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Brief research report

Body-size stigmatization by preschool girls: In a doll's world, it is good to be "Barbie"☆

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ABSTRACT

A number of studies have measured body size stigmatization, that is, the assigning of negative characteristics to individuals who are considered fat, in samples of children as young as preschool-age. The results of such studies are fairly consistent, but may be criticized for the abstract nature of the line drawings typically used as test stimuli. In the present study the utility of using toy dolls to gauge young girls' views toward different body shapes was assessed. Forty girls ages 3½–5½ were asked to assign various traits to one of three dolls (thin, average, and fat). As with previous work, responses fell out in a stereotypical pattern, with the positive characteristics attributed most often to the thin or average doll and all of the negative characteristics most often to the fat doll. The strengths and weaknesses of this doll paradigm in studies of body-size stigmatization by young children are discussed.

Introduction

Evidence exists that biases against fatness and toward thinness are present at young ages. For example, Staffieri (1972) reported that girls ages 7–11 years assigned more negative adjectives to "endomorphic" body types, while Lerner and Gellert (1969) noted an aversion to a "chubby" peer by 86% of the kindergarteners who viewed three photographs. In the usual procedure, the respondent is shown three drawn figures (i.e., thin, average, and fat), read a list of adjectives (e.g., "strong," "stupid"), and is asked to "Point to the one who is . . .." This method has been used successfully with children of preschool age (Harriger, Calogero, Witherington, & Smith, 2010; Wright & Bradbard, 1980), and with a two-choice option (thin vs. fat) with children as young as 2½ years (Turnbull, Heaslip, & McLeod, 2000). As with older children, these studies typically find that the drawing of the fat child usually gets assigned the negative characteristics.

A variant of this technique has been to use the three stimulus figures, but instead present the adjectives paired as endpoints on a semantic differential (e.g., "strong — weak") and ask the child to indicate where on the continuum each figure should be placed. As with the single adjective technique, research with preschoolers using this method again shows greater negativity attributed to the fat figure (Brylinsky & Moore, 1994; Margulies, Floyd, & Hojnoski, 2008; Musher-Eizenman, Holub, Miller, Goldstein, & Edwards-Leeper, 2004).

Some researchers have nevertheless voiced the concern that for young children, these tasks may not be appropriate due to the abstract nature of the stimulus figures and the difficulty they might have in rating characteristics on a continuum (Feldman, Feldman, & Goodman, 1988; Jarvie, Lahey, Graziano, & Framer, 1983). With this in mind, Cramer and Steinwert (1998) advanced a different method, whereby they told preschool-age children two stories that portrayed one girl as "mean" and another as "nice," and then asked them to indicate which figure was the mean or the nice one. Averaged comparisons showed that the "chubby" figure was chosen as the mean one more frequently than the thin or average figure. When asked why they considered each figure to be mean or nice, 5-year-olds were likeliest to mention the figure's weight or body size.

Still questioning the validity of using drawn figures with children this young, Meers and colleagues directly tested line drawings against photographs of children (Meers, Koball, Oehlhof, Laurens, & Musher-Eizenman, 2011). The line drawings were created by digitally outlining the photographic array developed by Truby and Paxton (2002), so that the two sets of specimens were identical as to variety of shapes. For both sets, the preschool-age children attributed more negative adjectives to the fatter figures than to the thinner figures. In addition, the line drawings elicited a stronger anti-fat bias than the photographs, suggesting that the abstract nature of the drawings might affect the young children's biases, in this instance unfavorably.

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Since much of preschool-age children's knowledge is gained via their interacting with concrete objects, the use of dolls could serve as more tangible if not necessarily realistic stimuli for assessing attitudes toward body shapes. Somewhat surprisingly, despite the number of studies that have been conducted on children and body image as it relates to body size (Ambrosi-Randic, 2000; Hendy, Gustitus, & Leitzel-Schwalm, 2001; Heron, Smyth, Akano, & Wonderlich, 2013; Musher-Eizenman, Holub, Edwards-Leeper, Persson, & Goldstein, 2003; Williamson & Delin, 2000), little research has been conducted using dolls. In fact, only three studies could be located that used dolls to examine body-size preferences, and each took a very different approach.

In an unpublished paper, Dyrenforth et al. (1978) reported that 59 of the 63 children in their 2–5-year-old sample expressed a preference for a very thin as opposed to a fat "rag doll," supplemented by their preference for line drawings of thin children. Ditmar, Halliwell, & Ive (2006) used the concept of a thin versus heavier doll ("Barbie" versus "Emme") but presented them to 5–8-year-old girls not as actual dolls, but through images of them in picture books. Their experimental results showed that exposure to the storybook images of the Barbie heroine had a detrimental effect on body satisfaction in the younger girls but had no effect on the older girls.

In contrast, Anschutz and Engels (2010) used actual Barbie® (Mattel, Inc.) and Emme® (Tonner Doll Co.) dolls as their test stimuli, but in recognizing that the Emme doll, besides being more realistically proportioned was also a larger sized toy, also included a third doll – Tyler© (Tonner Doll Co.), that matched the Emme doll in height but the Barbie doll in thinness (Emme and Tyler are approximately 16 in. tall while Barbie is 11½ in. tall). The 1st–4th grade girls were given 10 min to play with one of the dolls and then completed questionnaires on their body esteem and body shape satisfaction. Unlike the Ditmar et al. study, no differences were found on the body image variables between any of the groups after the play period, nor were there any age differences.

Given the limitations inherent in each of these "doll" studies (i.e., rag dolls, pictures of dolls, different size dolls), and the inconsistent results with girls of elementary school ages, it is not known precisely how younger girls would respond to a body-size challenge that used dolls instead of drawings. It might also be instructive to use dolls that are more alike in terms of height and appearance. Since the Mattel® company estimates that 90% of girls ages 3–10 own at least one Barbie doll (Mattel Inc., 2012), such a study would likely benefit from using Barbie-like dolls to gauge preschool girls' attitudes toward the female shape. The present study was designed to use Barbie-like dolls to assess young girls' preferences as tied to body shapes, with dolls designed to avoid confounding of height or other features such as face or hairstyle. It was expected that the fat and thin dolls would be assigned more negative and positive traits, respectively, and that the average doll would be the most favored as a choice for play.

Method

Participants

Female children, ages 3½–5½ years old, attending a laboratory preschool or adjoining child care center at a northeastern state university were invited to participate in this research. Of the 49 mothers that were asked to enroll their daughters in the study, 43 gave consent. Prior to any participant recruitment or data collection, all procedures were approved by the university's institutional review board. Over the days of data collection, three of the girls declined to participate when approached, resulting in a sample size of 40 girls (M age = 55 months, SD = 6.2 months). The sample was predominantly white (83%), with four Asian, two black, and one Hispanic girl comprising the remainder.

Fig. 1. Doll stimuli representing thin, average, and fat figures.

Materials

For the purposes of this investigation, three Barbie-like dolls were constructed from components taken from other commercially available dolls. The dolls had identical heads and were outfitted similarly, but were clearly differentiated by their body shapes, representing a thin, average, and fat female (see Fig. 1).

Procedure

At the time they gave their consent, each mother completed a brief questionnaire that asked her age, how she viewed her own weight, and if she played with Barbie dolls as a girl. She was also asked to describe her daughter's weight and indicate whether or not and how many Barbie dolls her daughter had. Mothers also gave consent to release their daughters' heights and weights as previously measured and recorded by the school staff. Participating girls were of average build, as judged by their mothers and verified by their body mass index-for-age (M = 58th percentile, SD = 28).

The girls were individually escorted from their classroom by a female research assistant to a nearby multipurpose room, where they were seated at a child-sized table. Set on the table before them were the three dolls, with the thin, average, and fat dolls referred to by the research assistant only as Doll 1, Doll 2, or Doll 3, respectively. Children were first read a series of questions presented in random order using a shuffled deck of index cards. The questions included both positive (6) and negative (6) adjectives or behaviors (e.g., "Which doll looks like she helps others?" "Which doll looks sad?"). The list of descriptors formulated by the authors was drawn from adjectives used in previous studies (Harriger et al., 2010; Musher-Eizenman et al., 2004; Wright & Bradbard, 1980). Some novel items were added to make the descriptors more child-relevant (i.e., "puts toys away"), with others included to tap body size and behavior (e.g., "eats the most"). Moreover, adjectives from previous studies that we deemed to be inappropriate to model for young children were purposely not included (e.g., "stupid," "ugly"). Upon hearing each question, the child simply had to point to one of the three dolls and the research assistant circled a 1, 2, or 3 by the relevant descriptor on a pre-coded score sheet. After this sequence, each girl was asked "Which of these dolls would you most like to play with?" The children were then given their choice of a Disney© character sticker, thanked, and escorted back to their classroom.