Past research has shown that humor is often related to specific gender-role expectations and differences in society. For instance, Kavanagh, Dovidio, and Hazlett (2009) found that men tend to use maladaptive humor styles, such as aggressive and self-defeating humor, more than women. Further, Barnes (1999) in a study of six types of humor noted that male college students preferred “sick” humor with crude undertones, while female college students preferred more stereotypic humor, such as “skunk blonde” jokes.

When do these gender differences in humor appreciation develop? Despite the fact that children are obviously capable of欣赏 humor, attempts to substantiate a gender difference in children's appreciation of humor styles have been largely inconclusive. Loizzo (2006), in studying children's understanding of pictorial humor, did not find any difference in overall humor appreciation between kindergarten-aged boys and girls.

Findings consistently demonstrate a gender difference in preschoolers' play behaviors. Boys' play begins to be more physically substantial starting around the age of four (Johnson, Christe, & Veysey, 1999). It is important to examine these gender differences in play because Wood and Cook (2005) suggest that the stereotype of masculine behavior involving power and aggression can manifest itself in the use of aggressive humor. Further, Peterson (2007) found a connection between aggressive behavior and preference for aggressive humor styles.

Although McGhee (1976) suggested that boys and girls do not differ in humor patterns until about 6 years of age, others have noted that differences can be observed in playtime habits of preschool-aged children, with boys tending towards more physical and aggressive play (Girsch, 1974; Tallandini, 2004). If this were the case, boys would be expected to appreciate aggressive or violent humor more than would girls.

In order to determine gender differences in humor preference among preschoolers, the frequency of smiling and laughing were used as measures of humor appreciation. Smiling and laughing were respectively operationally defined as any visible upward turn of the corners of the mouth and any audible sounds accompanying an amused expression. Specifically, the present study hypothesized that preschool boys would show a greater appreciation for aggressive humor in cartoons than preschool girls.

Method

Participants
Participants consisted of 21 children (10 girls, 11 boys) aged three and four (Mage = 3.76) drawn from two private preschools in northern California. Children whose parents signed parental consent forms were selected as participants, and the children signaled their additional consent when asked if they would like to watch the videos.

Materials
Three video clips taken from Disney cartoons were used in this experiment and had a mean length of 85.67 seconds. The aggressive humor condition used Donald Duck: Donald's Snow Fight for a total of 120 seconds. The romantic humor condition used Mickey Mouse: Topolino in Cantiere for a total of 85 seconds. The neutral humor condition utilized Goofy’s How to Sleep for a total of 52 seconds. Observers used an observation sheet to record the frequency of smiling, laughing, and frowning.

Procedure
Before the children were brought to the testing room, participants were randomly assigned in groups of three to six children. The experimenter informed the children that they would be watching three videos. Next, the experimenter started the video clips, each playing in a pre-arranged, randomized order. Another experimenter observed the response of the children during each video, making tally marks each time a child smiled, laughed, or frowned. The children were thanked for their participation after the end of the third video.

Results
The hypothesis that boys will laugh and smile more during aggressive humor than girls was examined using an independent samples t-test. As predicted, boys laughed significantly more (M = 2.27, SD = 1.83) than girls (M = .80, SD = 1.01) during the aggressive video, t(15.96) = 2.28, p = .04. Also, boys smiled (M = 2.45, SD = 1.57) significantly more frequently than girls (M = 1.10, SD = 1.45) during the aggressive video, t(18.99) = 2.05, p = .05. There was no significant gender difference found in laughing or smiling during the neutral or romantic humor conditions.

Discussion
As predicted, boys showed more appreciation of aggressive humor than girls. This was evidenced by the fact that boys laughed and smiled more frequently than girls during the aggressive humor video. This gender difference in humor appreciation was not detected for the romantic or neutral humor video clips. These results are consistent with past research that found men prefer aggressive humor (Kavanagh, Dovidio, & Hazlett, 2009; Martin et al., 2000) attributing gender differences in aggression to innate biological differences, by linking testosterone and aggressive play. However, other researchers found no evidence that physical aggression is correlated with high testosterone. This suggests the presence of another mediating factor that may be contributing to boys' preference for aggressive humor in addition to possible genetic predispositions.

In order to determine what type of cartoon humor the preschool children preferred, it was necessary to adjust for the length of laughs and smiles for the length of the videos. Figures 1 and 2 depict the adjusted data in number of laughs and smiles per second for each video. Using a repeated measures MANOVA to examine which video produced the most laughs, a within-subjects effect was found for video type, F(2) = 10.25, p = .001. Comparisons revealed the mean number of laughs per second during the aggressive video (M = 0.13, SD = .044) was significantly higher than both the mean number of laughs per second during the romantic video (M = .004, SD = .007) (t(20) = 4.01, p = .001, and the neutral video (M = .006, SD = .044) (t(20) = 3.34, p = .003).

In conclusion, boys in this study showed a greater appreciation for aggressive humor than girls. This was evidenced by the fact that boys laughed and smiled more frequently than girls during the aggressive humor video. This gender difference in humor appreciation was not detected for the romantic or neutral humor video clips. These results are consistent with past research that found men prefer aggressive humor (Kavanagh, Dovidio, & Hazlett, 2009; Martin et al., 2000) attributing gender differences in aggression to innate biological differences, by linking testosterone and aggressive play. However, other researchers found no evidence that physical aggression is correlated with high testosterone. This suggests the presence of another mediating factor that may be contributing to boys’ preference for aggressive humor in addition to possible genetic predispositions.

It appears that both boys’ aggressive play and humor preferences stem from early socialization. Armed with the evidence that boys do show a preference for aggressive material as early as preschool, marketing adults should evaluate the message transmitted to young children. If you think that children are not learning and picking up information, even in subtle preferences like humor, the joke’s on you!

Abstract
This study examines gender differences in young children’s humor preferences. We predicted that boys would show a greater appreciation for aggressive humor in cartoons than girls. Twenty-one preschoolers (10 girls, 11 boys, Mage = .76) viewed clips of Disney cartoons illustrating aggressive, neutral and romantic humor. Researchers observed frequencies of laughing, smiling, and frowning. As hypothesized, boys laughed and smiled more during the aggressive cartoon than girls. No gender differences were detected in the neutral and romantic humor. Findings are discussed with respect to power and aggression.

Joke’s on You! Preschool Boys’ Preference for Aggressive Humor

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