DIFFERENT ATTITUDES TOWARD HUMOR BETWEEN CHINESE AND AMERICAN STUDENTS: EVIDENCE FROM THE IMPLICIT ASSOCIATION TEST

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Summary.—Although cross-cultural research indicates that Chinese people demonstrate less humor than do Americans, little research addresses the reasons. This cross-cultural difference may be largely due to different implicit attitudes toward humor held by Chinese and Americans, deeply rooted in the two cultural traditions. Both self-report evaluation and the Implicit Association Test (IAT) were used to compare Chinese and American attitudes toward humor. Although 60 Chinese undergraduate students showed no significant difference from 33 American exchange students in explicit attitudes toward humor, the former associated humor more frequently with unpleasant adjectives and seriousness with pleasant adjectives on the IAT; the opposite pattern was found for the American group. This indicated a negative implicit attitude toward humor among the Chinese students.

Humor is defined as "the quality of action, speech, or writing, which excites amusement, oddity, jocularity, facetiousness, comicality, fun" (Simpson & Weiner, 1989). Previous research shows that humor can improve health (Hubert, Moller, & Jong-Meyer, 1993; Kuiper, Martin, & Olinger, 1993; Fry, 1994) as well as cognitive and emotional responses in social interactions (Martin, 2001, 2007). Recent studies indicate that East Asians, especially the Chinese, use less humor than Westerners and use humor less for coping (Liao, 2001; Chen & Martin, 2005, 2007; Liao & Chang, 2006; Tsai, Louie, Chen, & Uchida, 2007; Yue, in press). This study attempts to explore the underlying reasons.

Western Views on Humor

In Western society, humor has been valued since the era of Plato and Aristotle, as they both believed that humor as a kind of natural expression could bring people positive emotion such as amusement, fun, and delight (Grant, 1924/1970). Freud (1928) also regarded humor as a mature and healthy defense mechanism that allowed people to handle negative feel-

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lings. By the late 19th and early 20th centuries, humor was greatly advocated such that it became the symbol of American popular culture (Mintz, 1983). During this “golden age” of American humor, a large number of humor magazines emerged, distinguishing it as a special genre in popular writings (Bier, 1968; Blair & Hill, 1978). As a result, Americans generally considered humor as a core trait of their personality (Mintz, 1983; Mindess, Miller, Turek, Bender, & Corbin, 1985) as well as an essential characteristic of creativity (Sternberg, 1985).

Eastern Views on Humor

In Chinese society, humor has been valued largely by Taoism and Buddhism (Lin, 1993; Yue, 2010). Taoism values humor as an attempt to have witty, peaceful, and harmonious interaction with nature, whereas Buddhism encourages humor as a symbol of lightening up (Yue, 2010). But Confucianism, focusing on social ethics and social hierarchy, devalues humor as it might undermine the five cardinal relations (Fung, 1948; Lin, 1974; Ho, 1996; Yue, 2010). The core Confucian value of ren aims at teaching people to behave formally, seriously, and to restrain laughter (King & Bond, 1985; Li, 2003). As Confucianism has been the dominant philosophy in Chinese society since the Han Dynasty (202 BC to 220 AD), Chinese people have become increasingly cautious with humor so as to conform to social formality and social status (Bond, 1996). Kao (1946/1974) remarked that “Confucianism, with its precept of the moral person of junzi, has molded the serious thoughts and habits of the Chinese gentleman for all time” (p. 3). Similarly, Yue (2010) argued that Confucianism is culturally responsible for devaluing humor as an act of an uneducated and uncivilized person.

In fact, Chinese undergraduates were found to behave in less humorous ways than Canadian undergraduates, and used less humor to cope with stress than did their Canadian counterparts (Chen & Martin, 2005). Chinese undergraduates were also found to regard themselves as being less humorous than American undergraduates and to believe that hilarious laughter would make others feel uncomfortable and nervous (Liao, 2001). Moreover, Chinese children considered humor as a sign of “aggression-disruption” whereas Canadian children regarded humor as a characteristic of “sociability-leadership” (Chen, Rubin, & Sun, 1992).

Considering these cultural differences, possibly Chinese people, compared with Americans, would hold more negative attitudes toward humor. However, studies conducted in Chinese society indicated that Chinese people tend to like humor very much (Hao, Yue, Qi, & Lan, 2007; Yue, 2008). Given that these surveys did not involve cross-cultural comparisons and focused on explicit attitudes toward humor only, the present study was conducted among samples of American and Chinese under-
graduates to examine their explicit attitudes toward humor as well as their implicit attitude toward humor.

IAT Studies

The Implicit Association Test (IAT) has been widely used to assess individuals’ implicit attitudes, especially for attitudes associated with prejudices and stereotypes (Greenwald, McGhee, & Schwartz, 1998; Cunningham, Preacher, & Banaji, 2001; McConnell & Leibold, 2001; Fazio & Olson, 2003). It is a response time-based measurement with two kinds of words: one is concept words consisting of two different categories (e.g., “flower names” vs “insect names”), the other is adjectives consisting of two different categories as well (e.g., “pleasant” vs “unpleasant”; Greenwald, et al., 1998). Alternatively, the IAT assesses attitudes by having people rapidly categorize stimulus words using two response keys (Fazio & Olson, 2003). For example, a positive implicit attitude toward flowers is manifested by categorizing “flower” or “pleasant” faster than “insect” or “pleasant” when they are mapped onto one response key (Greenwald, et al., 1998). In other words, faster responses suggest a stronger association between the targeted concepts and adjectives.

Objectives and Hypotheses

In the present study, the IAT was used to examine the implicit attitude toward humor for two reasons: (1) using the IAT could minimize the problem of social desirability that often occurs in a survey study (Fazio, Jackson, Dunton, & Williams, 1995; Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; Wittenbrink, Judd, & Park, 1997; Greenwald, et al., 1998); (2) relying on quick response tasks could reduce the reference-group effect in cross-cultural comparisons (Peng, Nisbett, & Wong, 1997; Heine, Lehman, Peng, & Greenholtz, 2002). Based on the above reviews, it was hypothesized that explicitly, Chinese people would appear to appreciate humor as much as the Americans, but implicitly they would tend to be more negative about humor.

Method

Participants

Sixty Chinese undergraduates of Peking University in China and 33 American exchange students of the City University of Hong Kong were recruited to participate in this study. For Chinese participants (25 men, 31 women, and 4 not reporting sex), the mean age was 23.1 yr. (SD = 1.9). For Americans (16 men, 17 women), the mean age was 21.2 yr. (SD = 1.8).

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3All of these American students lived in Hong Kong for one semester and came from several different universities in America.

4There was no reliable sex difference in this study, so sex is not reported.
Measures

The Implicit Association Test. — For the IAT design, “humor” was compared with “seriousness” for two reasons: “seriousness” is an antonym of “humor,” as suggested by the Oxford English Dictionary (Simpson & Weiner, 1989); “seriousness” was the most frequently nominated word in a pilot study. Specifically, the pilot study involved 48 participants at City University of Hong Kong who were asked to nominate Chinese characters that were antonyms of “humor.” “Seriousness” was mentioned 26 times out of 48 (54%) and was most frequent of all words nominated. Also in this pilot study, participants were asked to nominate synonyms of “humor” and “seriousness,” respectively, to form the pool of related words for the IAT. The final list of English words, following the back-translation procedure, includes: (a) humor (funny, humorous, witty, and amusing), (b) seriousness (solemn, careful, serious, and grave), (c) pleasant (joyful, wonderful, beautiful, and outstanding), and (d) unpleasant (disgusting, ugly, dirty, and nasty).

The software Inquisit Laboratory was used to administer the IAT. The words appeared on the center of the screen, and participants were asked to categorize each word into different categories (e.g., humor vs seriousness) with left-hand key press “E” and right-hand key press “I.” Following the paradigm of Greenwald, Nosek, and Banaji (2003), the current test contains seven blocks. Blocks 1 and 2 presented concepts or adjectives (e.g., humor versus seriousness first or pleasant versus unpleasant first); Blocks 3 and 4 presented a combination of “humor, pleasant,” and “seriousness, unpleasant”; Block 5 was the same task as Block 1 or Block 2, but with the reversed key response options; Blocks 6 and 7 presented a combination of “humor, unpleasant,” and “seriousness, pleasant.” It is important to note that only Blocks 4 and 7 were collected for data analyses as is common practice when using the IAT (Greenwald, et al., 1998). Finally, to control the sequence effect, for half the participants the positions of Blocks 2, 3, and 4 were switched with those of Blocks 5, 6, and 7, respectively.

Self-report measure. — A 10-point scale with anchors of 1: Strongly unfavorable and 10: Strongly favorable was used as a rating scale for explicit attitude toward humor (“How much do you like humor?”) in this study (Sumners, 1990; Yue, in press). Participants also were asked to rate their perception of their own sense of humor as well as their perceptions of the sense of humor of ordinary Chinese and American people (“What is the degree of sense of humor for Chinese people?”) on a 10-point scale (1: Very low, 10: Very high; Hao, et al., 2007; Yue, 2008). American participants


As the study pertained to humor and since humor-seriousness has been compared on the IAT, only the humor part of this self-report measure was administered.
were administered the English version of the questionnaire and Chinese participants the Chinese version.

Procedure

After reading and signing the informed consent form, participants filled out the questionnaire and finished the IAT. The order of questionnaire and the IAT was counterbalanced across participants.

Results

Data were analyzed by the standard procedure (Greenwald, et al., 1998), recoding reaction time below 300 msec. to 300 msec. and those above 3,000 msec. to 3,000 msec. The first two trials of each block were dropped because of the lengthened latencies that typically appeared in the early trials. Error rates\(^5\) in excess of 25% were deleted as well (Greenwald, et al., 1998). Valid data were obtained for 53 Chinese and 33 American students, with average error rate of 7.17% and 5.24%, respectively.

Implicit Attitude Toward Humor

The 2 (culture: Chinese, American) × 2 (category combination: “humor, unpleasant” and “seriousness, pleasant”, “humor, pleasant” and “seriousness, unpleasant”) analysis of variance (ANOVA) on reaction time showed a statistically significant main effect of culture \((F_{1,166} = 20.04, p < .001; \text{ partial } \eta^2 = 0.11)\), but the effect of category was not statistically significant \((F_{1,166} = 0.20, \text{ ns}; \text{ partial } \eta^2 = 0.001)\). The American group had a faster mean response time than the Chinese group. Table 1 displays the mean latencies for the association between targets and adjectives.

A statistically significant two-way interaction was observed \((F_{1,166} = 35.81, p < .001; \text{ partial } \eta^2 = 0.18)\). The Chinese group responded faster when “humor or unpleasant” were mapped onto one key response and “seriousness or pleasant” were mapped onto the other key response than for the opposite mappings \((i.e., \text{ “humor or pleasant” and “seriousness or unpleasant”;} t_{12} = -6.82, p < .001, \text{ Cohen’s } d = 0.79; \text{ IAT effect } D = -.74)\). This supported the hypothesis that the Chinese group would show a generally negative implicit attitude toward humor. The American group responded more rapidly when “humor or pleasant” was mapped onto one key response and “seriousness or unpleasant” was mapped onto the other key response than the opposite mappings \((i.e., \text{ “humor or unpleasant” and “seriousness or pleasant”; } t_{12} = 6.36, p < .001, \text{ Cohen’s } d = 1.24, D = 1.06)\). Compared with the Chinese group, the American group had a generally positive implicit attitude toward humor.

\(^5\)In the IAT procedure, response error refers to incorrect category assignment by participants. For example, if the participant categorized target word “funny” with “seriousness” instead of “humor,” a response error was recorded.

\(^6\)For an explanation of the difference between \(D\) and Cohen’s \(d\), please see Greenwald, et al. (2003).
Explicit Attitude Toward Humor

It is intriguing to note that the American group did not score statistically significantly higher on favoring humor than the Chinese group ($t = 1.75$, $p = .084$, ns) but did score statistically significantly higher on evaluation of self-humor ($t_{54} = 3.55$, $p = .001$; $d = 1.0$). This confirms that explicitly the Chinese group reported themselves to appreciate humor as much as the American group. Equally intriguing is that both Chinese and American groups believed that Americans were more humorous than Chinese people (Chinese group ratings, $t_{52} = 6.29$, $p < .001$, $d = 1.18$; American group ratings, $t_{52} = 5.10$, $p < .001$, $d = 1.47$). This echoes Yue and associates’ previous findings (Yue, et al., 2008; Yue, 2010).

Discussion

Research has shown that East Asians, Chinese and Taiwanese in particular, report lower evaluation of self-humor and less laughter than Westerners (Liao, 2001; Chen & Martin, 2005; Liao & Chang, 2006; Tsai, et al., 2007). The present study contributed to this finding by showing that Chinese students, compared with American students, held a more negative implicit attitude toward humor. The most interesting finding was that explicitly, the Chinese group rated their humor appreciation almost the same as the American group did, but implicitly they tended to devalue humor. This supports Yue’s argument that Chinese people would appreciate and fear humor at the same time (Yue, 2010; in press). Specifically, the Chinese appreciation of humor derives from the Taoist valuation of humor as a way to achieve witty, peaceful, and harmonious interactions. The Chinese devaluation of humor comes from a Confucian disregard for humor as a sign of intellectual shallowness and social informality (King & Bond, 1985; Bond, 1996; Yue, 2010).

The second interesting finding of this study is that both Chinese and American groups indicated that Americans were more humorous than Chinese. This supports previous observations that Chinese people behave less humorously than Westerners and were less confident of their self-humor (Liao, 2001; Liao & Chang, 2006; Tsai, et al., 2007). Yue (2010) claimed that being humorous is incongruent with being traditionally Chinese; the
Chinese negative attitude toward humor seems compatible with Chinese cultural traditions.

Limitations and Conclusions

The present study suffered from several limitations. First of all, the samples were confined to university undergraduate students and only Chinese and American students. For broader generalizations, further studies could recruit people of various ages and educational and occupational characteristics. It would be interesting to check educational and occupational differences in humor as well. Although the present study indicated cultural differences on humor attitudes, it is still unclear as to whether this would be the same in public settings as well as in private settings. Hence, it would also be interesting to explore the possible interaction effects between cultures (China vs America) and settings (public vs private) in future studies. Since Chinese people are likely to devalue humor in their implicit attitudes, it would also be interesting to examine whether jokes and humor are socially less desirable in Chinese culture than in American culture. Finally, it would be particularly interesting to study how the Chinese norms might be changing with time and exposure to Western media in the process of globalization. Future studies with longitudinal designs could be helpful for investigating this possible trend.

REFERENCES


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