RESEARCH

Religiousness, Religious Fundamentalism, and Quest as Predictors of Humor Creation

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Theory and research on humor as well as on religion, focused on related personality traits, cognitive structures, and social consequences, lead to the hypothesis that religiousness is negatively associated with humor. In this study, 72 individuals were tested in their propensity to spontaneously produce humor in response to hypothetical daily hassles. Religiousness and religious fundamentalism were found to be negatively correlated with humor creation in response to these hypothetical daily hassles, while quest religious orientation was positively correlated with humor creation in response to these same events. No relation was found between religion and reported sense of humor or reported use of humor as coping. The discussion focuses on methodological and theoretical considerations toward a comprehensive interpretation of results and possibilities for further research.

HUMOR AND RELIGION

Many scholars have pointed out the historical mistrust of religion toward humor and the comic (e.g., Eco, 1980/1983; Le Goff, 1997). Certainly, in the last decades, we

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have observed an effort among scholars to give value to laughter and humor in biblical texts, in the life of Christ and saints, in religious contexts other than Christianity, and in the spiritual life in general (e.g., Berger, 1997; Hyers, 1987). However, even if we assume that these recent efforts are historically correct or spiritually legitimate, or both, the question arises for psychology of religion whether this suspicion of religion toward the comic is only historical or if it reflects a deeper, psychological reality. In other words, beyond the fact that (a) humor has been or is present in religion (see Gilhus, 1997, for a historical overview), (b) it has a function within religion (e.g., Apte, 1985; Davies, 1998), and (c) some differences in attitude toward humor may exist between religions (e.g., Morreall, 1999), it is still an intriguing question why, for instance, for 2,000 years people believed that Jesus did not laugh, or why, even when humor is valued in the religious life, it is argued that "spontaneous" humor is not to be encouraged at the beginning of spiritual life (Derville, 1969).

Several arguments regarding the association between humor and religion may be advanced on the basis of theory and research in psychology of humor and psychology of religion (see Saroglou, in press-b, for details). First, humor creation and humor appreciation are defined by recognition of, play with, and enjoyment of incongruity, either in strictly cognitive terms or in more general philosophical terms, that is, incongruity of life, playfulness with meaning and the limits of meaning, and affirmation of the possibility of nonsense. We may then wonder whether a religious person, characterized by the need for meaning (Pargament, 1997), the need for reduction of uncertainty (see Schwartz & Huismans, 1995), the need for cognitive closure (Saroglou, inpress-a), and the nonacceptance of nonsense in life (Campiche, 1997), would not be inclined either to recognize, play with, or enjoy the incongruity inherent to humor.

Second, humor is considered as a way to challenge and transgress social norms, conventional rules, and traditional ideas (Veatch, 1998). We may then suspect that religiousness, a dimension that is associated with conservatism (e.g., Campiche, 1997), respect for tradition and conformity (e.g., Burris & Tarpley, 1998; Schwartz & Huismans, 1995), and risk avoidance (Miller & Hoffmann, 1995), does not predispose people to create or appreciate humor.

Third, religious people are known to be less open to ideas, practices, and values related to sexuality (see Hood, Spilka, Hunsberger, & Gorsuch, 1996, for a review) and hedonism (e.g., Burris & Tarpley, 1998; Schwartz & Huismans, 1995). They may then be less attracted by sexual humor, or, more generally, by humor itself (in the sense that humor in general seems to have a sexual connotation; Freud, 1905/1960); that is, they may be less likely to use this kind of humor or more likely to find it disgusting. In addition, another aspect/kind of humor, aggressive humor and laughing at the expense of others, may not attract (again from a humor creation, use of humor, or appreciation of humor perspective) religious people who (at least if we refer to self-reports) tend to be friendly, warm, and helpful (low

psychoticism; Francis, 1992), high in agreeableness (Saroglou, 2002), and ready to forgive (McCullough & Worthington, 1999).

Finally, the seriousness of the religious ideals, the explicit spiritual ideals of self-mastery and self-control through virtue (see Baumeister & Exline, 1999) may contribute (as internalized values) to a certain inhibition of humor performances. Religiousness is clearly associated with orderliness (Lewis, 1998), conscientiousness (Saroglou, 2002), and low impulsivity (Francis, 1992), while the comic, through its emotional and surprising character, contributes to a release of control (see Saroglou, in press-b) and is negatively related to the need for closure (Saroglou & Scariot, 2002). We may then assume that even if religious people could easily recognize or play with incongruity, could easily will to produce and appreciate sexual and hostile jokes, or could be attracted by the subversive, anticonservative character of humor, they would not easily allow themselves to release self-control and express humor.

Putting together these theoretical and empirical considerations, we may suspect that, overall, *religiousness* is negatively associated with sense of humor.

HUMOR AND CLOSE- VERSUS OPEN-MINDED RELIGION

In addition to religiousness per se, two specific religious dimensions that reflect close-versus open-minded religion, that is, *religious fundamentalism* and *quest*, respectively, may be related to humor. Religious fundamentalism, more clearly even than religiousness per se, reflects close-mindedness: discomfort with new evidence challenging beliefs (dogmatism) and authoritarian submission to established rules (Altemeyer, 1996), as well as low openness to fantasy, ideas, and values (openness to experience; Saroglou, 2002). Religious fundamentalists may then feel uncomfortable with humor that generally challenges or even denies established ideas and humor that introduces ambiguity and relativity into ideas, beliefs, and hierarchies of values: Humor is negatively related to dogmatism (Dixon, Willingham, Chandler, & McDougal, 1986), intolerance of ambiguity (Ruch, 1992), and authoritarianism (Lefcourt, 1996).

On the contrary, people high in quest orientation are open when their beliefs are challenged; they see doubts positively (and consequently accept ambiguity) and do not reduce complexity of existential questions (Batson, Schoenrade, & Ventis, 1993; McFarland & Warren, 1992). This is what humor does: It challenges established ideas, introduces ambiguity and incongruity (thus complexity) into existential questions, and introduces doubt as to the meaningfulness of life and the world. People high in quest orientation may then also be inclined to introduce or enjoy the incongruity, ambiguity, and complexity of humor.

MEASURING SENSE OF HUMOR AND HUMOR CREATION

To empirically explore how religious dimensions relate to humor, one has to focus on specific humor constructs. It is important to remember, first, that in empirical literature on psychology of humor no validated taxonomy of different kinds of comic phenomena (such as humor, irony, sarcasm, wit) exists; we therefore have to focus on *humor* as a generic term that embraces these different types. Second, besides the term *sense of humor* seen as a personality trait, this literature traditionally considers three distinct humor constructs: humor creation, sense and use of humor as reported in questionnaires, and humor appreciation. As the third construct taps a reality that is very different from the use and initiation of humor, and because humor creation is generally considered to represent one's own sense of humor better than humor appreciation does (see Thorson & Powell, 1993a, 1993b), in this study we decided to focus on the first two constructs.

To study sense of humor as a reported propensity to use humor in different kinds of life situations we used two scales that, although they have limitations (self-report measures of a highly socially desirable trait; lack of discriminant validity; Kohler & Ruch, 1996; Thorson & Powell, 1991), have probably been the most used in research across different cultures, that is, the Situational Humor Response Questionnaire (SHRQ) and the Coping Humor Scale (CHS; see Martin, 1996, for a review). Sense of humor in the first questionnaire is defined as "the frequency with which a person smiles, laughs, and otherwise displays mirth to a wide variety of life situations" (Martin, 1996, pp. 253–254). These life situations are not necessarily stressful or unpleasant. The second measure assesses individuals' perception of their own propensity to use humor in coping with stress.

In addition to self-reported questionnaires of sense of humor, we decided to study humor creation as real behavior. However, instead of focusing on *humor creativity* "on demand" (asking participants to create cartoon punch lines or to try to be humorous in a monologue or dialogue and evaluating them on their quantity or quality of humorous production), as is often the case in humor research, we investigated *spontaneous humor creation* (spontaneous use of humor where participants are unaware of the expectations of the researcher) to tap a humor construct that more clearly includes the "release of control" aspect of humor.

HYPOTHESES

Subsequently, we hypothesized that religiousness and religious fundamentalism are negatively related to humor creation and reported sense and use of humor as coping, whereas quest religious orientation is positively related to the above humor constructs.

METHOD

Participants

The participants were 72 adults, 18 men and 54 women, all living or studying on the campus of the Catholic University of Louvain, in the French-speaking region of Belgium. Ages ranged from 18 to $60 \ (M=23.42, SD=9.10)$. All participants had a university-level education and an educational background in Catholic institutions. The study was advertised to all participants as "coping and styles in which individuals cope with stressful situations." Students chose to participate in the study for credit to their introductory psychology course.

Measures and Procedure

Measures were administered to the participants in the following order.

Humor creation. Participants were asked to immediately fill in the punch lines of all 24 pictures of the Rosenzweig test (Rosenzweig, 1948) presenting frustrating daily life situations. The test was administered with the usual instructions inviting individuals to imagine how they would react in the situations depicted. Participants were unaware that the experimenter was interested only in the spontaneously produced humor responses. Responses were evaluated by raters as humorous or nonhumorous and were assumed to indicate, because of the projective character of the Rosenzweig pictures, the degree to which people would be likely to use humor spontaneously, as a reaction to daily hassles. The criteria we established to code answers as humorous were the following: (a) Judges had to evaluate the fact that participants tried to produce humor rather than focus on the quality of humor produced; (b) all kinds of comic responses were included (i.e., irony, sarcasm, nontendentious humor); (c) adages, as uncommon ways of escaping from the framework of the first-level reaction to frustrating situations, were coded as humorous responses; (d) one- and two-word answers were considered as providing insufficient information to possibly be coded as humorous; (e) an ambiguous answer was classified as humorous if it was very original compared with the common answers to the specific situation or if the person was generally high in humor. Protocols were detached from the material of the other questionnaires to ensure the judges' ignorance of any information on participants (e.g., gender, religiousness). Each of the two independent judges, one male (the experimenter) and the other female (note that Rosenzweig cards contain both male and female protagonists), scored the answers twice with at least 2 days between scorings, to be as independent as possible from mood influence. The inter-rater reliability on evaluation of responses was satisfactory (effective R = .82; .89, in another

study) as in another study (Saroglou & Jaspard, 2001; R = .89). The following are two examples of coding: In a situation outside a car, where a woman says to her male partner (who is looking for the car keys) "What a good time to lose the keys!" participants made the male partner answer by saying (a) "It takes talent to lose your keys at the right moment" or "Time is not a matter of choice" (humorous), and (b) "I'm sure I put them in my pocket but I can't find them" or "Wait, I'm checking my pockets, if not I'll go back in the house" (nonhumorous). In another situation, where somebody falls down in front of his two friends and one of them says "Did you hurt yourself?" participants answered either (a) humorously ("I don't know, I haven't reached the ground yet" or "What do you think?" or (b) nonhumorously ("No, it's nothing. Can you help me up?" or "Yes, a little. You should be more careful").

Situational Humor Response Questionnaire (Martin & Lefcourt, 1984). This unidimensional 21-item scale of sense of humor operationalizes sense of humor as the propensity of a person to respond with mirth and laughter to a wide variety of daily life situations. Each item has a 5-point response scale ranging from 1 (showing little amusement) to 5 (laughing heartily). Here are some examples of the situations: "If you were awakened from a deep sleep in the middle of the night by the ringing of the telephone, and it was an old friend who was just passing through town and had decided to call and say hello ..."; "If you arrived at a party and found that someone else was wearing a piece of clothing identical to yours"

Coping Humor Scale (Martin & Lefcourt, 1983). This 7-item self-report scale assesses the extent to which individuals use humor as a coping strategy for dealing with stressful life circumstances. Here are some examples of the scale items: "I usually look for something comical to say when I am in tense situations"; "I have often felt that if I am in a situation where I have to either cry or laugh, it's better to laugh." Participants rate their agreement in a 4-point scale, ranging from 1 (strongly disagree) to 4 (strongly agree). Both the SHRQ and CHS are associated with many personality characteristics and health outcomes and have been used in numerous studies and different cultures (see Martin, 1996, for a review).

Religious Fundamentalism Scale (Altemeyer & Hunsberger, 1992). The balanced 20-item Religious Fundamentalism Scale (RF) measures religious fundamentalism defined mainly by the belief to the uniqueness of a set of religious teachings that clearly contain the fundamental, basic, and inherent truth about humanity and deity and by the belief that this truth must be followed today according to the practices of the past. We introduced some minor changes in our French translation

of the scale for cultural adaptation to the Catholic tradition and to the sensitivities of Belgian religiosity. For example, "Satan" was replaced by "diable"; "group" (Item 3) was replaced by "Église ou groupe religieux." We also removed some superlatives so as not to confuse disagreement with the statement itself and disagreement with the superlative. We also split item 2 into two items because it contained two different statements (total items: 21, in our version; however, correlation between the two items that came from item 2 turned out to be particularly high). Finally, in this study, participants had to indicate their agreement or disagreement with the religious statements contained in the scale, by rating from 1 (very strongly disagree) to 6 (very strongly agree) on a 6-point Likert-type format scale.

Revised and Balanced Quest Scale. This Revised and Balanced (by adding negative items) Quest Scale (Altemeyer & Hunsberger, 1992) appreciably improves the psychometric qualities of previous scales measuring the quest orientation. As with the RF scale, participants indicate their agreement with the statements of the scale by rating from 1 (strongly disagree) to 6 (strongly agree), and their total score is calculated by summing up their responses. Examples of the scale items are as follows: "It might be said that I value my religious doubts and uncertainties"; "My religious beliefs are far too important to me to be jeopardized by a lot of skepticism and critical examinations" (negative item).

Religiousness index. We used a three-item index of religiousness that includes questions on (a) the importance of God in personal life, (b) the importance of religion in personal life, and (c) frequency of prayer. Possible answers ranged from 1 (not at all important) to 7 (very important) for the first two items and from 1 (not at all) to 5 (a lot [meaning almost every day]) for the third item. The total score is obtained after standardization.

RESULTS AND DISCUSSION

Descriptive statistics, reliability, and intercorrelations between religion and humor measures are presented in Tables 1 and 2. Reliability of, and intercorrelations between, the SHRQ and the CHS were similar to those of the original English versions (see Martin, 1996). Intercorrelation between RF and Quest was similar to that reported in the normative data, while reliability of these scales was lower, but still satisfactory (Altemeyer & Hunsberger, 1992). Reliability of our religiousness index was also satisfactory.

With regard to our strategy of measuring spontaneous humor creation, it turned out that participants spontaneously produced humorous answers, and the

	Alpha α	Total		Males > Females
			SD	t Test
Humor				
Humor creation		3.51	2.55	3.28**
SHRQ	.56	56.79	6.88	0.43
CHS	.59	19.61	3.72	0.52
Religion				
Religiousness	.86	16.71	7.92	-2.81*
Religious fundamentalism	.78	43.86	13.47	-2.48*
Quest	.78	72.14	11.61	2.55*

TABLE 1
Descriptive Statistics, Reliabilities, and Gender Differences

Note. N = 72. SHRQ = Situational Humor Response Questionnaire; CHS = Coping Humor Scale. * p < .05, two-tailed. ** p < .01, two-tailed.

TABLE 2
Intercorrelations Between Humor and Religion Measures

	Humor		Religion		
	SHRQ	CHS	Religiousness	RF	Quest
Humor					
Humor creation	12	09	28*	23*	.23*
SHRQ		.49***	.11	03	02
CHS			.12	.17	.05
Religion					
Religiousness				.69***	.71***
Religious fundamentalism					69***

Note. N = 72. CHS = Coping Humor Scale; Quest = Revised and Balanced Quest Scale; RF = Religious Fundamentalism Scale; SHRQ = Situational Humor Response Questionnaire.

*p < .05, two-tailed. ***p < .001, two-tailed.

minimum and maximum scores of humor creation were 0 (only 5 participants) and 10, respectively. The mean score on this test and the standard deviation were similar to those of a previous unpublished study in an Israeli sample (M = 3, SD = 2.2; O. Nevo, personal communication, July 14, 1998). Humor creation was not related to the two self-report scales. This might possibly be explained by the fact that the two scales, especially the SHRQ, tapped a different humor construct than spontaneous humor creation. Although a moderate correlation between spontaneous humor creation and CHS could be expected (as both measures were focused on humor in frustrating or stressful situations, respectively), the lack of correlation between them may be due to the behavioral versus

self-report difference of these measures as well as to the projective (some would add "unconscious") character of the Rosenzweig test pictures versus the explicitly conscious character of the CHS items.

Our hypothesis of negative association between religion and humor was moderately confirmed, as far as humor creation is concerned. As detailed in Table 2, religiousness, per se, as well as religious fundamentalism, tended to predict low spontaneous humor production in response to hypothetical daily hassles. In contrast, as hypothesized, quest religious orientation, which involves doubt and openness to change in beliefs, was positively related to this spontaneous humor creation. No differences emerged from within-gender correlations. However, expectations that people high in religiousness and religious fundamentalism (vs. Quest) would tend to report low sense of humor—defined in the measure we used (SHRQ) as a responsiveness with laugh, smile, and otherwise a mirthful reaction in everyday situations—failed to be satisfied. This was also the case with reported use of humor as a coping mechanism.

Why this discrepancy between results based on spontaneous humor and results based on the humor scales? It is possible that the negative association between humor and religion can be found clearly when the release of self-control, as in spontaneous humor creation, is involved. This behavioral aspect of humor is not involved in reported sense of humor. In addition, today religion does not provide an explicit antihumor discourse; if this were the case, an impact of religious attitude toward humor could also be perceived in self-report questionnaires of individuals' own senses of humor. On the contrary, a possible influence of religion on humor is probably more easily perceived in projective tests (such as the Rosenzweig test) that may allow for the manifestation of unconscious elements. Finally, high scores on self-report humor scales such as the SHRQ and the CHS (but not so on other humor behaviors) reflect clearly participants' extraversion (see Martin, 1996, 1998) as well as optimism and related behaviors (Kuiper & Martin, 1998). Interestingly, religiosity (as well as religious fundamentalism) is clearly associated with optimism (e.g., Sethi & Seligman, 1993) and sometimes with extraversion (see Saroglou, 2002, for a review). It is then possible that, if the hypothesized negative association between religion and self-reported sense of humor really exists, extraversion-optimism counteracts with religion and neutralizes the association between religion and sense of humor as measured in these scales.

Because of the multidimensionality and complexity of both religion and humor, one has to keep in mind the limitations of this study as well as perspectives for further research. First, this study needs to be replicated and extended to other samples, such as people with specific religiosity (e.g., high religious fundamentalists) or people with other than (Belgian) Catholic Christian religious backgrounds. For instance, it has been argued that religions vary in their way of approaching the comic and the tragic dimensions of life (Morreall, 1999). Another limitation of this study may be that the situations depicted in the humor creation test we used were selected by

Rosenzweig to generate frustration. Frustration, though, may be considered as leading to more ironic and even aggressive humor. If this is the case, it is possible that results on humor creation were influenced by the restriction of the material to these situations. More generally, one could assume that religiousness inhibits aggressive and ironic humor but not necessarily nontendentious humor. If we consider, for instance, another measure, that is, the SHRQ (where it is possible to find a large variety of situations), in this study religiousness turned out to be negatively associated with item 18 of this scale, "If you were eating in a restaurant with some friends and the waiter accidentally spilled some soup on one of your friends ...," but it was unrelated to item 13, "If you were eating in a restaurant with some friends and the waiter accidentally spilled some soup on you" In addition, the situations depicted in the Rosenzweig test involve interpersonal—dyadic relations and interpersonal responsibility. One could then assume that religion predicts low humor creation in situations of daily hassles involving interpersonal—dyadic relations and responsibility such as those depicted in this test, but not in euphoric social situations.

A final, related, and more general question worthy to be explored is whether this possible negative association between humor and religion reflects a direct or an indirect relation, involving a moderating or mediating effect of personality. For example, in terms of the Five Factor Model, research should investigate whether low humor performance as function of religion and specific religious dimensions may depend on difficulty in creative thinking or perceiving incongruity (openness), seriousness (conscientiousness and extraversion), or high responsibility and concern for others (conscientiousness, agreeableness).

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