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Meaning-Making in an Atheist World

Tatjana Schnell^{a),*} and William J. F. Keenan^{b),*}

^{a)} Assistant Professor, Institute of Psychology, Innsbruck University,
Innsbruck 6020, Austria
tatjana.schnell@uibk.ac.at

^{b)} Associate Professor of Sociology of Religion and Culture, Liverpool Hope University,
Liverpool, UK
william.keenan@ntu.ac.uk

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Abstract

This article explores atheist meaning-making by employing a multidimensional model of meaning operationalized by the Sources of Meaning and Meaning in Life Questionnaire (SoMe). When compared to a representative sample of “religionists” ($N = 390$) and “nones” ($N = 178$), atheists ($N = 102$) show lower degrees of *meaningfulness*, but they do not suffer from *crises of meaning* more frequently. However, subsequent cluster analysis reveals that heterogeneity within atheism has to be taken into account. Three types of atheists are identified. ‘Low-commitment’ atheists are characterised by generally low commitment; they report very low meaningfulness and a high frequency of crises of meaning. ‘Broad-commitment’ atheists exhibit considerably higher levels of meaningfulness and rare crises of meaning. They evidence, in particular, high scores on the dimension of *well-being and relatedness*. The third type, primarily committed to “selfactualization,” exhibits moderate levels of meaningfulness, with crises of meaning being literally absent. Common to most atheists is a particular commitment to *self-knowledge, freedom, knowledge, individualism, and comfort*. In comparing male and female atheists, gendered patterns of commitment are discovered.

Keywords

atheism, meaning in life, sources of meaning, nonbelief, Sources of Meaning and Meaning in Life Questionnaire (SoMe), crisis of meaning

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Introduction

Atheism has progressed historically from being “something obscene and blasphemous going on under cover of night” (Becker, 1932/2003, p. 75) to the contemporary situation where “between 500 and 750 million humans currently do not believe in God” (Zuckerman, 2007, p. 61). While a general “atheization” surely is some considerable way off, contemporary expressions of an active atheist public presence around such issues as the inclusion of religion in the preamble of the EU constitution (Pickel, 2009), the “atheist bus” campaign (Sims, 2009), the “Brights” movement and the widespread interest in Dawkins’s *The God Delusion*, suggest heightened cultural visibility of the atheism-religion tension. A “new atheism” (Stenger, 2009) propagates a naturalistic philosophy of life (Dennett, 2006) and claims superiority over religious worldviews (Dawkins, 2006). This surging atheism meets distrust, especially in America where being atheist is a stronger impediment to a political career than being Muslim or homosexual (Edgell, Gerteis, & Hartmann, 2006).

Nevertheless, we know little about the actual empirical facts and figures associated with contemporary atheism. In contrast to the resurgent interest in exploration of the intellectual commons shared by religion and science (Keenan & Arweck, 2006)—including, social science itself (Keenan, 2003)—, there has been relatively little sustained social scientific enquiry upon atheism, a fact all the more surprising, perhaps, given the widespread assumption that the social sciences and irreligion, even antireligion, are indivisible soul mates (Coles, 1999; Fenn, 2001).

Stereotypes portray atheists as lacking meaning, morality and experiences of awe (Jenks, 1987). Atheists publicly challenge these prejudices (Harris, 2006); they even claim the possibility of “atheist spirituality” (Comte-Sponville, 2008). But how representative are these positions? Is “nonbelief in the supernatural” indicative of a specific set of worldviews and commitments? Or should we assume, rather, the existence of diverse meaning “subsystems” within religious disaffiliation (Pasquale, 2007; Petts, 2009)? What do we know from the literature, so far?

Findings from Research on Atheism

Empirical surveys of atheism, either in its heyday in the modern period or in its contemporary adjustments to religious vitalisation in late modern society, are prominent by their absence within the literature on belief systems. When

Hunsberger and Altemeyer published results of their study on atheists in the United States in 2006, they claimed it to be the first scientific study of active atheists. Some work had been done previous to Hunsberger and Altemeyer's study, though. Pioneers of the psychology of religion, such as Marianne Beth, had started exploring the "psychology of unbelief" (cf. Belzen, 2010). An early study by Vetter and Green (1932) investigated causes for antireligious attitudes. The Dutch developmental psychologist Rümke (1939) explored stages of belief and unbelief. He linked the latter to an unresolved Oedipus complex, resulting in growth disturbances, one-sided development of intellect and fear of passivity. Campbell (1971) focused on facets of irreligion from a sociological perspective. He considers "irreligion" a specific "attitude of rejection" of religion. It is not simply passive cultural disengagement from religious tradition. Drawing on the satirist Ambrose Bierce's definition of irreligion as "the principal one of the great faiths of the modern world", Campbell finds that the "pure type" of "irreligionist," for whom there is "the rejection of all religions *and of all components of religious phenomena*" (Campbell, 1971, emphasis added), is rare indeed. Irreligion, in this sense, assumes a variety of forms. It ranges from intense privatization and individual retreat to highly organised modes of communal association. It may be that "religious rejection," to employ Weber's category, is less extreme, comprehensive, and homogeneous than the secular modern cultural historical hermeneutic assumes (Keenan, 2009; Schnell & Keenan, 2010).

In 1991, the Centre for the Psychology of Religion in Leuven organised a symposium focusing on the study of belief and unbelief. The organisers, Hutsebaut and Corveleyn (1994), noted the scarcity of research on unbelief. Scobie (1994) disapproved of unbelief being all too often referenced to belief, probably due to the historical hegemony of religious belief and the more cohesive cognitive structure of religious belief systems. Most of the symposium contributions dealt with developmental aspects of "unbelief"—more often than not within a religious frame of reference. Oser, Reich, and Bucher (1994) reported exploratory studies on developmental levels of and paths to atheism that, unfortunately, seem not to have been followed up.

For Beit-Hallahmi (2007, p. 301) existing information about religious believers provides a ready-made body of findings regarding "the psychology of irreligion": "If our findings about the correlates of religiosity make any sense, then atheists should be to some extent the psychological mirror image of highly religious people." However, there are likely to be characteristics of atheists and the atheist milieu that are not picked up by such a broad brush approach. As Bullivant (2008, p. 363) comments: "Studies devised for

exploring religion cannot (for example) reliably be used to investigate its *lack*" (emphasis original).

In their psychological study, Hunsberger and Altemeyer (2006) explicitly focused on atheists—more specifically, members of atheist clubs in the San Francisco Bay area, Alabama, and Idaho. They explored atheists' dogmatism, zealotry, and religious ethnocentrism and compared their values to those of fundamentalist Christians. Active atheists showed higher than anticipated scores in dogmatism, exhibited moderate levels of zealotry, and revealed higher than expected scores in religious ethnocentrism. They might be seen as representatives of a so-called "fundamentalism of enlightenment" (Lieven, 2004)—but the results are hardly generalizable as participants were institutionally-linked atheists from a specific region and particular social background.

Findings from Social Surveys

Large-scale surveys on values and beliefs provide information on the distribution of atheism as well as rudimentary insights into atheists' attitudes. Since the participants in the present study are mainly German, we focus on characteristics of the nonreligious in Germany. According to the International Social Science Programme (ISSP, 2008), 23% of Germans do "not believe in God," with numbers diverging from West (11%) to East Germany (53%). The number of agnostics ("I don't know whether there is a God, don't believe there is a way to find out") amounts to 12%, with a more similar distribution of 12% and 13% for West and East Germany. As reported by the Religion-Monitor (Bertelsmann-Stiftung, 2009), 28% of the German population are "not religious" (63% in the East, 19% in the West).

The European Values Study (EVS, 2010) reports numbers of self-declared atheists. Six percent of the population in West Germany declare themselves "convinced atheists"; in East Germany, 24% do so. An identification as "atheist"—by use of the term—thus results in significantly lower numbers than a deduction of atheism from nonbelief in God or irreligiosity. These empirical findings demonstrate the necessity of conceptual differentiation as suggested above.

An extensive sociological study among Germans (Jörns, 1997) also indicates the need for further differentiation. Jörns describes attributes of individuals who claimed to neither believe in God nor in transcendent beings or powers. Their hierarchy of values is governed by a positivistic epistemology and political interests. Personal identity is equated with political commitment; political

incidents are referred to as those experiences that have impinged on them most. They “believe” in humanity and trust in technical innovation. Any orientation by transcendence is deemed “unscientific,” interpreted as an indicator of psychological limitation or condemned as being outdated. These atheists claim to find meaning in life through work and job satisfaction. They have “no need for salvation”; their understanding of “soul” is merely metaphorical. Interestingly, only 63% of this atheist sample assume that there is *no* life after death.

Such “inconsistencies” are also corroborated by data from the EVS (2010), illustrating that atheism is not to be *equated* with a materialist worldview: between 2 and 5% (varying with answer format) of West German atheists claim to believe in a personal God, and 7% claim belief in a spirit or life force. As many as 9% believe in life after death, and 5% in sin. East German atheists are slightly more predictable, with only 1-2% believing in a personal God, life after death, or sin, and 4% in a spirit or life force.

Large-scale survey data thus give first indications of subtypes of atheists. Drawing meaningful conclusions about the irreligious “without accurately accounting for this heterogeneity . . . is statistically and methodologically problematic” (Hwang, Hammer, & Cragun, 2009, p. 5). By means of the present small-scale study of atheism, it should be possible to plug at least some part of the yawning empirical gap that bedevils the scientific discussion of irreligion in general. The present study explores in detail personal commitments of German-speaking atheists, particularly from the point of view of types of atheist meaning-making in a “godless universe” (Wielenberg, 2005).

An Empirical Study on Meaning-Making in the Atheist World

Do atheists live in a meaningless world? Which are the sources of meaning informing atheist meaning-making? Are atheists a homogeneous group? And what do we mean when we talk about atheism, at all?

A Working-Definition of Atheism

Conceptual differentiations of types of “nontheism” vary—“indifferent,” “philosophical,” “unchurched,” “transitional” (Oser, Reich, & Bucher, 1994); “sceptical agnosticism”; “cancellation agnosticism”; “positive atheism”; “negative atheism”; etc. (cf. Martin, 2007, p. 1-5); “soft/hard secularists” (Barker, 2004, p. 25; Kosmin, 2007, p. 5-7). Detailed survey material on these various types of “religious independents” (Hayes, 2000) is sparse.

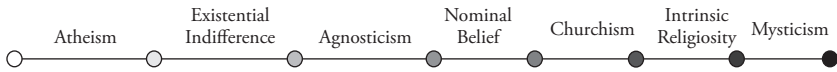


Fig. 1. Continuum of vertical transcendence.

For the present study, we propose to build on Wucherer-Huldenfeld's (2001, p. 37) comprehensive conception: "an atheist is somebody who... claims to categorically reject, to be sceptical or just indifferent to or ignorant of any religion and idea of the numinous." Atheism can thus be usefully represented within a continuum of openness to the numinous (i.e. "vertical transcendence," Goodenough, 2001; Ruschmann, 1999; Schnell, 2009a; Schnell & Keenan, 2010), ranging from self-declared a-theism, via indifferent "God-oblivion" (or "Existential Indifference," Schnell, 2010) and agnosticism, to different grades of religiosity (see Fig. 1). While "religionists" have been investigated extensively (cf. Hood, Hill, & Spilka, 2009), different types of atheist commitment have yet to be explored in any empirical detail and depth. Data introduced here focus on the left pole of the continuum of vertical selftranscendence: self-declared atheists. They will be analyzed for internal variation, as well as compared to a broad range of "nones"—encompassing all those who are *not* church members, and "religionists"—the right side of the continuum—identified through the minimal criterion of "nominal belief" (being church members).

Hypotheses and Research Questions

In an expressive refutation of "10 myths about atheism," the first to be attacked by Harris (2006) is the assumption that "atheists believe that life is meaningless." In the literature, atheists describe themselves as open-minded and committed individuals (e.g., Comte-Sponville, 2008; Dawkins, 2006; Dennett, 2006; Harris, 2006). Since commitment in general is conducive to experiences of meaning (Emmons, 2005; Schnell, 2009b), and meaningfulness can be derived from secular as well as religious or spiritual sources of meaning (Schnell, 2008a), we concur with Harris and hypothesise that atheists will experience equal levels of meaningfulness as do religionists and nones, and that crises of meaning are as frequent among atheists as among religionists and nones (H1).

Large scale survey statistics on atheism indicate considerable variety within self-declared atheists (see also Hwang et al., 2009). We hypothesise that atheists can be clustered based on their commitment to different sources of meaning (H2), and that resulting clusters exhibit different levels of meaningfulness and frequencies of crises of meaning (H3).

Additionally, the question of specific atheist sources of meaning will be exploratively addressed. Consequently, atheists' patterns of meaning-making will be compared to religionists' and nones'. Male and female commitments will also be taken into account separately, in order to identify potential gender specificities.

Method

Measures

The Sources of Meaning and Meaning in Life Questionnaire (SoMe; German version: LeBe; Schnell, 2009b; Schnell & Becker, 2007) was employed to explore ways of meaning-making among atheists. The SoMe is a 151-item inventory, enabling dimensional measurement of 26 sources of meaning as well as degrees of experienced meaningfulness and crisis of meaning. (For extensive description of the questionnaire's development, see Schnell, 2009a, Schnell, 2009b, and Schnell & Becker, 2007.)

Sources of meaning scales quantify the degree of realization for each of the 26 orientations (see Table 1 for all 26 scales). Orthogonal as well as oblique factor analyses suggest a summary of these by four dimensions:

1. *Selftranscendence*: Commitment to objectives beyond one's immediate needs.
Supported by factor-analyses of its items, the first dimension is divided into two subdimensions for further differentiation:
 - 1a. *Vertical selftranscendence*: Orientation towards an immaterial, cosmic power (comprising the two scales *explicit religiosity* and *spirituality*, of which only *spirituality* is being used in the present study, since atheism implies the absence of belief in God, hence explicit religiosity);
 - 1b. *Horizontal selftranscendence*: Taking responsibility for (worldly) affairs beyond one's immediate concerns;
2. *Selfactualization*: 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.

The *meaningfulness* scale measures the degree of subjectively experienced meaningfulness. Items paraphrase complementary facets of experiences of meaningfulness; they read (in the English translation):

- I lead a fulfilled life.
- I think that there is meaning in what I do.
- I have a goal in life.
- I feel I belong to something bigger than myself.
- I think my life has a deeper meaning.

With *crisis of meaning*, the degree of emptiness and a frustrated will to meaning is assessed:

- My life seems empty.
- I feel pain from finding no purpose in my life.
- My life seems meaningless.
- When I think about the meaning of my life I find only emptiness.
- I don't see any sense in life.

Values of this scale are typically strongly positively skewed; it is thus more informative to report percentages of crises of meaning (values ≥ 3 , range 0-5) than means.

In addition to the German and English versions, Russian, Spanish, Czech, and Bulgarian versions exist. For the German version, norms are available.

As part of the demographics, participants were also asked to identify their religion, rate their *subjective belonging* to this religion, and, independently of institutionalised religion, rate their *personal religiosity* and *belief in the supernatural*.

Samples

Atheist Sample

Self-declared atheists were contacted via German-speaking online forums, chat rooms, and websites. Altogether, 102 atheists completed an online version of the SoMe Questionnaire (German version: LeBe; Schnell & Becker, 2007). Sixty percent of the sample were female. The mean age was quite low ($M = 23$, $SD = 6$), ranging from 16 to 62. Slightly more than half (51%) were partnered. The great majority (95%) of the sample had obtained A levels.

According to demographic analyses, atheists tend to be young, male, unmarried, and well-educated (Hayes, 2000; Kosmin & Keysar, 2009; Sherkat, 2008). The present sample diverges from these characteristics in having a female majority. Demographics were controlled in statistical analyses.

Religionists and Nones Samples

The SoMe was also completed by a representative German sample ($N = 616$). Distribution of sex, age, education, and place of residence were analogous to that in the total population (*Statistisches Bundesamt*, 2005). Individual participants were randomly selected. They were informed of the study and asked to contribute by telephone. The questionnaire and a self-addressed envelope were then sent to those who agreed to cooperate. The return rate was 67%. After eliminating incomplete records and excluding multivariate outliers, 603 datasets remained. For analyses in the study at hand, this comprehensive representative sample was divided into *religionists* and *nones*. Those claiming church membership were classified as religionists; those who did not were categorised as nones. In an attempt to identify potential atheists among the religionists and the nones, all individuals who had scored a 0 on six-point Likert-scale ratings of both personal religiosity and belief in the supernatural were eliminated. The religionists sample was thus diminished by $N = 12$, the nones sample by $N = 23$.

Of the remaining religionists ($N = 390$), 58% were female. Age ranged from 16 to 85 years ($M = 46$, $SD = 17$). Of all religionists, 15% were single, 14% cohabited, 59% were married, and 12% divorced or widowed. Twenty-two percent of the religionists only had general education; 23% had obtained O levels, 18% A levels. Thirty-seven percent had graduated from technical college or university.

Less than half of the 178 nones were female (46%). The nones' mean age was 46 ($SD = 16$, range 16-83). Comparable to the religionists, 14% were single, but 21% cohabited and 50% were married; 15% were divorced or widowed. No more than 15% of the nones only had general education; 26% had taken O levels, 14% A levels. Forty-five percent had graduated from technical college or university.

Results

Hypothesis 1: Atheists experience equal levels of meaningfulness as do religionists and nones, and crises of meaning are as frequent among atheists as among religionists and nones.

Atheists were compared to both religionists and nones from the representative sample. A MANCOVA, controlling for sex, age, education, and family status, shows a highly significant overall effect of group differences, $F(4, 1272) = 4.78$, $p = .001$, $\eta^2 = .015$. Contrary to the hypothesis, atheists experience less meaningfulness than both religionists ($p < .001$) and nones ($p = .002$; see

Table 1 and Fig. 2). As expected, crises of meaning are as frequent among atheists as among religionists and nones (see Table 1 and Fig. 3).

Table 1. Percentage of crisis of meaning, mean values and standard deviations of meaningfulness and sources of meaning for different types of atheists, all atheists, religionists, and nones

	'Low-commitment' atheists	'Broad-commitment' atheists	'Self-actualisation' atheists	All atheists	Religionists	Nones
Crisis of meaning	30% ^a	2% ^a	0% ^a	4% ^a	4% ^a	5% ^a
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Meaningfulness	1.74 (0.82)	2.87 (0.86)	2.31 (0.83)	2.57 (0.92)	3.22 (0.89)	2.95 (0.94)
Selftranscendence						
Social commitment	1.96 (0.30)	2.91 (0.76)	3.02 (0.87)	2.85 (0.82)	3.03 (0.82)	3.04 (0.79)
Explicit religiosity	0.13 (0.32)	0.40 (0.74)	0.16 (0.30)	0.29 (0.60)	2.49 (1.62)	1.01 (1.24)
Unison with nature	1.32 (0.83)	2.72 (1.13)	2.33 (1.15)	2.45 (1.18)	3.44 (0.96)	3.50 (1.03)
Self-knowledge	2.63 (0.92)	3.55 (0.98)	3.34 (0.92)	3.39 (0.98)	2.72 (1.04)	2.68 (1.04)
Health	2.03 (0.76)	2.87 (1.05)	2.33 (1.25)	2.61 (1.13)	3.23 (0.97)	3.19 (1.05)
Generativity	1.17 (0.44)	2.51 (0.79)	2.29 (0.91)	2.30 (0.89)	3.15 (0.87)	2.97 (0.96)
Spirituality	0.72 (0.67)	1.72 (0.95)	0.87 (0.75)	1.34 (0.96)	2.73 (1.06)	2.09 (1.09)
Selfactualisation						
Challenge	1.62 (0.80)	3.08 (0.79)	3.01 (0.80)	2.91 (0.90)	2.50 (0.99)	2.71 (0.97)
Individualism	2.22 (0.75)	3.47 (0.72)	3.49 (0.66)	3.35 (0.79)	2.83 (0.83)	2.92 (0.80)
Power	1.84 (1.16)	2.85 (0.74)	2.92 (0.83)	2.77 (0.86)	2.66 (0.93)	2.82 (0.95)
Development	2.25 (0.85)	3.67 (0.69)	3.61 (0.68)	3.51 (0.81)	3.54 (0.78)	3.65 (0.75)
Achievement	2.40 (0.75)	2.90 (1.04)	2.42 (1.13)	2.69 (1.06)	2.90 (0.91)	2.85 (1.00)
Freedom	2.12 (1.25)	3.35 (1.11)	3.74 (1.10)	3.36 (1.20)	2.68 (1.16)	2.87 (1.10)
Knowledge	2.34 (1.03)	3.49 (0.75)	4.15 (0.62)	3.60 (0.90)	3.29 (0.80)	3.45 (0.85)
Creativity	1.24 (0.82)	2.99 (1.04)	2.74 (1.06)	2.73 (1.14)	2.87 (1.02)	3.00 (1.04)
Order						
Tradition	1.78 (0.60)	1.66 (0.75)	1.16 (0.66)	1.51 (0.74)	2.92 (0.91)	2.77 (0.99)
Practicality	2.00 (0.44)	2.69 (0.70)	2.31 (0.84)	2.50 (0.76)	3.42 (0.68)	3.43 (0.81)
Morality	2.44 (0.96)	3.32 (0.73)	2.57 (0.75)	2.98 (0.85)	3.90 (0.63)	3.74 (0.83)
Reason	2.30 (0.54)	2.83 (0.96)	3.02 (1.05)	2.84 (0.97)	3.39 (0.74)	3.43 (0.82)
Well-being and Relatedness						
Community	2.10 (0.65)	4.07 (0.61)	3.04 (0.73)	3.53 (0.93)	3.58 (0.80)	3.54 (0.81)
Fun	2.17 (0.98)	3.76 (0.70)	2.78 (0.69)	3.28 (0.93)	3.27 (0.87)	3.31 (0.83)
Love	2.13 (1.48)	3.43 (0.81)	2.33 (0.92)	2.94 (1.08)	2.99 (0.93)	2.90 (0.97)
Comfort	2.63 (1.12)	3.67 (0.60)	3.38 (0.81)	3.47 (0.79)	3.14 (0.85)	3.28 (0.76)
Care	2.28 (0.51)	3.90 (0.53)	3.13 (0.65)	3.48 (0.78)	3.80 (0.69)	3.64 (0.76)
Attentiveness	1.44 (0.86)	2.89 (0.56)	1.93 (0.60)	2.43 (0.82)	3.07 (0.77)	3.00 (0.76)
Harmony	2.04 (0.94)	3.73 (0.63)	2.67 (0.98)	3.21 (1.01)	3.83 (0.69)	3.73 (0.73)

Note: ^a percentage of individuals suffering from a crisis of meaning

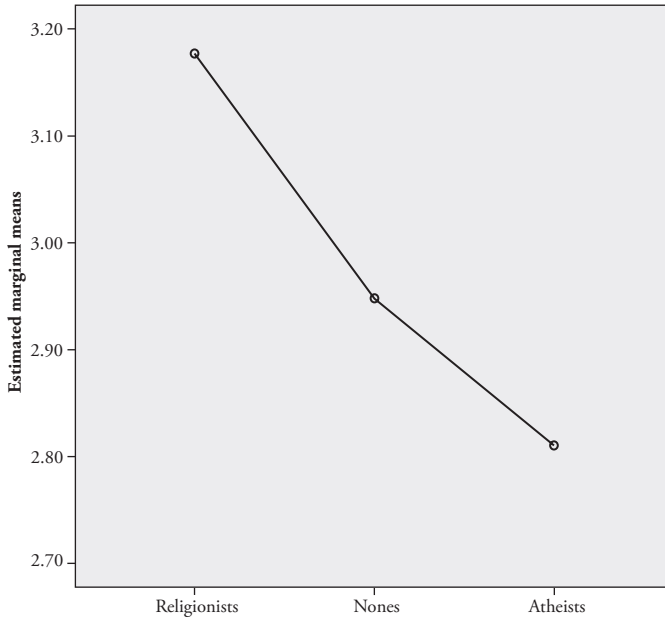


Fig. 2. Degrees of meaningfulness (range 0-5) among atheists, nones, and religionists, controlled for sex, age, education and family status.

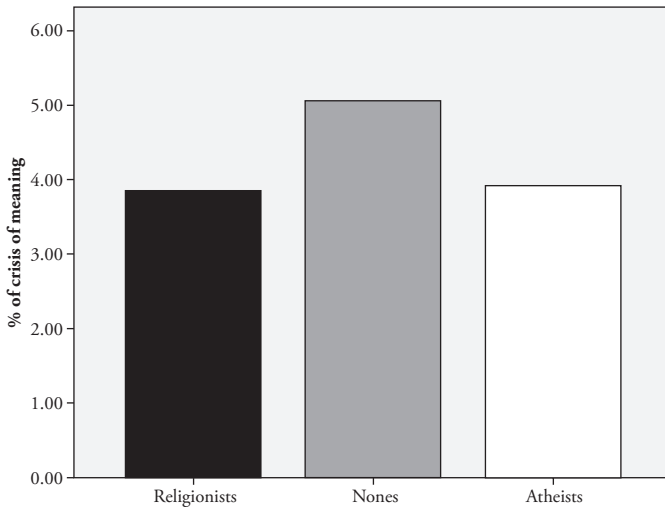


Fig. 3. Frequencies of crises of meaning (%) among atheists, nones, and religionists.

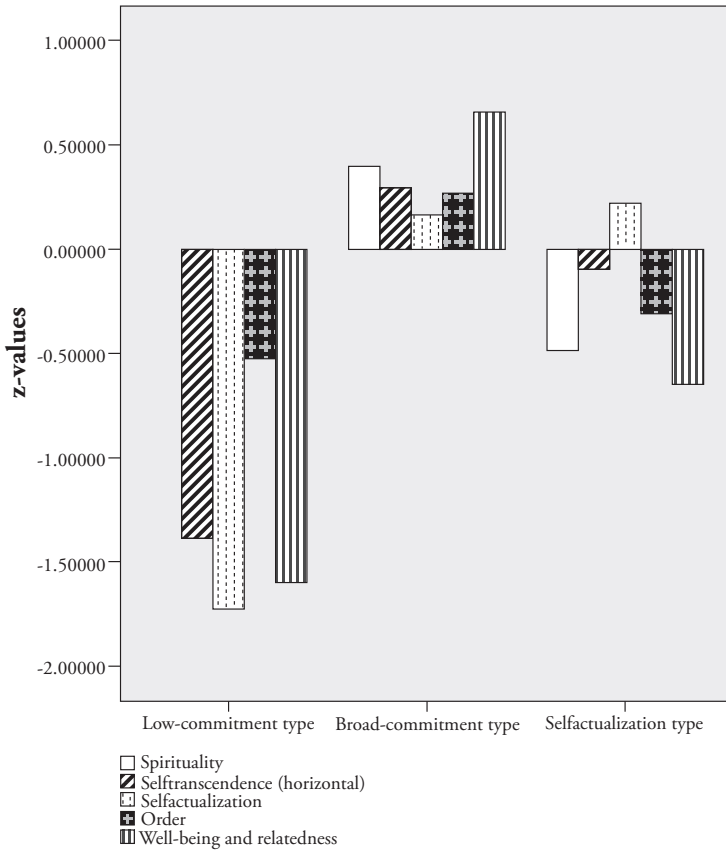


Fig. 4. Z-values for spirituality and four dimensions of meaning for three clusters of atheists.

Hypothesis 2: Atheists can be clustered based on their commitment to different sources of meaning.

The atheist sample was explored for systematic internal variation, based on the 26 sources of meaning. In order to avoid influences of response sets on clustering, all values were z -standardised before carrying out cluster analysis. A hierarchical cluster analysis indicated a three-cluster solution. After conducting k -means cluster analysis, three clearly distinguishable clusters were identified, $F(52, 148) = 5.74, p < .0001, \eta^2 = .67$. Cluster 1 ($N = 10$) is characterised by generally low values (see Fig. 4 for mean z -values for the five dimensions). Cluster 2 ($N = 58$) is marked by the highest values altogether, with special emphasis on well-being and relatedness. The third cluster's ($N = 34$) overall

commitment is higher than in Cluster 1, but lower than in Cluster 2; its only distinct commitment is to selfactualization. The results thus suggest a low-commitment type of atheism, a broad-commitment type, and a selfactualization type.

Hypothesis 3: Resulting clusters exhibit different levels of meaningfulness and frequencies of crises of meaning.

When comparing the three clusters regarding degrees of meaningfulness and frequencies of crises of meaning (not used for clustering), they show significant differences in both, $F(4, 196) = 9.25, p < .0001, \eta^2 = .16$: meaningfulness ($\eta^2 = .16$) is highest in the broad-commitment type ($M = 2.85$), followed by the selfactualization type ($M = 2.33$). The low-commitment type is marked by the lowest values of experienced meaningfulness ($M = 1.74$). Crises of meaning, on the other hand, are most frequent in the latter cluster (30%); they are very rare in the broad-commitment type (2%) and non-existent in the selfactualization type ($\eta^2 = .20$).

Specific atheist sources of meaning.

The question of specific atheist sources of meaning is to be answered exploratively. Since cluster analysis proved atheist heterogeneity, different types of atheists will be compared with religionists and nones regarding sources of meaning. Table 1 displays mean values for sources of meanings of different types of atheists, religionists, and nones. Nones include all those who are—for various (unknown) reasons—not church members. This subsample thus can be assumed to incorporate a large variety of worldviews. Nevertheless, nones can be systematically distinguished from religionists, $F(26, 513) = 5.94, p < .001, \eta^2 = .23$, demographics controlled) by the following sources of meaning: They are significantly less committed to *explicit religiosity* ($\eta^2 = .17$) and *spirituality* ($\eta^2 = .06$). They invest slightly less into *generativity* ($\eta^2 = .01$) and *morality* ($\eta^2 = .01$) than religionists do, while being slightly more committed to *comfort* ($\eta^2 = .01$).

Fig. 5 shows the profile of low-commitment atheists ($N = 10$) in comparison to religionists ($N = 390$) and nones ($N = 178$). A MANCOVA, controlling for sex, age, education, and family status, results in an overall effect of $F(52, 1044) = 5.20, p < .001, \eta^2 = .21$. Compared to religionists and nones, this atheist type shows lower commitment to nearly all sources of meaning, apart from *self-knowledge*, *freedom*, *achievement*, and *health*—which are comparable to values of religionists and nones (with demographics controlled). Meaningfulness ($M = 1.74$) is lower than among religionists ($M = 3.22$) and nones ($M = 2.95$), and crises of meaning are more frequent (30%), $F(4, 1092) = 7.49, p < .001, \eta^2 = .03$, with demographics controlled, than among religionists (4%) or nones (5%).

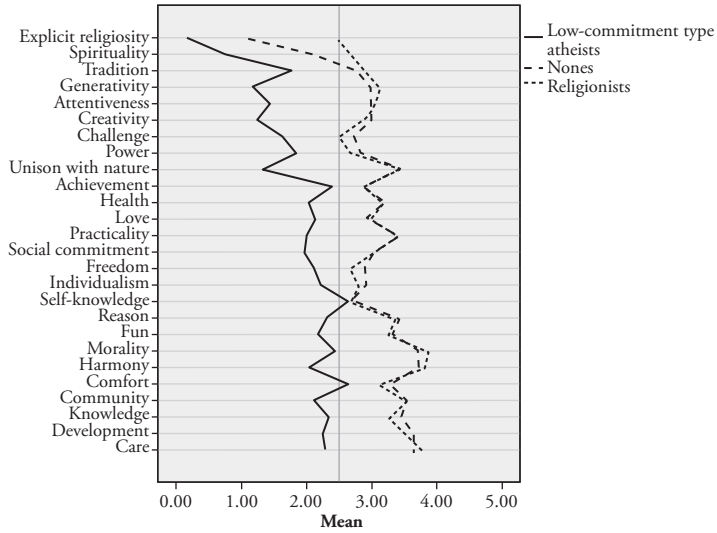


Fig. 5. ‘Low-commitment’ type atheists compared to religionists and nones; mean sources of meaning values.

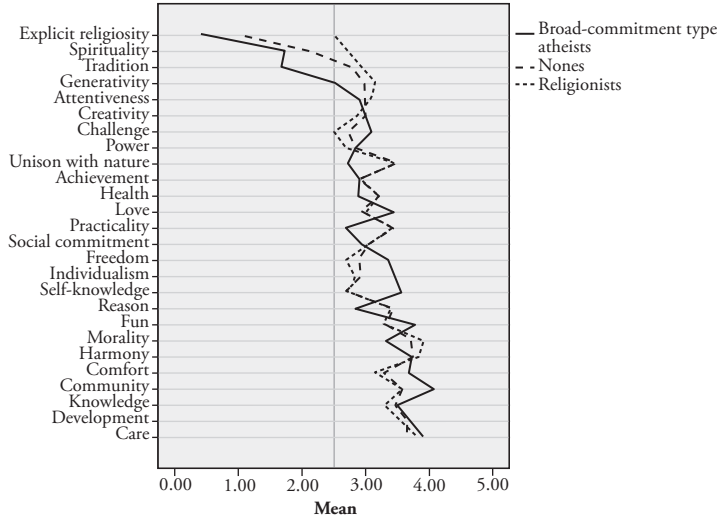


Fig. 6. ‘Broad-commitment’ type atheists compared to religionists and nones; mean sources of meaning values.

The next MANCOVA tests differences between the broadly committed atheists, religionists and nones. Sex, age, education, and family status are controlled. The overall effect, again, is highly significant ($F(52, 1138) = 6.63, p < .001, \eta^2 = .23$). Compared to religionists and nones, broad-commitment atheists ($N = 58$) show a stronger commitment to *self-knowledge* ($\eta^2 = .04$), *freedom* ($\eta^2 = .04$), *individualism* ($\eta^2 = .02$), *comfort* ($\eta^2 = .02$), *challenge* ($\eta^2 = .02$), and *knowledge* ($\eta^2 = .02$), but lower commitment to *explicit religiosity* ($\eta^2 = .20$), *spirituality* ($\eta^2 = .11$), *tradition* ($\eta^2 = .06$), *practicality* ($\eta^2 = .04$), *morality* ($\eta^2 = .02$), *generativity* ($\eta^2 = .02$), and *reason* ($\eta^2 = .01$; see Fig. 6). They experience similar degrees of meaningfulness ($M = 2.87$) as nones, but slightly less than religionists $F(4, 1186) = 2.92, p = .02, \eta^2 = .01$, with demographics controlled. Crises of meaning are neither more nor less frequent.

Fig. 7 shows the profile of atheists primarily committed to selfactualization ($N = 34$) in comparison to religionists and nones. A MANCOVA, controlling

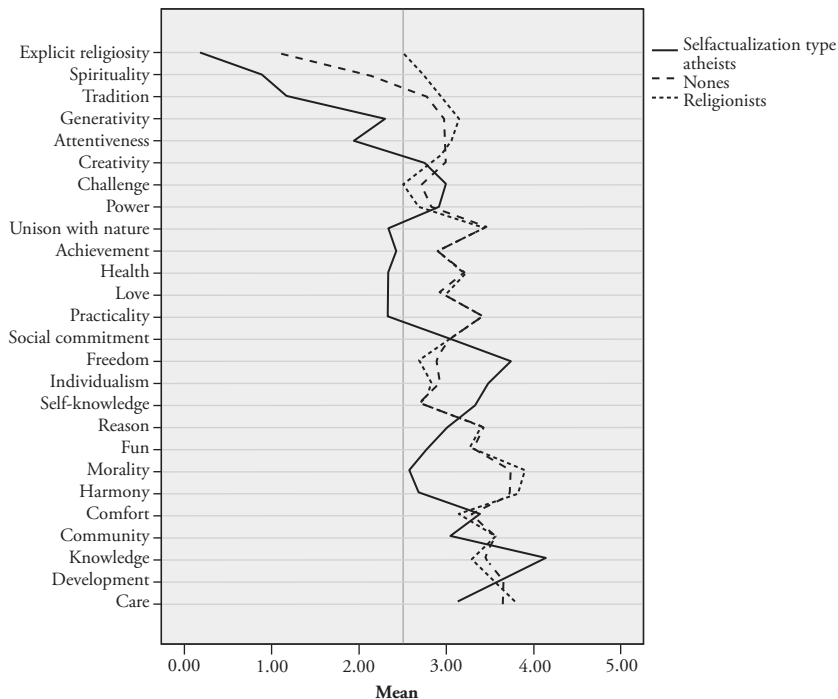


Fig. 7. 'Selfactualization' type atheists compared to religionists and nones; mean sources of meaning values.

for sex, age, education, and family status, results in an overall effect of $F(52, 1090) = 8.40, p < .001, \eta^2 = .29$. In comparison to religionists and nones, selfactualizing atheists show a stronger commitment to *knowledge* ($\eta^2 = .07$), *freedom* ($\eta^2 = .04$), *self-knowledge* ($\eta^2 = .02$), *individualism* ($\eta^2 = .01$), and *comfort* ($\eta^2 = .01$), and lower commitment to *explicit religiosity* ($\eta^2 = .20$), *spirituality* ($\eta^2 = .16$), *tradition* ($\eta^2 = .11$), *morality* ($\eta^2 = .10$), *harmony* ($\eta^2 = .08$), *attentiveness* ($\eta^2 = .08$), *practicality* ($\eta^2 = .07$), *love* ($\eta^2 = .04$), *unison with nature* ($\eta^2 = .03$), *generativity* ($\eta^2 = .03$), *care* ($\eta^2 = .03$), *community* ($\eta^2 = .03$), *fun* ($\eta^2 = .03$), and *achievement* ($\eta^2 = .02$). Meaningfulness is lower than among religionists and nones $F(4, 1138) = 6.28, p < .001, \eta^2 = .02$, with demographics controlled. Though none of the selfactualization atheists suffers from a crisis of meaning, the difference between the small sample of atheists and the religionists and nones does not yield statistical significance.

Male and female atheist positions. Gender aspects impinge on worldviews, as is widely known about religiosity (cf. Francis, 1997). Are female atheists committed to different sources of meaning from male atheists? A MANCOVA with age, education, and family status controlled, is significant with $F(26, 70) = 2.73, p < .001, \eta^2 = .50$. As illustrated in Fig. 8, male atheists are characterised by more commitment to knowledge, self-knowledge, and reason, and they are less committed than female atheists to community and love.

Discussion

Experiences of Meaning in Life

Self-declared atheists are characterised by their nonbelief in the existence of a God or numinous powers. Is the experience of life as meaningless a necessary implication of this standpoint, as often assumed (cf. Harris, 2006)? When compared to a representative sample of religionists and nones, atheists do report significantly lower degrees of experienced meaningfulness. This, however, is not generally perceived as critical. In spite of less meaningfulness, atheists do *not* suffer more frequently from crises of meaning than religionists or nones do. But heterogeneity within atheism has to be taken into account, as was demonstrated by cluster analysis.

Three Types of Atheists

After clustering on the basis of commitment to the 26 sources of meaning assessed by the SoMe, the distinction of three clusters showed that the shared

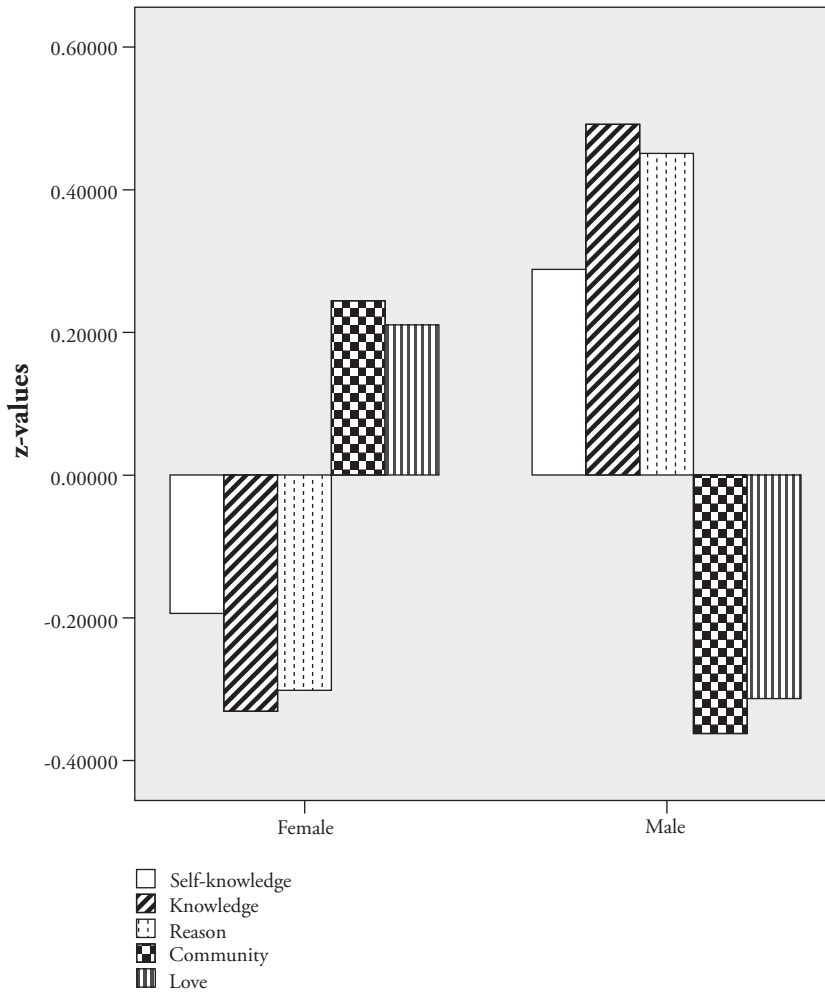


Fig. 8. Differences in sources of meaning between female and male atheists; z-values.

nonbelief in God or numinous powers does not imply a joint canon of alternative beliefs. One cluster, named low-commitment atheists, is characterised by generally low commitment to all sources of meaning. Atheists in this cluster report the significantly lowest degree of experienced meaningfulness, which is low also in absolute terms ($M = 1.78$, range 0-5). Additionally, with

30% frequency, crises of meaning are much more common in this subtype than in any other.

The second cluster represents broad-commitment atheists; they are committed to sources of meaning from various dimensions, with a special emphasis on well-being and relatedness. This cluster reports the highest degree of meaningfulness, and as few as 2% suffer from crises of meaning. Crises of meaning are even non-existent in the third cluster, the selfactualization atheists, in spite of their degree of experienced meaningfulness being slightly below the theoretical mean, thus indicating only moderate meaningfulness.

Patterns of meaning thus vary among atheists. While one subtype is characterised by very low meaningfulness and rather frequent crises of meaning, the majority of atheists experience life as rather meaningful. Though these experiences of meaningfulness are significantly lower than those of church members, crises of meaning are rare. The range of possible interpretations of this perhaps unusual finding extends from an objectivist scientific or philosophical worldview to existential indifference (Schnell, 2010). Further empirical refinements will be necessary to identify the precise causal factors in these different conditions or contexts.

Religionists and None

Several MANCOVAs helped clarify in which ways the three types of atheists differ from both religionists and nones in the representative sample, and how the latter can be distinguished. Though a fuzzy concept, the nones as a subsample showed systematic dissimilarity from religionists. Other than a perhaps obvious disinterest in explicit religiosity and spirituality, they also showed slightly less commitment to generativity and morality, while endorsing attachment to comfort. Again, this is a rather surprising finding, since the distinctions are only based upon formal church membership or non-membership, which cannot be equated with intrinsic, life-pervading religiosity. Generativity and morality are highly valorised by religious teachings, as sometimes also is an eschewing of hedonism. Members of the church seem to hold on to these values more confidently than non-members, thus contradicting Dawkins's thesis that religiosity is certainly not positively correlated with morality (2006, p. 263).

But what is the distinction between religionists and nones based on? Does belonging to the church make people more generative and moral? Since, according to EVS (2010), participation in church rituals is relatively low in Germany (9% attend services at least once a month in east Germany, and 23%

in west Germany), and church doctrines are often questioned or ignored (cf. Jörns, 1997), by what means are such influences transmitted? Maybe it is not church membership itself, but high values in religiosity and/or spirituality associated with it, that predict generativity and morality. Mediator analyses allow testing this hypothesis. Church membership is a significant predictor of generativity and morality ($p = .008$, $p = .003$, respectively). When including explicit religiosity and spirituality in a next step, the beta weight of church membership becomes insignificant in both cases. The influence of church membership on generativity is fully mediated by spirituality ($\beta = .28$, $p < .001$) and explicit religiosity ($\beta = .17$, $p < .001$); its influence on morality is also fully mediated by spirituality ($\beta = .20$, $p < .001$) and explicit religiosity ($\beta = .18$, $p < .001$). Hence, it is not church membership as such, but religious and spiritual commitment that accounts for higher values in generativity and morality. Correlations corroborate that church membership must not be equated with explicit religiosity and spirituality, since the former is only moderately correlated with church membership ($r = .41$, $p < .001$), and the latter even less so ($r = .26$, $p < .001$).

Atheist-Specific Sources of Meaning

By comparing several types of atheists to religionists and nones, more specific information is available. The low-commitment type of atheist is generally disengaged. Only his or her commitment to self-knowledge, freedom, achievement, and health is comparable to that of religionists and nones. Apart from self-knowledge and comfort, all average values are beyond the theoretical scale mean, thus indicating low engagement. Aside from explicit religiosity and spirituality, they particularly avoid optimistic and life-affirming sources of meaning such as generativity, creativity, unison with nature, and attentiveness.

Since crises of meaning are frequent among these particular atheists (30%), this cluster might have captured individuals in a transitional state of crisis. Statistically, crises of meaning show only moderate stability (Schnell, 2009b). The critical awareness of a lack of meaning, resulting in disengagement and non-involvement, is likely to be followed by a restructuring of meaning. Individuals presently classified as low-commitment type will therefore be unlikely to be similarly classified in follow-up studies.

Broad-commitment atheists, in contrast, are identified with higher levels of commitment and meaningfulness. Compared to religionists and nones, they are characterised by a particular commitment to self-knowledge, freedom,

individualism, comfort, challenge, and knowledge. Their orientation can be described as progressive; conservative and value-oriented sources of meaning such as tradition, practicality, morality, generativity, and reason are eschewed. The low endorsement of reason might be surprising, since reason, rationality, and a scientific worldview are especially propagated by the “new atheists” (Stenger, 2009). But natural-scientific positivism probably is not the most common underpinning of atheism. An existentialist philosophy might fit the data better, since existentialism “is anti-rationalist” and “views reason as an ineffective tool for the exploration of truth” (Schischkoff, 1991, p. 195). However, this tension between the rationalist and the non-rationalist orientations to life needs further exploration.

Selfactualizing atheists resemble broadly committed atheists in their engagement for knowledge, freedom, self-knowledge, individualism, and comfort. However, these self-centred commitments are not broadened or balanced by an interest in relatedness, as is the case for the broadly committed atheists. In addition to shunning conservative sources of meaning such as tradition, morality, and practicality, selfactualizing atheists also show little interest in cultivating relationships (love, care, community, fun), in selftranscendence through union with nature or generativity, or in a mindful approach to life (attentiveness, harmony). This type of atheist seems to be settled in its knowledge-based worldview, untouched by crises of meaning. Nevertheless, they experience lower degrees of meaningfulness than religionists and even nones. This might be attributable to a lack of breadth, balance, and depth in sources of meaning (cf. Reker & Wong, 1988; Schnell, 2008b).

Gendered Atheism?

The data clearly show that male atheists are more committed to knowledge, self-knowledge, and reason than female atheists. The latter, however, are considerably more committed to community and love. How do we explain these gender differences within atheism? Could this be an outworking of the ancient ‘principle’ of ‘male agency’ and ‘female communion’? Perhaps surprisingly, atheism does not level gender differences out. As in other areas of modern culture, there appear to be strong and unexpected residues of gender traditionalism. Further research is needed to answer the intriguing question of the nature of contemporary male and female worldviews, especially with regard to unbelief.

Outlook

This study contributes to meeting the growing demand for a more comprehensive perspective in the psychology of religion. It invites the development of integrative approaches to explore the complex and heterogeneous field of non-religiosity. A focus on personal meaning systems proved to be a fruitful starting point: although drawing on a non-representative convenience sample, the present study provides differentiated insights into types of non-religiosity. In the future, more representative samples should be targeted for replication and further insights into atheist meaning-making (Schnell & Keenan, in preparation).

In enquiring upon the varieties of atheism existing in a given modern social context, it may be the case that what were widely thought to be separate incommensurable worlds of meaning and belief—the dualistic, bifurcated worlds of religiosity and secularity (Berger, 2010; Gellner, 2003)—do, in fact, share, in the contexts of lived experience, a degree of common ground in terms of meaning and commitments.

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