) in North-Western Europe<sup>1</sup> still self-describe as being religious (EVS 4th wave, 2010), compared to 9% who see themselves as convinced atheists and 36% who self-identify as ‘not a religious person’. When asked to rate their spirituality (*sensu* interest in the sacred or the supernatural), 15% claim to be very spiritual, 35% somewhat spiritual, 28% not very spiritual and 22% not spiritual at all (EVS 4th wave, 2010). Religious self-classification is, as would be expected, related to spirituality ratings ( $\eta = .41, p < .001$ ): religious individuals report the highest interest in the sacred or the supernatural, followed by the ‘not religious’ and convinced atheists (see Fig. 1).

However, some qualification is observable in these ratings. Only few religionists are not at all interested in spirituality, but, also among non-religionists and atheists, a substantial number declare to be at least somewhat interested in the sacred or supernatural. Two possible understandings of spirituality can be inferred: while, for many, religiosity and spirituality belong together, for others, they are distinct and probably even opposing concepts.

This duality of viewpoints is mirrored in the literature. *Theoretical* discussions either emphasize the distinction of both concepts, by referring to the personalized, non-institutional character of spirituality and the primacy of experience over orthodoxy in spirituality (cf. Schnell, 2008a, 2009a; Spilka, Hood, Hunsberger & Gorsuch, 2003). Others state that religiosity and spirituality are basically the same and should not be divided (Streib & Hood, 2011; Pargament, 2007), whilst contending that ‘spiritual religion’ is of privatized, experience-oriented character.

*Empirical* findings are often read as supporting the spirituality-is-religion hypothesis. In a study by Zinnbauer et al. (1997), 74% of the sample self-

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<sup>1)</sup> Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Northern Ireland, Norway, Sweden, Switzerland, Great Britain.

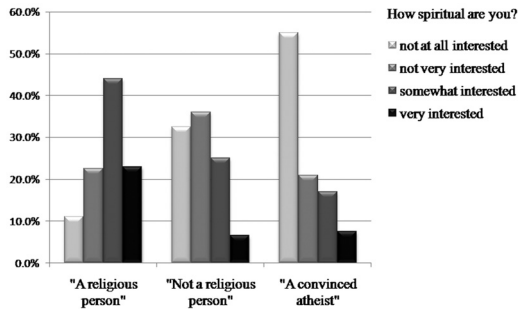


Fig. 1. Distribution of spirituality among religious persons, non-religious persons and convinced atheists according to EVS 4th wave data for North-Western countries.

identified as both religious and spiritual. Surveying Protestants, Marler and Hadaway (1993) found 64% and Scott (2001) 67% to self-identify as both religious and spiritual. With regard to established links between religiosity and spirituality, Marler and Hadaway (2002, p. 297) conclude: "Indeed, the most significant finding about the relationship between 'being religious' and 'being spiritual' is that most Americans see themselves as both", while Hill and Pargament (2003, p. 65) summarize: "The empirical reality is that most people experience spirituality within an organized religious context and fail to see the distinction between these phenomena".

Nevertheless, recognition of a substantial majority for whom religiosity and spirituality are largely indistinguishable, and significant correlations between both concepts, should not prevent us from looking at the remaining variance. While, conceptually, religionists might consider spirituality to be a central element of being religious, this does not have to be the case from the point of view of predominantly spiritual people. As early as 1993, Roof highlighted the existence of a group which he called "highly active seekers": individuals who said they did not consider themselves to be in any way religious although they did consider themselves to be spiritual. The existence of 'spiritual atheists' serves as another example of spirituality-without-religion (Schnell & Keenan, 2011, in press; Streib & Klein, 2011). Moreover, a majority of the 'spiritual but not religious' in Zinnbauer et al. (1997) were of the opinion that religiousness and spirituality, albeit overlapping, are not the same concept (44%), or that religiousness and spirituality are different and do not even overlap (15%).

Theoretically, spirituality can be appropriately conceptualized as *vertically* or *horizontally transcendent*. Vertically transcendent spirituality incorporates

concepts of an eternal, supernatural god or higher powers. Horizontally transcendent spirituality avoids reference to a supernatural reality but emphasizes the existence of an imminent absolute (Schnell, 2009ab; Schnell & Keenan, in press). Therefore, from a theoretical point of view, as well as with regard to self-identification of the general public, both *religious-and-spiritual* and *spiritual-but-not-religious* world-views seem to constitute noteworthy contemporary approaches to transcendence. To reach a more profound understanding of these approaches, investigation of personality correlates may provide a fruitful basis. While semantic preferences for either *spiritual*, or *religious*, or both, as self-descriptors might appear as expressions of societal trends and personal ‘whims’, personality correlates of these self-descriptors indicate that they are not arbitrary but rather closely linked to more or less inherited and socialized ways of thinking, acting and experiencing. Can personality traits be identified that predispose individuals to feel drawn towards one way of relating to transcendence rather than another? And, if so, are these largely inherited stable traits or are religiosity and spirituality associated more closely with characteristic adaptations that can be changed and adjusted, by conviction or experience?

### **Personality Correlates with Religiosity/Spirituality**

In 1997, Zinnbauer and colleagues were among the first to corroborate empirically the distinction between spiritual and religious self-description using personality variables. When comparing the *religious-and-spiritual* and the *spiritual-but-not-religious* with regard to religious activities, the former went to church more often, prayed more frequently, also outside of church, and reported higher degrees of intrinsic religiosity and religious orthodoxy. The latter, however, recounted more group experiences related to spiritual growth, more New Age beliefs and practices and mystical experiences. With respect to psychosocial variables, the *religious-and-spiritual* came across as more right-wing authoritarian, self-righteous, interdependent and self-sacrificing than the *spiritual-but-not-religious*.

Other than Zinnbauer and colleagues, most researchers have solely investigated correlations between religiosity and spirituality scales and personality measures. A distinction between those who see themselves as religious and spiritual and those who self-identify as only spiritual has not been made. Nevertheless, these research findings add to the understanding of *spiritual-*

*but-not-religious* and *religious-and-spiritual* individuals and will thus be reported in the following. In these studies, personality characteristics ranging from largely inherited personality dispositions to values have been assessed. Because of the heterogeneity of these constructs, an allocation to specific levels in an integrative model of personality will assist interpretation and consideration of findings.

### *An Integrative Model of Personality*

Following McCrae & Costa (1994), McAdams & Pals (2006) in their integrative model of personality propose to differentiate between *dispositional traits* and *characteristic adaptations*. Dispositional traits, such as the Big Five (McCrae & Costa, 1994), represent broad individual differences in thinking, acting, and feeling. They account for consistency across situations and over time and are thus relatively decontextualized. Characteristic adaptations refer to the intentional structure of personality-in-context (Little, 1999). McAdams and Pals (2006) describe them as “motivational, social-cognitive, and developmental adaptations, contextualized in time, place, and/or social role” (McAdams & Pals, 2006). They are associated with but not determined by dispositional traits (cf. Schnell & Becker, 2006; Roberts & Robins, 2000). While characteristic adaptations may change remarkably, with specific biographic periods and also within these, dispositional traits are relatively stable, and heritability values of about 50% have been established (e.g., Bouchard, Lykken, McGue, Segal & Tellegen, 1990).

### *Personality Dispositions and Religiosity/Spirituality*

A continuous line of research has been pursued to identify personality disposition correlates of religiosity, primarily. Francis (1992) and Piedmont (2005) present reviews of relevant studies. The inclusion of spirituality in this kind of research is rather recent. In 2000, MacDonald related Big Five personality traits to various dimensions of spirituality. The religiousness dimension was associated with Agreeableness, Conscientiousness, and Extraversion ( $.15 < r > .25$ ), as was the cognitive orientation towards spirituality ( $.15 < r > .30$ ). The latter, however, was also positively related to Openness ( $r = .22$ ). The experiential/phenomenological dimension of spirituality only showed significant relationships with Openness and Extraversion ( $r = .33$  and  $.14$ , respectively). The paranormal beliefs dimension obtained an association with Openness ( $r = .37$ ).

Maltby and Day (2001a) assessed Eysenck's Big Three, Neuroticism, Extraversion, and Psychoticism, and analysed relationships with four spirituality subscales. Among women, only Extraversion established significant associations with spirituality subscales ( $.31 < r > .37$ ). Among men, Extraversion also showed substantial links with several spiritual subscales ( $r = .32$ ). Additionally, Neuroticism was positively and Psychoticism negatively related to external/ritual spirituality ( $r = .20$  and  $r = -.21$ , respectively). In a replication study, Maltby and Day (2001b, p. 121) confirmed the strong share of variance between spirituality and Extraversion, for both men and women. They suggest that "Psychoticism underpins religiosity and Extraversion underpins spirituality", which would be in line with Saroglou's (2010, 2002) meta-analytical conclusion that both Agreeableness and Conscientiousness (which can be understood as representing two reverse-coded facets of Psychoticism) are major predictors of religiousness. Since Openness is not assessed by measures employing Eysenck's PEN model, the spirituality—openness link could not have been established in these studies—but might be tapped by the strong relationship between spirituality and Extraversion, a trait which shares a substantial amount of variance with Openness, as shown by Becker (2004).

Saucier and Skrzypinska (2006) employed a large battery of personality measures to distinguish *subjective spirituality* from *tradition-oriented religiousness*. With respect to correlations with these measures, both orientations differed markedly. Among the broad personality dispositions that were assessed, traditional religiosity related positively to Agreeableness (NEO-PI-R,  $r = .29$ ) and negatively to Openness to Experience (NEO-PI-R,  $r = -.26$ ). Subjective spirituality was positively associated with both Openness to Experience ( $r = .40$ ) and Extraversion (NEO-PI-R,  $r = .20$ ).

Henningsgaard and Arnau (2008) used the Big Five to predict spiritual meaning as well as intrinsic, extrinsic and quest religiosity. In multiple regression analyses, Conscientiousness was the only significant predictor of spiritual meaning ( $R^2 = .10$ ). Intrinsic religiosity was predicted by Conscientiousness and Agreeableness ( $R^2 = .08$ ), quest by Neuroticism, Openness, and low Conscientiousness ( $R^2 = .08$ ). No variance in extrinsic religiosity could be accounted for by the Big Five personality dispositions.

In a first meta-analysis, Saroglou (2002) found *intrinsic religiosity* to be related to Extraversion, Agreeableness, and Conscientiousness. *Open, mature religion and spirituality*, too, was associated with these three dispositions; it was also positively associated with Openness and negatively associated with Neuroticism. *Extrinsic religiosity* was positively related to Neuroticism. In a later meta-analysis, covering studies from 1999 to 2009, Saroglou (2010) summa-

rized personality correlates of three religious dimensions, *personal religiosity*, *spirituality/mature faith*, and *religious fundamentalism*. Personality variables were restricted to the Big Five personality traits. All three dimensions were significantly, although modestly, related with Agreeableness ( $.13 < r > .21$ ) and Conscientiousness ( $.12 < r > .16$ ). Spirituality/mature faith showed an additional positive relationship with Extraversion ( $r = .14$ ) and Openness ( $r = .18$ ), while religious fundamentalism was negatively related to Openness ( $r = -.21$ ).

### *Characteristic Adaptations*

As aspects of human individuality that speak to motivational, social-cognitive and developmental concerns (McAdams & Pals, 2006), both religiosity and spirituality can be considered characteristic adaptations (Saroglou, 2010; Schnell & Becker, 2007). Situated between general traits and specific behaviour, religiosity and spirituality lean towards the 'doing' side of personality, in contrast to the 'having' side, as represented by dispositional traits (cf. Cantor, 1990). Whereas traits like Neuroticism or Agreeableness shape our perception and action on basic levels, unintentionally or even against our will, religiosity and spirituality demand to be acted out. Religious/spiritual lives without practice, without inner experience, might remain nominal and, probably, empty.

As characteristic adaptations, both religiosity and spirituality are expected to be, to some extent, influenced by personality dispositions. In line with these, we are inclined to either turn towards external encouragement and stimulation, or to find the richness of the world in a book, or contemplation; to search for idiosyncratic ways of relating to an absolute, or to value tradition; to find succour in closely knit religious communities, or to become absorbed in private meditation. But, over and above these dispositions, religiosity and spirituality are hypothesized to interact with other characteristic adaptations, such as values, goals, and sources of meaning. As concepts situated on the 'doing' side of personality, and thus being essentially contextualized and cognitively and experientially mediated, associations between religiosity/spirituality and characteristic adaptations should even exceed those with personality dispositions.

In their 2008 study, Saroglou and Munoz-Garcia simultaneously investigated personality dispositions and values in relation to religion and spirituality. With the intention to determine which of both better predicts individual approaches to transcendence, they conducted hierarchic multiple regressions with (a) values entered in the first step and personality factors in the second step, and (b) personality traits entered first, followed by values. Among the

religion measures, they distinguished between classic religiosity (importance of God, importance of religion in life, frequency of prayer), emotional religion (interest in emotional—relational, community, meaning, and personal experience aspects), and spirituality (one item: importance of spirituality in life). All three measures were significantly predicted by values. Inclusion of personality factors did not increase the variance explained. When entered first, personality factors explained 11% of variance in classic religiosity, 12% of variance in emotional religion and 7% of variance in spirituality, but additional inclusion of values resulted in a substantial increase of explained variance (to 25%, 23% and 13%, resp.). The authors concluded that values, as characteristic adaptations, account for unique variance and predict specific dimensions of religion better than personality traits do.

Summarizing the reported findings, the following associations between personality and religiosity/spirituality appear as substantiated: *religiosity*, and spiritual approaches to transcendence characterized by an affinity to religiosity, are more probable among individuals who are agreeable and conscientious. *Spirituality* is also related to these two dispositions, but it is additionally associated with Openness and, maybe, Extraversion. While Saroglou (2002) reported *negative* correlations between spirituality and Neuroticism, Maltby and Day (2001a) found a *positive* correlation between external/ritual spirituality and Neuroticism. Henningsgaard and Arnau (2008) established a *positive* correlation between *quest* and Neuroticism, along with Openness and low Conscientiousness. Altogether, correlations are modest. Personality traits on a dispositional level overlap only moderately with religiosity and spirituality. Considerably more overlap is found when relating religiosity and spirituality to characteristic adaptations.

## The Study

The aim of the present study is threefold: first, to replicate and supplement findings on associations between personality and self-ratings of religiosity/spirituality in a sample of young adults from Western Europe; second, to compare personality dispositions and sources of meaning (as characteristic adaptations) regarding their power to uniquely predict self-ratings of religiosity and spirituality; and, third, to empirically distinguish two types of self-description, *religious-and-spiritual* and *spiritual-but-not-religious*, on the basis of personality traits.



Drawing on the above results, analyses are guided by the following hypotheses and expectations: substantiated findings concerning the link between religiosity/spirituality and personality dispositions—as summarized above—should be replicable in the sample at hand.

As characteristic adaptations, *sources of meaning* should also show substantial correlations with self-rated religiosity and spirituality. Representing a trait-based, but cognitively and motivationally moderated way of orienting oneself in this world, these commitments should establish stronger relationships with religiosity and spirituality than the Big Five traits. Since no previously published findings on the connection between sources of meaning and religiosity/spirituality are available, explorative analyses will clarify the ways they relate to each other.

When individuals are classified as *religious-and-spiritual* or *spiritual-but-not-religious* according to their self-ratings of religiosity and spirituality, the latter are hypothesized to report higher values in Openness than the former. Furthermore, the inconsistency in findings regarding the relationship between spirituality and Neuroticism is hypothetically attributed to the existence of different types of spirituality. For many authors, spirituality is characterized by a *search* (for meaning, happiness, the true self, etc.; cf. Bucher, 2007; Wulff, 1997). This aspect is probably less central among spiritual individuals who relate their world-view to a religious tradition (the *religious-and-spiritual*). Among the *spiritual-but-not-religious*, however, the *quest* dimension can be expected to be much more prominent. And it is probably hard to satisfy in a culture that provides strong ‘plausibility structures’ (Berger) for religious, but not for non-religious, spiritual approaches to transcendence. As has been found for the *quest* orientation (Henningsgaard & Arnau, 2008), a *spiritual-but-not-religious* approach is thus expected to be positively related to Neuroticism—in contrast to a *religious-and-spiritual* approach.

## Method

### *Measures*

#### *Religiosity and Spirituality*

Two one-item measures assess self-ratings of religiosity and spirituality.

- (1) “According to your personal definition of religiosity, how religious would you say you are?” (Response format 0–5)

In order to prevent people from rating their religious 'orthodoxy', they are asked to rate their 'personal' religiosity.

- (2) "How spiritual would you say you are (spirituality = belief in the supernatural)?" (Response format 0-5)

In order to avoid covering overly heterogeneous understandings of spirituality, a qualification ('belief in the supernatural') is added. The item thus measures a *vertically transcendent* spirituality. For better discrimination of religiosity and spirituality, the chosen terminology suggests a non-religious transcendent reality.

Ratings are dichotomized ( $< / \geq 3$ ) for categorization purposes. In accordance with their ratings of religiosity and spirituality, individuals are classified as (a) *religious-and-spiritual*, (b) *religious-but-not-spiritual*, (c) *spiritual-but-not-religious*, and (d) *neither-religious-nor-spiritual (secular)*.

#### *Personality Dispositions*

The NEO Personality Inventory Revised (NEO-PI-R, German version; Ostendorf & Angleitner, 2004) is employed to measure the Big Five on both factor and facet levels. Internal consistency is  $\alpha = .92$  for Neuroticism (facets from .60 to .84),  $\alpha = .88$  for Extraversion (facets from .52 to .83),  $\alpha = .89$  for Openness (facets from .53 to .78),  $\alpha = .87$  for Agreeableness (facets from .58 to .77), and  $\alpha = .91$  for Conscientiousness (facets from .63 to .86).

#### *Characteristic Adaptations*

The Sources of Meaning and Meaning in Life Questionnaire (SoMe; Schnell, 2009ab; Schnell & Becker, 2007) is a 151-item inventory that provides a dimensional measurement of 26 sources of meaning and an assessment of degrees of experienced meaningfulness and crisis of meaning. As characteristic adaptations of broad personality dispositions (Schnell & Becker, 2006), sources of meaning fuel every-day cognition, behaviour, and emotion. They motivate commitment, give direction and significance to different areas of life (Schnell, 2009ab; Ryff & Singer, 1998; Wong, 1998). Although mostly subconscious, sources of meaning are accessible to consciousness and can be reflected upon (Schnell, 2009ab; Leontiev, 2007; Schnell & Becker, 2007). *Sources of meaning* scales quantify the degree of realization for each of the 26 orientations. Orthogonal as well as oblique factor analyses suggest a summary of these by four dimensions.

1. *Self-Transcendence*: Commitment to objectives beyond one's immediate needs. Supported by factor-analysis of its items, the first dimension is divided into two sub-dimensions for further relevant differentiation;
  - 1a. *Vertical Self-Transcendence*: Orientation towards an immaterial, cosmic power (comprising the two scales *Explicit Religiosity* (measuring a classical understanding of religiosity, operationalized by faith, prayer, and the role of religion in life) and *Spirituality* (measuring a non-orthodox approach to transcendence, operationalized by relating to a reality beyond the known, sacredness, and fate));
  - 1b. *Horizontal Self-Transcendence*: Taking responsibility for (worldly) affairs beyond one's immediate concerns;
2. *Self-Actualization*: Employing, challenging, and fostering one's capacities;
3. *Order*: Holding on to values, practicality, decency, and the tried and tested;
4. *Well-Being and Relatedness*: Cultivating and enjoying life's pleasures in privacy and company.

In the present study, the SoMe is employed to assess 26 sources of meaning, among them *Explicit Religiosity* and *Spirituality*, on factor and facet levels. Internal consistency is  $\alpha = .84$  for *Vertical Self-Transcendence* (facets from .77 to .93);  $\alpha = .92$  for *Horizontal Self-Transcendence* (facets from .76 to .92);  $\alpha = .93$  for *Self-Actualization* (facets from .68 to .91);  $\alpha = .86$  for *Order* (facets from .65 to .78), and  $\alpha = .89$  for *Well-Being and Relatedness* (facets from .63 to .83). Mean inter-correlation of the 26 sources of meaning is .25; mean inter-correlation of the five dimensions is .30.

## The Sample

Two-hundred first-year students visiting an introductory psychology lecture were invited to participate in the present study. They were given a paper-and-pencil questionnaire set to complete and return within one week's time. Neither course credits nor other incentives were given for participation. Altogether, 135 completed questionnaire sets were returned (response rate = 68%). No univariate outliers were detected; two cases were identified as multivariate outliers and thus deleted. The majority (85%) of the sample is female. Age ranges from 18 to 45 years ( $M = 21$ ,  $SD = 4$ ). Of the sample, 63% are single, 36% are

partnered or married. The sample size is in line with requirements for an ideal ratio of cases to independent variables when carrying out a multiple regression. According to Green (1991), this amounts to  $N \geq 50 + 8m$  ( $m$  = number of independent variables) for testing a multiple correlation,  $N \geq 104 + m$  for testing individual predictors, and the higher  $N$  of both when testing the overall correlation and individual independent variables, when the dependent variable is normally distributed (cf. Tabachnick & Fidell, 2007). The required sample size of  $N = 122$  is exceeded by the actual  $N$  of 133.

## Results

### *Personality and Self-Ratings of Religiosity and Spirituality*

Table 1 shows correlations of self-rated religiosity and spirituality with the Big Five personality traits, on factor and facet levels. As has been expected, self-rated religiosity is positively related to Agreeableness and Conscientiousness. Several correlations between Extraversion facets and religiosity are established, albeit not on the factor level: Warmth and Positive Emotions are positively related, while Excitement-Seeking shows a negative correlation with self-rated religiosity. Expected relationships between self-rated spirituality and Agreeableness, Openness and Extraversion are established, but not with Conscientiousness—neither on factor nor facet levels. Moreover, Neuroticism is negatively linked with self-rated religiosity although not at all correlated with spirituality. Neither sex nor age is related to self-rated religiosity and spirituality.

In Table 2, correlations between self-rated religiosity and spirituality and sources of meaning are displayed, both on factor and facet levels. (Because, in this case, correlational analyses are carried out exploratively, significance levels are adjusted for alpha ( $\alpha$ ) error. Correlations with significance levels falling below the adjusted cut-off values will not be interpreted.) Self-rated religiosity and spirituality are most closely linked to Vertical Self-Transcendence, a factor representing Explicit Religiosity and Spirituality. While the Explicit Religiosity scale is strongly correlated with self-rated religiosity and significantly less so with self-rated spirituality, the Spirituality scale shows the reverse correlational pattern.

Both self-rated religiosity and spirituality are also substantially related to facets of Horizontal Self-Transcendence. Moreover, self-rated spirituality shows moderate associations with Well-Being and Relatedness on the factor

Table 1. Correlations between Self-Rated Religiosity/Spirituality, Big Five Factors and Facets, Sex and Age

	Self-Rated Religiosity	Self-Rated Spirituality
Neuroticism	-.27**	-.05
<i>Anxiety</i>	-.22**	-.03
<i>Angry Hostility</i>	-.30**	-.08
<i>Depression</i>	-.19*	.01
<i>Self-Consciousness</i>	-.25**	-.03
<i>Impulsiveness</i>	-.20*	-.02
<i>Vulnerability</i>	-.11	-.10
Extraversion	.11	.21**
<i>Warmth</i>	.18*	.14
<i>Gregariousness</i>	.06	.08
<i>Assertiveness</i>	.12	.13
<i>Activity</i>	-.07	.12
<i>Excitement-Seeking</i>	-.24**	.03
<i>Positive Emotions</i>	.22**	.25**
Openness	.11	.32**
<i>Fantasy</i>	-.02	.17*
<i>Aesthetics</i>	.14	.29**
<i>Feelings</i>	.15*	.26**
<i>Actions</i>	.14	.21**
<i>Ideas</i>	.10	.32**
<i>Values</i>	-.08	.05
Agreeableness	.34**	.24**
<i>Trust</i>	.31**	.20**
<i>Straightforwardness</i>	.19*	.14
<i>Altruism</i>	.30**	.24**
<i>Compliance</i>	.19*	.05
<i>Modesty</i>	.12	.01
<i>Tender-Mindedness</i>	.26**	.39**
Conscientiousness	.15*	.01
<i>Competence</i>	.19*	.14
<i>Order</i>	.07	-.05
<i>Dutifulness</i>	.14	.04
<i>Achievement Striving</i>	.14	.11
<i>Self-Discipline</i>	.11	-.03
<i>Deliberation</i>	.04	-.11
Sex	.06	.04
Age	.12	.05

\* =  $p < .05$  (one-tailed).\*\* =  $p < .01$  (one-tailed).

Table 2. Correlations between Self-rated Religiosity/Spirituality and Sources of Meaning Factors and Facets

	Self-Rated Religiosity	Self-Rated Spirituality
Vertical Self-Transcendence	<b>.68**</b>	<b>.69**</b>
<i>Explicit Religiosity</i>	<b>.75**</b>	<b>.47**</b>
<i>Spirituality</i>	<b>.35**</b>	<b>.78**</b>
Horizontal Self-Transcendence	<b>.39**</b>	<b>.41**</b>
<i>Generativity</i>	<b>.27**</b>	<b>.42**</b>
<i>Unison with Nature</i>	<b>.35**</b>	<b>.32**</b>
<i>Social Commitment</i>	.20*	<b>.31**</b>
<i>Health</i>	<b>.41**</b>	.17
<i>Self-Knowledge</i>	.17*	<b>.33**</b>
Self-Actualization	-.06	.16
<i>Individualism</i>	-.07	.13
<i>Challenge</i>	-.10	.14
<i>Development</i>	.02	.12
<i>Power</i>	-.15	.00
<i>Freedom</i>	-.09	.10
<i>Creativity</i>	.12	<b>.28**</b>
<i>Knowledge</i>	.04	.17
<i>Achievement</i>	-.10	-.06
Order	.13	.05
<i>Tradition</i>	.14	.09
<i>Morality</i>	.14	.11
<i>Practicality</i>	-.03	-.01
<i>Reason</i>	.14	-.02
Well-Being and Relatedness	.16	<b>.26**</b>
<i>Community</i>	.08	.13
<i>Fun</i>	.01	.08
<i>Love</i>	.04	.13
<i>Harmony</i>	<b>.25**</b>	<b>.30**</b>
<i>Comfort</i>	.01	.05
<i>Attentiveness</i>	.20*	<b>.32**</b>
<i>Care</i>	.17	<b>.24**</b>

\* =  $p < .05$  (two-tailed).\*\* =  $p < .01$  (two-tailed). **Bold:** significant after adjustment for alpha ( $\alpha$ ) error.

level, and Attentiveness and Harmony as specific facets. It is additionally linked to Creativity (Self-actualization).

*Personality Dispositions and Sources of Meaning as Predictors of Self-Rated Religiosity/Spirituality*

As characteristic adaptations, sources of meaning are expected to be better predictors of self-rated religiosity and spirituality than personality dispositions. In order to determine unique variance predicted by dispositions and characteristic adaptations, two times two series of hierarchical multiple regressions are performed (cf. Saroglou & Munoz-Garcia, 2008; Roccas et al., 2002). Multicollinearity diagnostics have been carried out; no multicollinearity is evident. In the first series, self-rated religiosity is predicted by entering the Big Five first, and, in a second step, by additionally entering the four sources of meaning dimensions (without Vertical Self-Transcendence). Increase in  $R^2$  indicates unique variance attributable to sources of meaning over and above personality dispositions (see Table 3). In the second series, sources of meaning dimensions are entered first, followed by the Big Five in a second step. Here, increase in  $R^2$  indicates unique variance attributable to personality dispositions over and above the sources of meaning.

Personality dispositions account for 16% of variance in self-rated religiosity. After entering the sources of meaning subsequently, another 16% of variance are explained, with 32% of variance explained altogether by both sets of predictors. When sources of meaning are entered first, they account for 24% of variance in self-rated religiosity; subsequent entry of the Big Five increases the amount of explained variance by an additional 8%. Considering all predictors simultaneously and thus allowing for inter-correlation, self-rated religiosity is negatively predicted by Neuroticism and Self-Actualization, and positively predicted by Horizontal Self-Transcendence.

In self-rated spirituality, less variance is explained, and the predictors follow different lines. When entered first, personality dispositions account for 15% of variance; sources of meaning dimensions account for an additional 9% (see Table 4). Reversing the sequence reveals that personality dispositions have no incremental value in the prediction of self-rated spirituality. In a first step, sources of meaning account for 20% of variance. Subsequent inclusion of the Big Five only adds another 4% of explained variance (n.s.). Considering all independent variables simultaneously, Horizontal Self-Transcendence appears as the only significant predictor of self-rated spirituality.

Table 3. Hierarchical Multiple Regressions to Predict Self-Rated Religiosity with (a) Big Five Entered First, (b) Sources of Meaning Entered First

<b>DV: Self-rated religiosity</b>	$\beta$	$p$	$R^2 (p)$	Increase in $R^2 (p)$
(a) Big Five entered first				
Step 1 Neuroticism	-.18	n.s.		
Extraversion	-.01	n.s.		
Openness	.06	n.s.		
Agreeableness	.30	.001		
Conscientiousness	.07	n.s.	.16 (.001)	
Step 2 Neuroticism	-.26	.006		
Extraversion	.06	n.s.		
Openness	.03	n.s.		
Agreeableness	.09	n.s.		
Conscientiousness	-.05	n.s.		
Horizontal Self-Transcendence	.50	.001		
Self-Actualization	-.34	.001		
Order	.06	n.s.		
Well-Being and Relatedness	.00	n.s.	.32 (.001)	.16 (.001)
(b) Sources of meaning entered first				
Step 1 Horizontal Self-Transcendence	.52	.001		
Self-Actualization	-.35	.001		
Order	.02	n.s.		
Well-Being and Relatedness	.10	n.s.	.24 (.001)	
Step 2 Horizontal Self-Transcendence	.50	.001		
Self-Actualization	-.34	.006		
Order	.06	n.s.		
Well-Being and Relatedness	.00	n.s.		
Neuroticism	-.26	.006		
Extraversion	.06	n.s.		
Openness	.03	n.s.		
Agreeableness	.09	n.s.		
Conscientiousness	-.05	n.s.	.32 (.001)	.08 (.01)



Table 4. Hierarchical Multiple Regressions to Predict Self-rated Spirituality with (a) Big Five Entered First, (b) Sources of Meaning Entered First

<b>DV: Self-Rated Spirituality</b>		$\beta$	$p$	$R^2$ ( $p$ )	Increase in $R^2$ ( $p$ )
(a) Big Five entered first					
Step 1	Neuroticism	.04	n.s.		
	Extraversion	.12	n.s.		
	Openness	.26	.003		
	Agreeableness	.20	.03		
	Conscientiousness	.02	n.s.	.15 (.001)	
Step 2	Neuroticism	-.01	n.s.		
	Extraversion	.15	n.s.		
	Openness	.17	n.s.		
	Agreeableness	.07	n.s.		
	Conscientiousness	-.09	n.s.		
	Horizontal Self-Transcendence	.38	.001		
	Self-Actualization	-.12	n.s.		
	Order	.03	n.s.		
	Well-Being and Relatedness	.02	n.s.	.25 (.001)	.09 (.007)
(b) Sources of meaning entered first					
Step 1	Horizontal Self-Transcendence	.42	.001		
	Self-Actualization	-.10	n.s.		
	Order	-.12	n.s.		
	Well-Being and Relatedness	.20	.03	.20 (.001)	
Step 2	Horizontal Self-Transcendence	.38	.001		
	Self-Actualization	-.12	n.s.		
	Order	.03	n.s.		
	Well-Being and Relatedness	.02	n.s.		
	Neuroticism	-.01	n.s.		
	Extraversion	.15	n.s.		
	Openness	.17	n.s.		
	Agreeableness	.07	n.s.		
	Conscientiousness	-.09	n.s.	.25 (.001)	.04 (n.s.)

*Distinguishing the Religious-and-Spiritual from the Spiritual-but-not-Religious*

With the aim to distinguish two types of spirituality, study participants are classified according to their self-ratings of religiosity and spirituality. By dichotomizing and relating both ratings to each other, four categories are obtained: *religious-and-spiritual*, *religious-but-not-spiritual*, *spiritual-but-not-religious*, and *neither-religious-nor-spiritual* (*secular*). In the sample at hand, the distribution is as follows: 30% religious-and-spiritual, 22% spiritual-but-not-religious, 7% religious-but-not-spiritual, and 41% secular. As set out in the Introduction, the first two categories seem to represent noteworthy trends observable in Western societies. The third category—*religious-but-not-spiritual*—has not been interpreted on the basis of empirical data, yet. In some studies, it is not even presented as a viable option (e.g., Princeton Religious Research Center, 2000; Roof, 1993). Marler and Hadaway (2002, p. 297) suggest viewing it as a reaction against popular perceptions of spirituality, or an inability to talk about religiousness and spirituality apart from one another. Because the number of individuals classified as *religious-but-not-spiritual* is very small in the present sample ( $N = 9$ )—as it is in several other surveys (e.g., Scott, 2001; Zinnbauer et al., 1997)—it is not included in further analyses.

The *spiritual-but-not-religious* have been hypothesized to show higher degrees of Openness and Neuroticism than the *religious-and-spiritual*. Table 5 displays results of two multivariate analyses of variance. Both spirituality types can be distinguished on the basis of the Big Five personality traits ( $F(5, 63) = 3.21, p = .01, \eta^2 = .20$ ): the *spiritual-but-not-religious* appear as more neurotic and less agreeable—but they are *not* more open than the *religious-and-spiritual*. Subsequent analyses on facet level show that, with regard to Neuroticism, the *spiritual-but-not-religious* report higher levels of Angry Hostility, Self-Consciousness, Depression, and Anxiety. With respect to facets of Agreeableness, the *religious-and-spiritual* are shown to be more trusting as well as altruistic.

The two types of spirituality can also be distinguished by the sources of meaning they are committed to ( $F(5, 63) = 7.13, p < .001, \eta^2 = .36$ ). This difference is confined to the dimension of Vertical Self-Transcendence, however. It is closely related to the self-identification as religious or not religious, with the *religious-and-spiritual* reporting higher values in Explicit Religiosity than the *spiritual-but-not-religious*.

Table 5. Mean Values, Standard Deviations, Significance Levels and Effect Sizes for between-Subjects Effects in Analyses of Variance Comparing Two Types of Spirituality

	<b>Religious-and- spiritual</b> <i>M</i> (SD)	<b>Spiritual-but- not-religious</b> <i>M</i> (SD)	<i>p</i>	$\eta^2$
Personality dispositions (Big Five)				
Neuroticism	81 (23)	101 (29)	.002	.13
<i>Anxiety</i>	14 (6)	19 (7)	.005	.11
<i>Angry Hostility</i>	12 (4)	16 (6)	.002	.14
<i>Depression</i>	11 (5)	15 (7)	.003	.12
<i>Self-Consciousness</i>	15 (5)	18 (5)	.002	.13
<i>Impulsiveness</i>	18 (6)	19 (5)	n.s.	.03
<i>Vulnerability</i>	12 (5)	14 (6)	n.s.	.02
Extraversion	124 (20)	125 (19)	n.s.	.00
Openness	133 (21)	133 (15)	n.s.	.00
Agreeableness	126 (16)	113 (20)	.02	.11
<i>Trust</i>	22 (4)	19 (5)	.004	.12
<i>Straightforwardness</i>	20 (4)	18 (5)	n.s.	.05
<i>Altruism</i>	26 (4)	23 (5)	.004	.12
<i>Compliance</i>	17 (6)	15 (5)	n.s.	.04
<i>Modesty</i>	17 (4)	17 (5)	n.s.	.00
<i>Tender-Mindedness</i>	24 (3)	23 (3)	n.s.	.02
Conscientiousness	116 (21)	112 (22)	n.s.	.01
Characteristic adaptations (sources of meaning)				
Vertical Self-Transcendence	3.17 (1.04)	2.05 (0.71)	.001	.28
<i>Explicit Religiosity</i>	2.91 (1.52)	0.74 (1.03)	.000	.40
<i>Spirituality</i>	3.45 (0.88)	3.36 (0.71)	n.s.	.00
Horizontal Self-Transcendence	3.38 (0.65)	3.17 (0.57)	n.s.	.03
Self-Actualization	3.23 (0.51)	3.38 (0.61)	n.s.	.02
Order	2.89 (0.60)	2.95 (0.71)	n.s.	.00
Well-Being and Relatedness	3.67 (0.52)	3.73 (0.47)	n.s.	.00

## Discussion

In the ongoing discourse on spirituality, clarity about the concept is still some way off. Theoretically, two noteworthy readings of spirituality appear as discernible: spirituality in a religious context (or: spirituality as religion) and

spirituality distanced from religion. Instead of arguing which of these conceptualizations is more adequate, the present paper proposes to acknowledge both as viable approaches toward transcendence. With this in mind, motivating factors and related constructs can be systematically explored in order to add to our understanding of these recent, complex and still obscure world-views. Anchoring both types of spirituality in an integrative model of personality is a fruitful means toward this aim.

In the study at hand, this has been done by employing a three-step design. In a first step, self-ratings of religiosity and spirituality have been looked at independently of each other, by correlating them with personality dispositions and sources of meaning:

### *Self-Rated Religiosity and Spirituality in Relation to Personality Dispositions and Sources of Meaning*

#### *Personality Dispositions and Self-Rated Religiosity*

As had been hypothesized on the basis of previous findings, self-rated religiosity is positively related to Agreeableness and Conscientiousness on the factor level. All Agreeableness facets apart from Modesty show positive correlations with religiosity—as it was also the case in a meta-analysis of four studies carried out by Saroglou (2010). In contrast to Saroglou (2010) and Saroglou and Munoz-Garcia (2008), Competence is the only facet of Conscientiousness that establishes a significant relationship with religiosity. The substantial effect sizes of the correlation coefficients for Achievement Striving, Dutifulness and Self-Discipline, however, suggest that the non-significant results can be attributed to the sample size.

Extraversion facets show conflicting links with self-rated religiosity: Warmth and Positive Emotions are positively, Excitement-Seeking is negatively related to religiosity. Such within-factor inconsistencies have already been documented in the literature (e.g., Saroglou & Munoz-Garcia, 2008; Hills et al., 2004). Saroglou and Munoz-Garcia (2008, p. 85) emphasize the importance of analyzing personality traits on facet level when religiosity and spirituality are at issue. With regard to Extraversion, they note, “there is no reason to hypothesize that religious people, at least today, are high or low in *gregariousness* or *activity*. [...] There is, however, reason to hypothesize that religious people, as low in impulsiveness (Francis, 1992), may be low in *excitement seeking*, an E facet in the NEO-PI-R that also constitutes one aspect of impulsiveness”. Although not substantiated by Saroglou and Munoz-Garcia’s findings, their hypothesis is supported by Saroglou’s small meta-analysis (2010) and by

the data at hand. Also the link between Warmth and religiosity can be interpreted in line with Saroglou and Munoz-Garcia (2008), who explain it by the overlap of Warmth and Agreeableness. Moreover, self-rated religiosity is negatively linked with Neuroticism, on factor and, consistently so, also on facet level. This might indicate that the employed self-rating of religiosity—“according to the personal definition” (see above under *Measures*)—comes close to a measurement of “open, mature religion and spirituality”—the only orientation that has repeatedly been found to relate negatively to Neuroticism (cf. Saroglou, 2002).

#### *Personality Dispositions and Self-Rated Spirituality*

Expected relationships between self-rated spirituality and Agreeableness, Openness and Extraversion have been established. Although reported by Henningsgaard and Arnau (2008), Saroglou (2010, 2002) and Saroglou and Munoz-Garcia (2008), no associations between spirituality and Conscientiousness were found in the present study, neither on factor nor facet levels. This might be explained by the operationalizations of spirituality that have been employed in the various studies. Henningsgaard and Arnau assessed ‘spiritual meaning’; in his meta-analyses, Saroglou summarised measures he interprets as ‘spirituality/mature faith’, and Saroglou and Munoz-Garcia used one item to measure the ‘importance of spirituality in life’. All of these operationalizations are more integrative than the ‘belief in the supernatural’ assessed in the present study. They allow for a religious interpretation of spirituality, whereas the phrasing as ‘belief in the supernatural’ suggests a non-religious transcendence. Relationships between spirituality and Conscientiousness, as they have been reported, might thus be attributed to an assessment of spirituality with an inherent religious component.

Among the facets of Agreeableness, spirituality is significantly related to Tender-Mindedness, Altruism and Trust; among the facets of Extraversion, there is only a systematic disposition for Positive Emotions. Openness, however, appears as fundamentally close to spirituality, on factor and facet level. A high openness for ideas, aesthetics and feelings is evident. Other than religiosity, self-rated spirituality is not linked to Neuroticism, at all. This finding might be interpreted as resulting from two types of spirituality confounded in the measure.

#### *Sources of Meaning and Self-Rated Religiosity*

Self-rated religiosity shares a lot of variance with Vertical Self-Transcendence, represented by two facets, Explicit Religiosity and Spirituality. The fact that

self-rated religiosity is very strongly ( $r = .75$ ) linked to Explicit Religiosity, assessing the importance of faith, prayer, and the role of religion in life, and much less strongly ( $r = .35$ ) to Spirituality, assessing the centrality of a reality beyond the known, sacredness, and fate, gives insight into subjective conceptualisations of religiosity. These seem to be well represented by attributes such as faith and prayer, and much less so by broader terms like sacredness and fate. Self-rated religiosity is also substantially associated with acts and attitudes of transcending *within* this world, as corroborated by correlations with several facets of Horizontal Self-Transcendence. Commitments to Health and Unison with Nature are particularly strong.

#### *Sources of Meaning and Self-Rated Spirituality*

The correlation pattern between self-rated spirituality and Vertical Self-Transcendence is reverse to that of self-rated religiosity:  $r = .78$  for Spirituality, and  $r = .47$  for Explicit Religiosity. Subjective theories of spirituality are thus apparently well represented by concepts like a ‘reality beyond the known’, sacredness, and fate, and much less so by concepts of faith, prayer, and religion. Self-rated spirituality is also strongly associated with Horizontal Self-Transcendence: Generativity, Self-Knowledge, Unison with Nature, and Social Commitment establish significant overlap with spirituality. The Well-Being and Relatedness factors as a whole, and Attentiveness and Harmony in particular, also appear as relevant for self-rated spirituality. So does the Creativity facet (Self-Actualization). A mindful, caring, and imaginative attitude towards life, the data suggest, is quite common among people who describe themselves as spiritual, but not among those who self-describe as religious.

*Summarizing and contrasting* correlational profiles of self-rated religiosity and spirituality, the contemporary young person who self-describes as highly *religious* appears as a friendly, pleasant, helpful, trusting, and warm individual. She is reliable and strives for success through skilfulness. Risk-taking tends to be avoided. Emotionally, the self-described religious person is stable and rather confident. Religion plays a major role in her life; prayer and faith are experienced as sources of strength. Moreover, she is committed to a healthy life-style, aims to live in unison with nature, and to do or create things of lasting value.

A self-description as *spiritual* is linked to partly different personality characteristics. A highly spiritual person today is tender-minded and unselfish. Rooted in an optimistic, positive outlook on life, she is ready for new ideas, aesthetics, and feelings. The spiritually dedicated individual feels connected to a reality beyond the known. She believes in fate and miracles. There are things

in her life she considers sacred. She is striving to do or create things of lasting value, to live in unison with nature and to support social justice. Self-knowledge, the exploration of one's strengths and weaknesses, appears as vital in the context of a spiritual life. It is accompanied by a commitment to live imaginatively and mindfully, and to create a harmonious relationship with others and the environment. Zero-correlations with Neuroticism indicate that this might be done in an emotionally stable and confident way, or it might be accompanied by self-consciousness, insecurity and despair (see also below).

#### *Personality Dispositions and Sources of Meaning as Simultaneous Predictors of Self-Rated Religiosity and Spirituality*

In a second step, predictive power of personality dispositions and characteristic adaptations has been established by hierarchical regression analyses. As had been expected, the total of unique variance accounted for by sources of meaning is considerably higher than that explained by the Big Five. It amounts to 16% for self-rated religiosity, and 9% for self-rated spirituality (unique variance explained by the Big Five is 8% and 4%, resp.). Altogether, 32% of variance in self-rated religiosity and 25% in self-rated spirituality can be explained.

When all predictors are considered simultaneously, Neuroticism and Self-Actualization are established as negative predictors, and Horizontal Self-Transcendence as positive predictor of self-rated religiosity. The image of the contemporary young religionist is thus sharpened by accentuating emotional stability, responsibility for (worldly) affairs beyond one's immediate concerns, and little interest in employing, challenging and fostering one's own capacities.

Self-rated spirituality appears as rather independent of personality dispositions and other sources of meaning: Horizontal Self-Transcendence is the only significant predictor when all independent variables are considered simultaneously. More than with any personality dispositions or other commitments, self-rated spirituality is thus associated with an inclination toward self-transcendence, both immanent and supernatural.

#### *Religious-and-Spiritual and Spiritual-but-not-Religious: Comparing Two Types of Spirituality*

In the third and last step, participants classified as *religious-and-spiritual* or *spiritual-but-not-religious* have been distinguished on the basis of personality dispositions and sources of meaning. Contrary to the expectation, the *spiritual-but-not-religious* are not more open than the *religious-and-spiritual*. However, with a mean of  $M = 133$ , both types show a very high Openness compared to

the general population ( $M = 113$ ,  $SD = 19$ ; Ostendorf & Angleitner, 2003). Therefore, the often reported link between spirituality and Openness is not conditional on detachment from religiosity. Instead, the presence of spirituality—accompanied by religiosity or not—seems to indicate a desire for new experiences, creativity and intellectual autonomy. In combination with spirituality, religiosity does not impede this thirst for the novel and innovative.

Although not hypothesized, the *spiritual-but-not-religious* are found to be less agreeable than the *religious-and-spiritual*, though not less agreeable than the general population ( $M = 115$ ,  $SD = 19$ ). In particular, the *religious-and-spiritual* are more altruistic and trusting than the *spiritual-but-not-religious*. This might be attributed to the Christian tradition which specifically advocates both unselfishness (e.g., Acts 20:35; Matthew 5:40–42) and trust (e.g., Psalm 20:7; Isaiah 12:2).

As had been expected, the *spiritual-but-not-religious* are more neurotic than the *religious-and-spiritual*—and also more neurotic than the general population ( $M = 101$ ,  $SD = 29$  vs.  $M = 84$ ,  $SD = 22$ ). They are particularly hostile, self-conscious, depressed, and anxious. As explicated above, the *spiritual-but-not-religious* are assumed to be seekers, while the *religious-and-spiritual* may well have found meaning and solidity in religion. Nevertheless, these high degrees of hostility, sadness, and anxiety seem to go beyond a mere state of exploration and quest. As suggested by Zinnbauer et al. (1997), a detachment from religion might be a consequence of painful experiences with the church, or clergy. Emotional instability may well be a corollary of such experiences, too. If that should be the case, turning towards *spirituality-without-religion* does not seem to give enough support to overcome suffering. Another explanation of high degrees of Neuroticism among the *spiritual-but-not-religious* might lie in a failure to integrate elements of spiritual traditions with one's overall philosophy of life (cf. Schnell, 2008b). The 'spiritual market' is characterized by a surplus of vendors offering services for 'spiritual' coping with everyday life and crises, and assistance for personal growth and fulfilment. All too often, however, these strategies are unrelated to the culture, values and beliefs of those who decide to use them. They are not being integrated into the personal worldview, and thus remain peripheral and, apparently, inefficacious.

When comparing sources of meaning the *religious-and-spiritual* and *spiritual-but-not-religious* are committed to, the key role of religion is again substantiated. Both types of spirituality report similar dedications, but differ only in the importance ascribed to Explicit Religiosity. The connection of personal spirituality to religion thus seems to be crucial for the way spirituality is experienced. A rejection of religion in one's concept of spirituality is, in this



sample of young adults in Western Europe, associated with angry hostility, self-consciousness, depression, and anxiousness. A link to religion seems to strengthen agreeableness, in particular trust and altruism.

### *Limitations and Outlook*

When exploring personality characteristics of self-rated religiosity and spirituality, the selection of constructs cannot be but partial. Even when an integrative model of personality is employed, as by including both personality dispositions and characteristic adaptations, several other constructs can be thought of that might differentiate further between religiosity and spirituality, and the two types of spirituality. The most promising level of analysis, to this endeavour, probably is that of characteristic adaptations. Constructs of particular interest would include coping strategies, cognitive styles, religious education, and faith development.

A further critical point surely is the definition of spirituality. As related above, no definition has yet been agreed upon by a larger community of scholars. The recently introduced definition of spirituality as the 'search for the sacred' (Pargament, 2007; Hill et al., 2000) is overly broad and, therefore, lacks discriminant validity. Spilka et al. (2003) suggest creating theoretical and operational definitions of spirituality that distinguish it from personal religiosity. For that reason, the present study has used a definition that refers to what has been shown to be a common theme in individuals' definition of the concept (i.e., reference to a higher power: Zinnbauer et al., 1997), phrased in non-religious terminology ('belief in the supernatural'). This definition is, of course, contradicting the integrative character of many other conceptualisations and might thus be disputable. With the aim of clearly distinguishing religiosity and spirituality, however, it has been chosen for pragmatic reasons.

Because the sample consists of German-speaking students of psychology, the majority of them female, generalisability of findings is weakened. However, gender differences were examined and no effects detected. The rate of individuals self-describing as secular is rather high in the present sample. As a consequence, the absolute number of individuals categorised as *religious-and-spiritual* and *spiritual-but-not-religious* is relatively small. For further exploration of the two types of spirituality, it might thus be necessary to collect larger sample sizes.

Analyses of self-rated religiosity and spirituality in relation to the Big Five personality traits and sources of meaning have provided a basis for several important findings. The association of religiosity with Agreeableness and

Conscientiousness has been replicated, as well as that between spirituality and Openness. Moreover, both self-rated religiosity and spirituality have been shown to be closely associated with a commitment to Self-Transcendence, vertical *and* horizontal. Additionally, self-rated spirituality is associated with a dedication to Well-Being and Relatedness, and Creativity. In multivariate analyses, sources of meaning were established as explaining considerably more unique variance in religiosity and spirituality than basic personality traits. Therefore, personal convictions appear to be much more important for a person's religiosity or spirituality than behavioural dispositions. In accordance with the assumption that characteristic adaptations are contextualized and, to a certain degree, alterable, developmental aspects demand consideration. How stable are self-attributed religiosity and spirituality? Are they connected to developmental stages, psychosocial or faith-related? Comparisons of age-groups as well as longitudinal studies are urgently needed to clarify these questions.

Last but not least, individual differences between people who are spiritual and religious, and those who are spiritual, but not religious, have substantiated the necessity to take both types of spirituality seriously. The *spiritual-but-not-religious*, in particular, demand further attention. In spite of the positive attributes spirituality is commonly associated with (cf. Schnell & Keenan, in press; Bucher, 2007; Zinnbauer et al., 1997), those in the present sample who are *only* spiritual (and not religious) suffer from insecurity, depression, resentment and anxiety. They are highly open for new experiences, feelings, and aesthetics, but do not dare to trust. For in-depth understanding of this type, analyses of specific non-religious spiritual creeds, rituals, and experiences are needed, along with non-religious spiritual coping strategies.

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