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**Senses of Humor:
The Validation of a Multi-factor Humor Appreciation Scale**

by

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Abstract

To further understand individual differences in mass communication effects, this paper focuses on the development, testing, and validation of a “humor appreciation” scale. Several conceptual propositions are forwarded, including that humor appreciation is a multidimensional construct—i.e., multiple “senses of humor” are possible. Data from three surveys—two student surveys and a general population survey—are examined, with results indicating that sense of humor may properly be viewed as multidimensional, and emergent humor dimensions may be validated with preferences for particular media content. Findings are compared to the initial set of propositions, and the usefulness of *senses of humor* as a communication “trait” is explored.

Senses of Humor: The Validation of a Multi-factor Humor Appreciation Scale

Humorous stimuli come from a multitude of communication sources, ranging from interpersonal interactions to mediated entertainment. Although not often acknowledged as “serious” narrative content (e.g., note the dearth of comedies winning Academy Awards), nearly 50 percent of the top-ranked videos and highest-rated TV shows of all time are comedies (Zillmann & Bryant, 1991). People clearly enjoy humor, but do all people enjoy all humor? Anecdotal evidence would suggest not. The audience for Shakespearean comic faire, for example, differs considerably from the audience for the latest Adam Sandler film. Indeed, the fact that some people find certain things hilarious while others are not the least bit amused—or are actually repelled or disgusted—suggests that the appreciation of humor is a complex phenomenon. This manuscript presents evidence from a series of investigations devised in an attempt to better understand humor appreciation. Through the development of a new, multidimensional conceptual framework, the various “senses of humor” are conceptualized, measured, and validated.

Generally, social and behavioral researchers have demonstrated commitment to specific, rather narrow conceptual definitions of the appreciation of humor. Berlyne (1972) stated that because humor could be aroused in a single person, the “primary significance [is not] a social one” (p. 51). On the other hand, Fine (1983) argued that humor *must* be considered in its social context, as a part of a social relationship. Zillmann and Cantor (1972) noted that *disparagement* is a key variable in determining whether humor is appreciated or not. Similarly, Scogin and Pollio (1980) showed that most humor is “directed at some specific person” with a “*deprecating* tone” (Pollio, 1983, p. 219). For Bateson (1953) and Koestler (1964), humor resulted from the rapid transfer of a logical pattern from one *cognitive framing* to another. These particularized

presentations sometimes have bordered on the pedantic, with little acknowledgment of alternative conceptual definitions.

An important exception to this trend is the early work of Eysenck (1942). His three-part theory of humor proposed cognitive aspects as emphasized in incongruity theories, conative aspects as shown in disparagement theories, and affective from theories that stress the positive emotions linked to laughter. Eysenck further combined the last two types into a class called “orectic,” which refers to the “joyful consciousness of superior adaptation” associated with these types of humor (Martin, 1998, p. 36).

One laudatory attempt at conceptualizing and operationalizing sense of humor as a *multidimensional* construct is the research of Thorson and Powell (1993a; 1993b). However, their investigations have been limited to the realm of social humor only, and almost entirely to the case of the individual as *source* of humorous communication (as opposed to humor appreciation by a receiver). Similarly, Craik and Ware (1998) have identified five styles of humorous conduct—socially warm vs. cold, reflective vs. boorish, competent vs. inept, earthy vs. repressed, and benign vs. mean-spirited—which clarify the multidimensional bases of humorous stimuli, but examine only source behavior, not humor appreciation or attraction.

Martin (1998) called for more study into “why people differ in the sorts of things that amuse them,” noting that the individual-differences, trait approach that he offers is rather unique in the psychology literature. He noted several older studies that explored humor appreciation dimensions: Based on the work of Eysenck (1942), Grziwok and Scodel (1956) used a set of 40 cartoons to measure appreciation of “orectic” (using aggressive and sexual themes) and “cognitive” (using parody, exaggeration, or incongruity) types of humor, finding the former to be related to such personality dimensions as extraversion and aggressiveness (Martin, 1998, p. 36).

Andrews (1943) studied reactions to 24 jokes, puns, limericks, and cartoons, finding six factors of perceived funniness: 1) derision-superiority; 2) reaction to debauchery; 3) subtlety; 4) play on words and ideas; 5) sexual; and 6) ridiculous wise-cracks. Cattell and Luborsky (1947) used responses to 100 jokes in a clustering process that produced five factors: 1) good-natured self-assertion; 2) rebellious dominance; 3) easy-going sensuality; 4) resigned derision; and 5) urbane sophistication. More recently, Ruch (reviewed in Martin, 1998) has used jokes and cartoons as stimuli, consistently discovering three dimensions of humor: Incongruity-resolution, nonsense, and sexual humor.

Few modern sources have demonstrated such attempts to incorporate multiple functions for humor appreciation or multiple types of humorous stimuli. McCullough (1993) began her cross-cultural examination of humor with a two-dimensional typology of humor as resident in the stimulus (i.e., ten television commercials presented to college students in the U.S. and in Finland). She concluded that the two dimensions extracted from previous work--aggressive/sexual humor and nonsense humor--were “too simplistic” and did not “fully represent the humor perceptions of the students of either nationality” (p. 1280). McCullough’s factor analytic approach added the dimensions of “gentle make fun” and “less aggressive/surprise” to the original two for the U.S. sample.

Ziv (1984) acknowledged that “those who enjoy humor . . . have certain preferences. . . . While some enjoy aggressive or sexual humor, others prefer intellectual humor” (p. 109). He identified five primary “functions” of humor—Aggressive, sexual, social, as a defense mechanism, and intellectual. Ziv then developed a model to describe how personality traits (e.g., stability, emotionality, introversion, extroversion) determine preferences for the different functions. Thus, according to Ziv’s model, “emotional extroverts” are likely to appreciate humor

with aggressive functions, while “stable introverts” are likely to prefer humor with intellectual functions. Ziv did not empirically test these predictions, but McGoun and Neuendorf (1995) tested his notions in an applied context, discovering that extroversion related positively to appreciation for television sitcom humor of divergent types (“aggressive” vs. “nonaggressive” family sitcom content, i.e., *Married with Children* vs. *The Cosby Show*). Emotionality was unrelated to humor appreciation. The results provided support for Ziv’s contention that introversion/extroversion is an important personality construct related to humor appreciation, but did not support his specific predictions of how humor preferences would be differentiated.

Eshleman and Neuendorf (1989) conducted a fairly comprehensive review of the humor literature, identifying two extant types of humor appreciation with an individual-level locus, and four types of humor appreciation within social contexts. They declined to attempt a typology of humorous stimuli, rather casting their conceptualization in terms of receiver-based templates via which the individual might view a stimulus with humor potential. This leaves open the possibility of individuals holding diverse “senses” of humor, resulting in profiles that vary in the degree to which the templates are employed.

Based on these works and a thorough examination of the literature on humor, a likely set of such humor “templates” could be forwarded: 1) cognitive bisociation, an appreciation of the humor in stimuli via dual framing (as in puns, double entendres, and absurd visual juxtapositions; Bateson, 1953; Freud, 1960; Schultz, 1976), which is dependent on a close understanding of the culturally determined multiple meanings of symbols; 2) physiological arousal and response, which situates the humor appreciation either at a pleasant level of arousal with concurrent physical response (“arousal boost,” Berlyne, 1969; Berlyne, 1972), or at the resolution following an unpleasantly high level of arousal which is given release in a “punch

line” catharsis (“arousal jag,” Maase, Fink, & Kaplowitz, 1985); 3) social/functional, which examines the role of humor as a social currency for the creation and maintenance of social relationships and the regulation of distance in those relationships (Chapman, 1983; Lamaster, 1975; Scogin & Pollio, 1980) and includes humor as a mechanism in reference group affiliation (Pollio, 1983); and 4) disparagement, where humor is used either as a source of social power in the establishment of a “pecking order” (Fry, 1963) or as an attack to situate the target in a “one-down” position (Zillmann & Cantor, 1976). The first two conceptual categories correspond basically to humor appreciated at the “individual level,” while the latter two describe humor that demands appreciation in a social context (even if that social context is the vicarious experience of watching fictional social interactions in a film or sitcom, for example; Eshleman & Neuendorf, 1989).

The modern history of sense of humor measurement has produced a fascinating collection of pointed attempts that either 1) measure sense of humor in a generic, self-assessment fashion (e.g., “I have a good sense of humor”) or 2) following the seeming predilection of many scholars to choose a narrow definition of humor, develop a good measure of a rather specific type of humor appreciation (e.g., Martin and Lefcourt’s (1984) Situational Humor Response Questionnaire, a 21-item scale that measures propensity to laugh). At the same time, scholars call for the acknowledgment of humor as a multifaceted construct (e.g., Ruch & Hehl, 1983).

Despite his recognition that individuals prefer certain humor types, Ziv’s humor appreciation scale (1984) taps fondness for humor “in general,” through measures such as “I find many situations funny” and “Comparing myself with my friends, I enjoy more the jokes I hear” (p. 112). It declines to attempt measures for specific humor types. Martin and Lefcourt’s (1984) Coping Humor Scale is a well-established seven-item scale measuring relative value

placed on humor as an adaptive mechanism. Zillmann, Rockwell, Schweitzer, and Sundar's (1993) adaptation of the CHS expands the set to 18 items, but does not increase the number of dimensions tapped. Svebak's (1974) Sense of Humor Questionnaire is designed to measure two constructs, the ability to perceive humor and the value placed on humor by the individual. Thorson and Powell (1993b) have distinguished between humor generation and humor appreciation, and focus almost exclusively on the former, attempting only humor appreciation indicators that relate to appreciation of comics and comedians. Other efforts to measure sense of humor have relied on a unidimensional, normative approach--i.e., efforts to tap a "good" sense of humor (Craik, Lampert, & Nelson, 1996; Herzog & Karafa, 1998).

Ruch (1998) provides a comprehensive coverage of the treatment of sense of humor in psychology, and while the majority of measures covered are source-centric, some key humor appreciation measures are identified. Table 1 lists the relevant sense of humor (appreciation) scales that have been developed to date. Importantly, these unidimensional measures are likely to invoke a strong demand characteristic, resulting in a skewed distribution. In other words, respondents are very likely to agree with *all* such statements--no one admits to having a "poor sense of humor."ⁱ As Crawford and Gressley (1991) point out, most people consider themselves to be *above average* in sense of humor because of the value placed on sense of humor in Western society. Therefore, normative, unidimensional, and generic measures do little to advance our understanding of humor appreciation.

Propositions

The research reported on in this manuscript attempts to bring to bear a wider variety of humor appreciation and humor preference types in the measurement of the sense of humor--or rather, the "senses" of humor. It takes a wholly *receiver-oriented approach*, limiting its purview

to how individuals respond to potentially humorous stimuli, while excluding a consideration of humor generation and other source-centric aspects of humor. It also attempts to validate the multidimensional approach to senses of humor by linking particular preferences with attraction toward specific media exemplars. The research is informed by a set of propositions derived via a grounded theory approach, exhaustively examining the humor literature (a 400-entry bibliography is available from the authors) and developing constructs via in-depth interviewing and participant observations. This conceptual framework for understanding multidimensional humor appreciation has a number of propositions:

Proposition 1. Sense of humor is not singular; rather, multidimensional “senses of humor” exist. These multiple dimensions of humor appreciation may be correlated, but are not fully redundant, rather representing quite different and separable orientations toward a potentially humorous stimulus (see also Eysenck, 1942). These senses of humor are relatively stable and enduring in the individual (corresponding to a trait, individual-differences perspective; see Martin, 1998).

Proposition 2. All humans possess some type of humor appreciation, and anecdotal claims of identifying an individual with “no sense of humor” are actually instances where the sense of humor profiles of the two individuals involved have little overlap.

Proposition 3. An individual may demonstrate a preference for a single dimension of humor, or for multiple dimensions; that is, sense of humor profiles may be one-dimensional or multidimensional.

Proposition 4. These profiles will predict preferences for stimuli with potential for humor

response, notably comedic TV and film content.

Proposition 5. A stimulus with humor potential (e.g., a joke, a television program, a film) may evoke single-dimension or multiple-dimension humor responses in audience members.

Proposition 6. The extent to which two individuals' humor profiles match will be a strong determinant of their interpersonal relationship potential--how well they will get along, work effectively together, etc. (see also Eysenck, 1972 (cited by Martin, 1998), and his notion of "conformist" sense of humor).

Proposition 7. A stimulus with strong potential for evoking multiple-dimension humor responses is likely to be more sought-after (popular) by audience members at large.

A full test of all seven propositions will require a program of research involving a series of multiple investigations. The current research, reporting on selected aspects of three studies, focuses on the ongoing process of building a scale for the valid and reliable measurement of multiple humor preferences (i.e., a "senses of humor" scale, or SOHS). The propositions above form the theoretic framework that underscores the research reported here, but only two—numbers 1 and 4—will be directly addressed, since the emphasis of this paper is on scale development and validation.

Methods

The methodological plan for this research is similar to that proposed and used by Frost (1969; cited in Gunter, 2000), and follows the guidelines of DeVellis (1991) for the construction

of new scales. The process follows these steps:

Step 1: The construction of a multiple-item Likert-type scale derived from open-ended responses to pilot questionnaires and qualitative investigations. (The open-ended and qualitative assessments should be repeated as needed.)

Step 2: The use of frequency analysis to add, delete, and revise items, and factor analysis to refine the dimensions of the scale. (This process should be repeated as needed.)

Step 3: The validation of the multiple sense of humor dimensions against relevant humorous media exposure habits.

Step 4: The validation of the multiple sense of humor dimensions against existing sense of humor measures, values, and other theoretically related constructs.

These steps conform neatly to the process of validity assessment as clarified by Carmines and Zeller (1979). Steps 1 and 2 provide evidence of *content validity*, the extent to which an empirical measurement reflects a specific domain of content fully (p. 20). Step 3 is designed to provide evidence of *criterion-related validity*, the extent to which a measuring instrument can estimate some important form of behavior that is external to the measurement (p. 17). Here, the behavior is selective exposure to relevant types of humorous media content. Step 4 will provide evidence for *construct validity*, the extent to which a measure relates to other measures “consistent with theoretically derived hypotheses concerning the concepts (or constructs) that are being measured” (p. 23).ⁱⁱ

Step 1 was initiated with Study 1 (to be described below), and has been ongoing through two additional data collections (Studies 2 and 3). Prior to Study 1, in-depth interviews by students with friends and family members provided supplemental items to those derived from

extant literature. All three studies have included open-ended items to gather additional items representing new sense of humor dimensions.

Step 2 was first conducted with data from Study 1, and has been repeated with Studies 2 and 3. This process of scale refinement via factor analysis is a major focus of this paper.

Step 3 has been conducted for all three studies, and results from the most recent investigation relating senses of humor to acquisition of humorous media stimuli are reported in this paper.

Step 4, relating senses of humor factors to other sense of humor measures (concurrent validity) and related constructs, is a primary focus of Study 3, and is reported herein.

The analyses reported in this paper are based on the following three data collections: (1) a pilot study of college students conducted in 1991 (McGoun & Neuendorf, 1995), (2) a general population survey of adults conducted in 1999, and (3) a comprehensive survey of college students conducted in late 2001.ⁱⁱⁱ

Study 1—pilot study of a student sample

The initial student sample consisted of 249 respondents enrolled in introductory classes in communication. The sample was 48.8% female, with a median household income of \$25,000 to \$34,999 and a mean age of 21.5 years.

The pilot questionnaire presented to the student sample 23 items measuring *humor appreciation* on an 11-point, zero-to-ten Likert-type response scale. (The items were derived from a series of qualitative investigations and based primarily on the multidimensional approach suggested by Eshleman & Neuendorf (1989)). After careful examination of the variable distributions (including their ranges, variances, and skews) and intercorrelations (identifying extreme redundancies), the pool was reduced to a set of 14 items. Generally, those items

attempting to tap the generic “good sense of humor” (e.g., “I have a good sense of humor,” “I laugh a lot,” “I like to tell jokes to others”) suffered from extremely low variance and severe negative skews.^{iv}

Study 2—general population survey

In 1999, a probability sample of residents of a major metropolitan area in the U.S. Midwest responded to an omnibus CATI survey. The sample of 321 adults was 60% female, with a median household income of \$20,000 to \$30,000 and a mean age of 41.6 years, and was composed of 32.3% college graduates, 45% Democrats (or “leaning” toward Democrat), 24% Republicans (or “leaning” toward Republican), 30% self-designated “liberals,” and 32% self-designated “conservatives.”

A set of 11-point Likert-type items tapped the respondents’ multifaceted *senses of humor*. The 17 items were primarily culled from earlier work (McGoun & Neuendorf, 1995; Neuendorf, Skalski, Jeffres, & Atkin, 1999), constituting the 14 items retained from the pilot survey instrument, supplemented with several items added specifically to tap social humor functions not well measured in previous attempts. Additionally, an open-ended question asked respondents to describe their “favorite type of humor.”^v

Study 3—comprehensive student survey

In December of 2001, a two-part survey was administered to students in introductory communication courses at an urban Midwestern university. The sample of 314 respondents was 49% female, with a median household income of \$40,001-\$50,000 and a mean age of 21 years. The sample was 29% self-designated “liberals,” and 23% self-designated “conservatives” with 83% reporting affiliation with an organized religion.

Based on the results of the previous two data collections, as well as a consideration of

new scholarly literature, the *senses of humor* were measured with 26 items. New items included those measuring appreciation for self-deprecating humor, social criticism, the oft-mentioned (on open-ended items) “dry” humor, and disparagement humor with a wider variety of targets (e.g., women, men, arrogant people). The full set of 26 items is shown in Appendix A. The set includes the new items described above plus the items used in the previous studies. New items are designated by an asterisk (*).

To test criterion validity, this instrument also asked respondents about “how funny” they thought each of several films were on a 0-10 scale, if they had seen them: *American Pie*, *Bill and Ted’s Excellent Adventure*, *Dumb and Dumber*, *Evil Dead II*, *Fast Times at Ridgemont High*, *Fight Club*, *Monty Python and the Holy Grail*, *The Waterboy*, and *There’s Something about Mary*. This roster of films was chosen due to likely relationships with the consistent factors to emerge from the first two data collections and are further reported on below.

To test for construct validity, the Schwartz Values Scale (Schwartz, 1992) was included. This is a list of 56 values—respondents are asked to indicate how important they think each is on a 0 to 7 scale, with “7” indicating “of extreme importance” and “0” indicating “opposed to my values.”

Results

Content validity: Comparing factor structures

For comparative purposes, the senses of humor items that were common among the three data sets were submitted to identical factor analyses (principal component, oblique (oblimin) rotation, latent root criterion). Oblique rotation was selected due to the clear possibility of humor preferences being related. The results are displayed in Tables 2-4, as are the exact

wordings of the Likert-type questionnaire items.^{vi}

For Study 1, the four factors account for 55.7% of the pooled variance. For the general population sample (Study 2), this figure is 58.3%, and for the comprehensive student sample (Study 3), it is 66.7%. The results of the three factor analyses reveal patterns that are surprisingly robust. In each analysis, the first factor is a measure of enjoyment of “mean-spirited humor” with most of the primary-loading variables consistent across studies (i.e., “sexist,” “racial/ethnic,” “death/violence,” “crude/sick”).

Across the three studies, we see other consistencies—in the derivation of a “realistic humor” dimension (anchored with a lone “realistic” item), an incongruous humor factor (that in Study 2 also includes a liking for “bloopers”), and a “stupid” humor/”blooper” factor in Studies 1 and 3 (both student samples). The second study has a unique factor that emerges in neither of the student samples—a “satire/death/slapstick” factor (fondly nicknamed the “Monty Python factor”). The third study finds the emergence of a new factor, that which combines “absurd,” “slapstick,” and “satire” appreciations. This factor has been labeled “Disrespect humor,” to indicate the affiliation of each item to a sensibility that appreciates poking fun at the status quo. The inconsistencies among the three studies are perhaps indicative of a generational difference, with the younger student samples more appreciative of sophomoric humor and more likely to treat it as a true humor “type” rather than a mere level of sophistication.

In general, the factors are not strongly related to one another—the highest zero-order correlation coefficient is that for factors 1 and 5 in Study 3 ($r=-.30$; $r\text{-sq}=.09$). The dimensions of humor appreciation measured in the studies are by and large orthogonal, tapping unique, non-redundant senses of humor.

Toward a “senses of humor” scale

Given that the goal of this paper was to develop a broad “senses of humor” scale, the complete set of 26-items from study 3 was also factor analyzed and used in subsequent tests. This factor analysis followed the same procedure as the analyses reported above (principal component, oblique (oblimin) rotation, latent root criterion), though a second-run was done after dropping an item that loaded poorly and on its own factor initially (“I enjoy jokes involving wordplay”). The results of this analysis are shown in Table 5. It was expected that this analysis would produce the robust factors from before and also reveal some new ones.

Six factors emerged this time, accounting for 62.4% of the pooled variance. The *first factor* has been named “put down humor” and includes the following items (with loadings in parenthesis): “I like humor that puts down rich people” (.75), “I like humor that puts down men” (.74), “I like humor that puts down arrogant people” (.73), “I like humor that puts down stupid people” (.72), “I like humor that puts down women” (.70), “I enjoy humor that criticizes society” (.60), and “I like humor about death” (.58). The *second factor* parallels one that emerged across data collections, “stupid/blooper humor.” It has the items, “I find bloopers especially funny” (.76), “something is funny if it happens accidentally” (.68), and “I find it funny when people do stupid things” (.60). The *third factor* has also emerged from all three data collections, “realistic humor.” This time, it included the usual “something is funny to me only if I find the situation realistic” (.87) and a second item, “something is funny to me only if I think it could really happen” (.80). The *fourth factor* to emerge has been called “incongruity,” and it includes the items asking about absurd humor (.65), coincidences (.60), sarcasm (.59), dry humor (.57), and self-deprecating humor (.56). The *fifth factor* includes items about slapstick (.80), satire (.76), and sight gags (.65), making it similar to the “incongruity” and “satire/death” factors from the first two data collections. This is the “slapstick/satire” factor. The *final factor* is named

“sexual/scatological humor” and includes items asking about preference for humor about sex (.73), naughtiness (.73), sick things (.66), violence (.65), and racial/ethnic groups (.61). This is another robust factor to emerge across data collections.

Criterion-related validity: Predicting media preferences

The factor scores from the third data collection were saved as variables and used to predict viewership of movies, in an effort to establish criterion validity. Specifically, we wanted to demonstrate the concurrent validity of humor types with regard to film preference. According to Kerlinger and Lee (2000), concurrent validity is the type of criterion validity that can be used to validate a new test. The expectation in this case was that certain humor preferences would correlate with certain film preferences. These relationships were expected to hold for certain factors, as well, which have added predictive power, due to the inclusion of *several* (vs. a single) dimensions of humor preference in a single, saved factor score. Thus, the film preference items (asking subjects about “how funny” they thought each of a series of films were) were correlated with three of the robust factors to emerge from the third data collection. The fourth, “realistic humor,” was excluded due to uncertainty about what constitutes a “realistic” comedic movie.

The first factor related to exposure patterns was “stupid/blooper” humor. Our expectation was that preference for this type of humor would be related to liking of the movies *Dumb and Dumber*, *The Waterboy*, and *Bill and Ted’s Excellent Adventure*, all of which contain strong doses of stupid humor. This expectation received complete support, as preferences for all three films, among respondents who had seen them, correlated significantly with the “stupid/blooper” factor variable (*Dumb and Dumber* $r = .336$, $p < .01$, $N = 203$; *The Waterboy* $r = .319$, $p < .01$, $N = 183$; *Bill and Ted’s* $r = .317$, $p < .01$, $N = 150$).

A second test involved the “sexual/scatological” factor, which was expected to relate to

finding the films *American Pie*, *There's Something about Mary*, and *Fast Times at Ridgemont High* funny. This test was partially supported, as significant Pearson correlations were found between the “sexual/scatological” variable and *American Pie* ($r = .225$, $p < .01$, $N = 193$) and *There's Something about Mary* ($r = .184$, $p < .01$, $N = 198$). The result for *Fast Times at Ridgemont High* was in the expected direction ($r = .055$) but not significant, perhaps due to the relatively small number of respondents who had seen the film ($N = 82$).

The third test examined the relationship between the “slapstick/satire” factor and liking of the films *Monty Python and the Holy Grail*, *Fight Club*, and *The Evil Dead II*, all of which contain slapstick humor and over-the-top, satiric violence. The correlations were once again significant, with the strongest relationships observed yet (*Monty Python and the Holy Grail* $r = .401$, $p < .01$, $N = 86$; *Fight Club* $r = .273$, $p < .01$, $N = 129$; *Evil Dead II* $r = .727$, $p < .01$, $N = 25$).

Finally, the correlations between each of the three factors and the *other* six films was examined, to rule out the claim that the above results may be due to all factors being correlated with all films. The first factor, “stupid/blooper” humor, was significantly related to finding *American Pie* ($r = .230$, $p < .01$, $N = 193$) and *There's Something about Mary* ($r = .209$, $p < .01$, $N = 198$) funny, but none of the other four films. The second factor, “sexual/scatological” humor, was significantly related to finding *Fight Club* ($r = .261$, $p < .01$, $N = 125$) and *Dumb and Dumber* ($r = .225$, $p < .01$, $N = 203$) funny, but none of the other four films. Lastly, the “slapstick/satire” factor was not significantly related to finding *any* of the other six films funny. Though the first two factors did relate to other films, these relationships were *not* unexpected, since it could easily be argued that the films in question contain *both* types of humor, something that may help to explain their success and enduring popularity.

Construct validity: Relationships with theoretically linked constructs

The last stage of the validation process attempted to establish construct validity, using an exploratory approach. The six factors to emerge from the third data collection were entered into a series of stepwise multiple regression analyses. Factors served as dependent variables in each of the analyses, and the 56 Schwartz values served as the independent variables. It was expected that the emergent values would relate (and not relate) to the humor dimensions in theoretically meaningful ways. Several values turned out to be significant predictors (all at $p < .05$) and are reported below.

The first factor, “put down” humor, was positively associated with valuing social power ($\beta = .26$) and pleasure ($\beta = .14$), and negatively associated with valuing equality ($\beta = -.20$), healthiness ($\beta = -.13$), helpfulness ($\beta = -.18$), and cleanliness ($\beta = -.24$). The second factor, “stupid/blooper” humor, was positively associated with valuing meaning in life ($\beta = .15$), obedience ($\beta = .26$), daringness ($\beta = .14$), and helpfulness ($\beta = .16$), and negatively associated with valuing intelligence ($\beta = -.30$). The third factor, “realistic humor,” was positively associated with valuing social power ($\beta = .14$), preserving public image ($\beta = .19$), self-discipline ($\beta = .19$), protecting the environment ($\beta = .15$), and wisdom ($\beta = .18$), and negatively associated with valuing humbleness ($\beta = -.28$) and honoring of parents and elders ($\beta = -.15$).

The first of the remaining three factors, “incongruity” humor, related positively to valuing inner harmony ($\beta = .26$), social power ($\beta = .21$), pleasure ($\beta = .16$), and wisdom ($\beta = .17$), and negatively to valuing national security ($\beta = -.16$), preserving public image ($\beta = -.14$), devoutness ($\beta = -.16$), and cleanliness ($\beta = -.15$). The second of the last, “slapstick/satire” humor, related positively to valuing social power ($\beta = .23$), reciprocation of favors ($\beta = .17$), a

world of beauty ($\beta = .16$), and being capable ($\beta = .15$), and negatively to valuing respect for tradition ($\beta = -.29$), a spiritual life ($\beta = -.18$), and preserving public image ($\beta = -.18$). The last factor, “sexual/scatological” humor, related positively to valuing social power ($\beta = .27$), enjoying life ($\beta = .22$), pleasure ($\beta = .19$), and social recognition ($\beta = .19$), and negatively to valuing a spiritual life ($\beta = -.20$), respect for tradition ($\beta = -.23$), social order ($\beta = -.15$), and being intelligent ($\beta = -.15$). Interpretations of these results are in the discussion section below.

Reliability

Internal consistency analysis of the final 25-item, six factor solution for Study 3 resulted in the following Cronbach’s alpha coefficients: Factor 1, 7 items, $\alpha = .86$; Factor 2, 3 items, $\alpha = .61$; Factor 3, 2 items, $\alpha = .72$; Factor 4, 5 items, $\alpha = .68$; Factor 5, 3 items, $\alpha = .68$; Factor 6, 5 items, $\alpha = .79$. These α coefficients range from barely acceptable (.61) to strong (.86). Future elaboration on the multiple facets of the scale should address the lower reliabilities through the development of additional items tapping that particular type of sense of humor.

Discussion

The process outlined in this paper, with its reliance on a grounded-theory approach to developing in-depth understanding of the humor appreciation process, has been successful in confirming the notion that an expanded view of the human “sense of humor” is both valid and fruitful for predicting behaviors, including media habits and preferences. The process as executed meets the spirit of the *original* 1970’s “uses and gratifications” notion of the active audience; in its original form, the perspective demanded emergent constructs and operationalizations, rather than standard scales across needs and applications (Katz, Blumler, & Gurevitch, 1974). The constructs developed here--and their measures--are peculiar to the realm

of humor appreciation and are therefore rich in detail. Several propositions were employed as framings for this investigation, and numbers 1 and 4 were tested for this manuscript.

Propositions 1 and 4

Proposition 1 states that “Sense of humor is not singular; rather multidimensional ‘senses of humor’ exist. These multiple dimensions of humor appreciation may be correlated, but are not fully redundant, representing quite different and separable orientations toward a potentially humorous stimulus.” This proposition has received modest support. Factor analyses from three data collections found relatively consistent factor structures with a respectable amount of variance accounted for. The oblique solutions proved to be appropriate and robust, showing only small to moderate inter-factor correlations.

Proposition 4 proposes that “These profiles will predict preferences for stimuli with potential for humor response, including TV and film content.” This proposition also received modest support. Three of the emergent humor types from the third data collection related in predictable ways to how funny respondents found particular films. Most of the rest of the humor types were new to the third data collection and will be tested in a subsequent work, drawing on a broader array of humorous stimuli (e.g., preference for film, television, and other media comedy offerings).

Other Propositions

Propositions 2 and 3 have been tested using correlational and cluster analyses on the second dataset; these results are reported elsewhere (Neuendorf & Skalski, 2000). Proposition 2, which says “All humans possess some type of humor appreciation, and anecdotal claims of observing an individual with ‘no sense of humor’ are actually instances where the sense of humor profiles of the participants have little overlap,” was refuted in the earlier work. Evidence

from the general population sample indicates that there may exist individuals who are not highly aroused by or attracted to any humor type as measured. Proposition 3, which states that a single-dimension or a multiple-dimension humor preference profile is possible for a given individual, received clear support in the earlier work. A number of combinations of humor preference were apparent in the cluster analysis, with considerable face validity.

Propositions 5 through 7 were not assessed by the three investigations reported here, and await future elaboration.

Scale Validation

The validation process for the Senses of Humor Scale (SOHS) has resulted in a new technique for the measurement of multidimensional senses of humor (appreciation), with some predictive ability to media preferences.

With regard to *content validation*, the results from Studies 1 through 3 have confirmed a consistent multidimensional structure for humor appreciation, with enhancements at each stage. The next study ought to make incremental improvements that will bolster reliabilities through additional items for key factors (e.g., realistic humor) and re-introduce the dimension of “social humor” in a more suitable context (i.e., an *appreciation* of social humor, rather than the *personal use* of humor in a social situation). Among the four theory-derived “templates” of humor noted at the beginning of this paper (i.e., cognitive bisociation, physiological arousal and response, disparagement, and social/functional), this is the only one not well-represented at the end of the content validation process.

With respect to *criterion-related validity*, three of the senses of humor factors were found to successfully predict appreciation of films. Specifically, respondents who were high in the appreciation of stupid/blooper humor, sexual/scatological humor, and satire/slapstick humor,

respectively, found films that contained those humor types funny. The other types of humor preferences to emerge from the third data collection were obviously not available in time to test their relationships with specific examples of media content, but future research will involve a full test of how successfully the senses of humor predict media preferences and habits. Indeed, some additional evidence in this area already exists: humor templates to emerge in a cluster analysis of the factors from the second dataset (reported in Neuendorf & Skalski, 2000) related to a variety of film and television stimuli. However, it remains to be seen how well senses of humor relate to media seeking behaviors (e.g., interest in seeing upcoming movies), which would be an even better test of criterion validity.

The process of *construct validation* was begun by exploring how the senses of humor relate to values, which they did in many meaningful ways. Here are four examples: (1) a “put down” sense of humor was significantly predicted by valuing social power and *not* valuing equality, as would be expected by people who find it funny when others are “put in their place”; (2) “Stupid/blooper” humor was significantly predicted by *not* valuing intelligence, as would be expected; (3) The “slapstick/satire” sense of humor was significantly predicted by not valuing respect for tradition, which makes sense when one considers that the object of much satire is tradition; and (4) “Sexual/scatological” humor was significantly predicted by valuing enjoyment of life and pleasure, both of which involve sex. Since few studies have attempted to measure different senses of humor, it was not possible to establish convergent validity by relating our measures to others, but this should be addressed in future work to further establish construct validity.

Future Directions

Certainly, more data collections ought to further test the ability of the SOHS dimensions

to relate appropriately to such constructs as personality dimensions.

In addition, more work needs to be done on identifying “robust” types of sense of humor. Four have emerged from the first three data collections, and these can be further refined through the development of multiple-item measurement scales, in line with principles of psychometric theory (Nunnally & Bernstein, 1994). New types of humor to emerge should also be subjected to rigorous, multiple-item tests of reliability and validity. Identifying additional senses of humor will maximize the usefulness of the senses of humor construct by making it applicable to a wider variety of individuals.

Indeed, one of the impetuses of this research has been to gain a better understanding of individual differences in responses to communicated messages. As Oliver (2002) notes, media messages in particular have long been criticized for having small effect sizes; however, much of this unexplained variance can be attributed to individual differences, making them “infinitely worthy of our research attention” (p. 507). Many such variables have already been identified, including trait, readiness to respond, evaluative disposition, and need-based differences (Oliver, 2002). Sense of humor is one particular individual difference variable that has received scant attention in communication research, even though it is probably one of the most talked about in everyday life. Consider expressions such as “He has no sense of humor” or “I like her sense of humor”—these explicitly acknowledge the importance of sense of humor as a construct. Some newly developing areas of media scholarship, such as those looking at entertainment as a media effect (Bryant & Miron, 2002), would clearly benefit from a consideration of how senses of humor predict media habits, preferences, and enjoyment. The utility of senses of humor can even extend beyond mass media settings—as mentioned in one of the propositions behind this work, senses of humor may be a determinant of how people get along in interpersonal contexts

such as workgroups. Clearly, there is much value in considering the senses of humor in communication scholarship, and this paper has taken steps toward the development of a multi-factor senses of humor scale. After further refinement of the scale, the obvious next step is to incorporate the senses of humor into mainline research, in an effort to demonstrate once and for all that sense of humor is no laughing matter.

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Table 1.

List of Sense of Humor Scales (with Emphasis on Humor Appreciation).

Title:	Humor Initiation Scale
Source:	Bell, McGhee, & Duffey, 1986
Description:	A six-item scale using five-point Likert-type and frequency response options, the Humor Initiation Scale is designed to measure frequency of using humor in social interaction. (Sample item: “How often do you try to be funny by telling jokes ro stories that you remember?”
Title:	IPAT Humor Test of Personality
Source:	Cattell & Tollefson, 1966
Description:	Scale not provided.
Title:	Humorous Behavior Q-sort Deck
Source:	Craik, Lampert, & Nelson, 1996
Description:	100 items total; 40-item, 5-factor structure shown in article; Factors are socially warm vs. cold humorous style, reflective vs. boorish humorous style, competent vs. inept humorous style, earthy vs. repressed humorous style, and benign vs. mean-spirited humorous style
Title:	Relational Humor Inventory
Source:	DeKoning & Weiss, 2002
Description:	A 34-item inventory asks respondents to rate statements about their use of humor in their “present relationship,” using a seven-point response scale (1=not at all accurate, 7=very accurate). Half of the items refer to the respondent’s humor behaviors with regard to their “partner,” and half ask about the partner’s habits. (Sample items: “Sometimes I make my partner the butt of a joke.” “My partner can persuade me to do something by making me laugh.”) The items factor analyze into three dimensions: Negative, positive, and instrumental.
Title:	Humor Perceptiveness Test–Revised
Source:	Feingold, 1983
Description:	A series of 32 incomplete jokes, puns, riddles and gags are presented to respondents, who are asked to complete them. (e.g., “She could have married any man she pleased. But she never _____ [<i>pleased any man</i>].” “Johnny Carson: It was really hot today. Audience: _____ [<i>How hot was it?</i>]”
Title:	Cartoon Punch Line Production Test (CPPT)
Source:	Kohler & Ruch, 1993
Description:	Respondents are presented with six cartoons, for which they are asked to generate captions.
Title:	Untitled 4-trait matrix (inc. humor appreciation & humor creation)

Source: Koppel & Sechrest, 1970
 Description: Scale not provided.

Title: Coping Humor Scale
 Source: Lefcourt, 2001
 Description: A seven-item 4-point Likert-type scale measures the use of humor to cope with difficult situations.

Title: Situational Humor Response Q
 Source: Lefcourt, 2001
 Description: A 21-item, multiple-choice type scale measures responses to potentially humorous real-life situations. (e.g., “If you were eating in a restaurant with some friends and the waiter accidentally spilled a drink on you . . . I would not have been particularly amused; b. I would have been amused, but wouldn’t have shown it outwardly; c. I would have smiled; d. I would have laughed; e. I would have laughed heartily.”)

Title: Cartoon Measure of Perspective-Taking Humor
 Source: Lefcourt & Shepherd, 1995
 Description: Using six cartoons from Gary Larson’s *Far Side Collection* selected by a panel as representative of humor that lampoons human (vs. animal) self-importance, the measure asks subjects to respond in two ways– 1) to rate how funny each cartoon is (on a 1-5 scale), and 2) to explain what makes the cartoon funny (with the explanation coded on a three-point comprehension scale).

Title: 3 WD Humor Test
 Source: Ruch, 1992
 Description: Three versions of the test exist, with between 35 and 50 jokes and cartoons each. Each cartoon is rated for funniness (0=not at all funny, 6=very funny) and aversiveness (0=not at all aversive, -6=very aversive). Over several data collections, three factors repeated have emerged: Incongruity-resolution, nonsense, and sexual humor.

Title: State-Trait-Cheerfulness-Inventory (STCI) (scale not presented)
 Source: Ruch, Kohler, & Van Thriel, 1996
 Description:

Title: Sense-of-Humor Q
 Source: Svebak, 1974
 Description: Three dimensions of humor are measured with seven items each (a total of 21 items, each measured on a specific four-point scale). (e.g., “A humorist is typically perceived by others as a person who lacks the courage of his convictions (1=really true, 4=not at all).) The three dimensions are: Habitual sensitivity to humorous messages, habitual tendency to enjoy or dislike comical situations, and habitual tendency to permit or suppress emotional impulses of joy.

Title: Revised Sense-of-Humor Q

Source: Svebak, 1996

Description: Scale not provided.

Title: Multidimensional Sense of Humor Scale

Source: Thorson & Powell, 1993a

Description: A 24-item set of five-point Likert-type measures factored into four dimensions—humor production (i.e., joke-making, wit), humor and coping, and attitudes toward joke-telling and comedians.

Title: Humor creativity test

Source: Ziv, 1979

Description: Respondents are asked to provide captions for cartoons; the captions are judged by three raters using a scale from 0 (no caption given) to 5 (extremely funny).

Title: Humor Questionnaire

Source: Ziv, 1981

Description: 16 items are measured on a seven-point scale (1=very rarely, 7=very frequently); sample items only are given in the article—e.g., “I find many situations laughable,” “If I could be a writer I would like to write humoristic stories.”

Title: Test of the Sociometry of Humor

Source: Ziv, 1984

Description: Using a sociometric approach (i.e., peer ratings), each subject is evaluated as to whether they possess a “good” sense of humor.

Table 2.

Oblique Factor Analysis of Common Senses of Humor Measures–Pilot Study, Student Sample.

	-----	Loadings	-----	-----	
	Factor 1	Factor 2	Factor 3	Factor 4	
	<i>Mean-Spirited humor</i>	<i>Stupid/Blooper humor</i>	<i>Incongruity humor</i>	<i>Realistic humor</i>	Comm.
“I like sexist humor”	.79	.10	.11	-.13	.67
“Something is funny if it ridicules certain racial or ethnic groups”	.77	-.01	.13	.12	.61
“Something is funny if it is crude”	.74	.11	.23	.20	.57
“I like sexual humor”	.69	.29	.16	-.13	.54
“I like humor about death or violence”	.56	-.35	.42	.10	.61
“Something is especially funny if it happens accidentally”	.22	.72	.25	.21	.63
“I find bloopers especially funny”	-.06	.67	.01	-.34	.54
“I find it funny when people do stupid things”	.45	.58	.30	.07	.52
“I enjoy satire”	.17	.03	.69	.32	.57
“I like jokes that involve wordplay–puns, riddles, and the like”	.01	-.01	.67	-.22	.53
“I enjoy slapstick”	.15	.16	.63	-.01	.40
“I find things funny if they are absurd”	.38	.25	.59	-.00	.43
“I really enjoy visual humor”	.22	.47	.53	-.30	.51
“Something is funny to me only if I find the situation realistic”	-.06	-.08	-.09	.81	.68
Eigenvalue (extraction)	3.52	1.76	1.44	1.08	
% of total variance	25.1%	12.6%	10.3%	7.7%	55.7%
Eigenvalue (rotation)	3.05	1.85	2.39	1.17	
Cronbach’s alpha	.78	.52	.63	NA	

Table 3.

Oblique Factor Analysis of Common Senses of Humor Measures–General Population Sample.

	-----	Loadings	-----	-----	
	Factor 1	Factor 2	Factor 3	Factor 4	
	<i>Mean-Spirited humor</i>	<i>Bloopers/Incongruity humor</i>	<i>Satire/Death humor</i>	<i>Realistic humor</i>	Comm.
“I like sexist humor”	.81	.08	-.12	-.03	.66
“I like sick humor”	.79	.11	-.28	-.13	.64
“Something is funny if it ridicules certain racial or ethnic groups”	.76	-.03	-.27	-.07	.62
“I like sexual humor”	.72	.35	-.19	.03	.58
“I find it funny when people do stupid things”	.60	.41	.11	-.30	.59
“I find bloopers especially funny”	.01	.72	.02	-.19	.57
“I like sight gags”	.33	.65	-.36	-.17	.51
“I like jokes that involve wordplay–puns, riddles, and the like”	.19	.61	-.41	-.07	.47
“Something is especially funny if it happens accidentally”	.13	.58	-.19	.26	.45
“I find absurd things funny”	.38	.44	-.41	-.44	.50
“I enjoy satire”	.11	.32	-.80	.01	.69
“I like humor about death”	.51	-.07	-.68	-.15	.66
“I enjoy slapstick”	.23	.40	-.56	-.24	.44
“Something is funny only when I find the situation realistic”	-.00	-.02	.04	.88	.78
Eigenvalue (extraction)	3.99	1.88	1.18	1.11	
% of total variance	28.5%	13.4%	8.5%	7.9%	58.2%
Eigenvalue (rotation)	3.36	2.42	2.13	1.28	
Cronbach’s alpha	.80	.66	.55	NA	

Table 4.

Oblique Factor Analysis of Common Senses of Humor Measures–Comprehensive Survey, Student Sample.

	----- - Loadings	-----	-----	-----	-----	
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	
	<i>Mean-Spirited humor</i>	<i>Stupid/Blooper humor</i>	<i>Incongruity humor</i>	<i>Realistic humor</i>	<i>Disrespect humor</i>	Comm.
“I like humor that puts down women”	.85	.04	.04	.05	-.12	.75
“I like humor that puts down other racial or ethnic groups”	.79	.06	.13	.26	-.08	.68
“I like humor that involves violence”	.77	.30	.06	.09	-.48	.68
“I like humor about death”	.77	.00	.21	.05	-.43	.67
“I like sick humor”	.66	.30	.04	.03	-.52	.58
“I find bloopers especially funny”	.09	.77	.07	-.23	-.18	.67
“Something is especially funny if it happens accidentally”	-.02	.69	.28	.26	-.21	.61
“I find it funny when people do stupid things”	.35	.64	-.12	.04	-.52	.64
“I like jokes that involve wordplay–puns, riddles, etc.”	.05	.11	.85	.02	.00	.74
“I like sight gags”	.23	.46	.51	.02	-.50	.56
“Something is funny to me only if I find the situation realistic”	.06	-.07	-.01	.86	-.04	.78
“I like humor about sex”	.35	.50	.22	.57	.04	.66
“I find things funny if they are absurd”	.25	.29	-.06	-.02	-.79	.68
“I enjoy slapstick”	.39	.28	.40	.11	-.64	.56
“I enjoy satire”	.35	-.09	.54	.33	-.62	.75
Eigenvalue (extraction)	4.51	1.90	1.37	1.20	1.07	
% of total variance	30.1%	12.6%	9.2%	8.0%	6.8%	66.7%
Eigenvalue (rotation)	3.62	2.31	1.64	1.40	2.73	
Cronbach’s alpha	.84	.61	.42	.37	.64	

Table 5.

Oblique Factor Analysis of 26 Humor Items in Comprehensive Study, Student Sample.

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	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	
	<i>Put-down Humor</i>	<i>Stupid/ Blooper Humor</i>	<i>Realistic Humor</i>	<i>Incong- ruity Humor</i>	<i>Slapstick Satire</i>	<i>Sexual/ Scatolo- gical</i>	Comm .
“I like humor that puts down rich people”	.75	.13	.07	.41	.49	.21	.68
“I like humor that puts down men”	.74	-.04	.03	.12	.08	.23	.57
“I like humor that puts down arrogant people”	.73	.15	.22	.54	.33	.16	.72
“I like humor that puts down stupid people”	.72	-.04	.17	.37	.37	.31	.58
“I like humor that puts down women”	.70	-.09	-.04	.05	.27	.62	.70
“I enjoy humor that criticizes society”	.60	-.16	.14	.39	.59	.34	.62
“I like humor about death”	.58	-.09	-.04	.24	.57	.52	.61
“I find bloopers especially funny”	.09	.76	-.10	.11	.11	.12	.62
“Something is funny if it happens accidentally” .16	-	.68	.25	.11	.26	.16	.58
“I find it funny when people do stupid things”	.37	.60	.06	.40	.28	.33	.59
“Something is funny to me if situation realistic”	.08	-.10	.87	-.04	.11	.14	.82
“Something is funny only if could really happen”	.14	.09	.80	.23	.05	.17	.68
“I find things funny if they are absurd” .33		.30	.06	.65	.39	.17	.54
“I find amazing coincidences funny”	.06	.46	.22	.60	.16	.13	.53
“I like sarcasm” .44		-.09	.24	.59	.44	.26	.46
“I like dry humor”	.33	-.15	.08	.57	.35	.29	.36
“I enjoy self-deprecating humor”	.24	.07	.07	.56	.15	.27	.68
“I enjoy slapstick” .23		.28	.02	.15	.80	.28	.70
“I enjoy satire”	.24	-.13	.21	.41	.76	.23	.61
“I like sight gags”	.12	.51	.05	.17	.65	.16	.73
“I like humor about sex”	.35	.17	.21	.54	.40	.73	.73
“I like humor that is naughty”	.03	.23	.35	.19	.12	.72	.67
“I like sick humor”	.43	.13	-.02	.53	.43	.66	.67
“I enjoy humor that involves violence”	.52	.17	.04	.23	.55	.65	.64
“I like humor... puts down racial/ethnic groups”	.61	-.05	.07	-.14	.38	.61	.72
Eigenvalue (extraction)	7.71	2.36	1.70	1.46	1.27	1.10	
% of total variance	30.85%	9.42%	6.79%	5.84%	5.10%	4.40%	62.4%
Eigenvalue (rotation)	5.06	2.31	1.93	3.73	4.36	3.89	
Chronbach's Alpha	.86	.61	.72	.68	.68	.79	

Appendix A: The 26-item *senses of humor* scale

1. Something is funny to me only if I find the situation realistic.
2. Something is especially funny if it happens accidentally.
3. I like humor about sex.
4. I like jokes that involve wordplay--puns, riddles, etc.
5. I like sight gags.
6. I like humor that puts down other racial or ethnic groups.
7. I enjoy slapstick.
8. I enjoy satire.
9. I like humor about death.
10. I enjoy humor that involves violence.
11. I find bloopers especially funny.
12. I find things funny if they are absurd.
13. I find it funny when people do stupid things.
14. I like humor that puts down women.
15. I like sick humor.
16. I enjoy humor that criticizes society.*
17. I like sarcasm.*
18. I like humor that is naughty.*
19. I find amazing coincidences funny.*
20. I enjoy it when others use self-deprecating humor (i.e., making fun of themselves).*
21. I like dry humor.*
22. I like humor that puts down men.*
23. Something is funny to me only if I think it could really happen.*
24. I like humor that puts down arrogant people.*
25. I like humor that puts down rich people.*
26. I like humor that puts down stupid people.*

* designates new item.

Endnotes

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- i. This notion of a demand characteristic for measures tapping a “good” sense of humor has been confirmed in several data collections by these authors. On 0-to-10 response scales, almost everyone typically responds with an eight or higher.
 - ii. Carmines and Zeller (1979) note that it is “impossible to ‘validate’ a measure of a concept in this sense unless there exists a theoretical network surrounds the concept” (p. 23). This notion of a “theoretical network” is an appropriate way to describe the somewhat scattered findings regarding sense of humor to date. The research reported on in this paper lays the groundwork for a more comprehensive theory of senses of humor appreciation.
 - iii. As suggested by Zillmann (1977), a general population sample is especially important in humor studies, since “humor which holds appeal for large audiences. . . is far less complex and sophisticated than would be concluded from investigations of subjects with an atypically high level of education” (p. 292). There are also age and, presumably, maturity differences between college students and the general public that may influence humor preferences, thus further necessitating a more externally valid general population sample.
 - iv. The instrument also included an exhaustive roster of television comedies available via broadcast or cable at the time the survey was distributed, either in rerun or first run. Respondents gave an indication for each of how much they enjoyed the program, using a 0-10 scale (where 0=do not like at all and 10=like very much). They were also asked for reasons why the respondents thought their three favorite TV comedies and three favorite movie comedies were funny, providing a rich source of qualitative information about humor preference types for further refinement of the set of humor measures.
 - v. Also included in the instrument were measures for a wide variety of *social categories*: Age (in years), marital status, level of education achieved, racial/ethnic background (dummy coded for non-white status), political affiliation (a 5-point scale ranging from “strong Democrat” to “strong Republican”), liberalism/conservatism (a 5-point scale ranging from “strongly conservative” to “strongly liberal”), household income, and gender (dummy coded for femaleness).

To measure the respondents’ levels of state *depression*, the 20-item CESD Scale (Center for Epidemiologic Studies Depression Scale; Robinson, Shaver, & Wrightsman, 1991) was utilized. The standard technique of straight additive index construction was employed, with a resultant Cronbach’s alpha of .85.

Standard measures of *media exposure* were included in the survey--hours of television watched yesterday, hours of radio listening yesterday, newspaper readership during the last week (in days), number of magazines read regularly, number of books read in the past six months, number of videos viewed in the past month, number of movies watched at the theater in the past month.

Measures of adoption of a number of *newer media technologies* were also included--frequency of email usage in the last week, hours of Internet use in the last week, and home access to each of the following: a VCR, a CD player, a DVD player, a laserdisc player, a camcorder, cable TV, a satellite dish, a cell phone, and a computer.

Open-ended items tapped respondents' *favorite TV show and movie* of all time, each of which was coded for whether the content was comedy (1) or not (0); a weepy (2), a melodrama (1), or neither (0), and contained graphic violence (2), "light" violence (1), or no violence (0). Two additional open-ended items asked for respondents to indicate the funniest movie or TV show they had ever seen,

vi. Note that a number of items underwent some rewording during the evolution across the three studies. The major changes are: "Something is funny if it is crude" became "I like sick humor" from Study 1 to Study 2; "I like humor about death or violence" became "I like humor about death" for Study 2, with "I like humor that involves violence" added for Study 3; and "I enjoy visual humor" became "I like sight gags" from Study 1 to Study 2. "I like sexist humor" from Studies 1 and 2 became "I like humor that puts down women" in Study 3. "Something is funny if it ridicules certain racial or ethnic groups" became "I like humor that puts down other racial or ethnic groups" in Study 3. The "sex" and "absurd" items were also slightly reworded in Study 3.