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Nine-month-old infants prefer unattractive bodies over attractive bodies

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ABSTRACT

Infant responses to adult-defined unattractive male body shapes versus attractive male body shapes were assessed using visual preference and habituation procedures. Looking behavior indicated that 9-month-olds have a preference for unattractive male body shapes over attractive ones; however, this preference is demonstrated only when head information is obscured. In contrast, 6- and 3.5-month-olds did not show a preference for unattractive or attractive bodies. The 6-month-olds discriminated between the two categories, whereas the 3.5-month-olds did not. Because unattractive body shapes are more common than attractive/athletic body shapes in our everyday environment, a preference for unattractive body shapes at 9 months of age suggests that preferences for particular human body shapes reflect level of exposure and familiarity rather than culturally defined stereotypes of body attractiveness.

Introduction

As adults, we judge other humans as attractive or unattractive on a daily basis. Such judgment is made not only about human faces but also about body shapes. A large corpus of research has focused

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on adults' perceptions of facial attractiveness (Rhodes, 2006) and, more recently, on children's perceptions (Cooper, Geldart, Mondloch, & Maurer, 2006). Developmental research has demonstrated that infants show a preference for attractive human faces from birth (Slater et al., 1998). Attractiveness judgments and the mechanisms driving their development are important to understand given that positive qualities and abilities are more likely to be attributed to attractive individuals than to unattractive individuals (e.g., Lemay, Clark, & Greenberg, 2010; Reingen & Kernan, 1993) and attractive individuals are generally treated more favorably (e.g., Kalick, Zebrowitz, Langlois, & Johnson, 1998).

In most existing studies on the emergence of the perception of facial attractiveness during development, whether a stimulus is deemed attractive has been largely based on adults' perception (e.g., Langlois, Ritter, Roggman, & Vaughn, 1991; Slater et al., 1998). Adults' judgments of a face's attractiveness are generally consistent with the typicality of the face or the extent to which the face is similar to the central tendency of all the faces in one's visual environment (Langlois & Roggman, 1990). This consistency between face typicality and adult-defined face attractiveness leaves open an important theoretical question: Can a preference for attractive humans develop based on visual experience alone, or are later developing culturally defined norms of attractiveness also necessary? Research addressing this question will shed light on the processes that underlie preferences for attractive humans. Infant studies should offer the best approach to address the question because the enculturation of beauty standards is presumably yet to have started at this young age. However, in nearly all infant studies of face attractiveness, the dimensions of typicality and adult-defined attractiveness have been confounded (Hoss & Langlois, 2003; Slater et al., 1998) due to the fact that both dimensions are intimately linked and difficult to disentangle. Thus, infants' judgments of facial attractiveness, like those of adults, are consistent with the typicality of the face (Rubenstein, Kalakanis, & Langlois, 1999). In the case of the human body, however, the disentanglement of these two dimensions is possible because body shape attractiveness is often culturally determined and changes across periods in history (Stearns, 1997; Tovée, Swami, Furnham, & Mangalparsad, 2006). The current study, therefore, investigated whether young infants have a preference for attractive male human bodies over the more commonly encountered unattractive or typical male human bodies.

What is known about the developmental course of perception of male body attractiveness? Extensive research demonstrates that women living in Westernized societies prefer male bodies that have a mesomorphic V-shaped torso (i.e., a narrow waist and a broad chest and shoulders) and a well-developed upper body but flat stomach (e.g., Maisey, Vale, Cornelissen, & Tovee, 1999; Swami et al., 2007). This preference is culturally specific to Westernized societies. Swami and Tovee (2005) reported that rural Malaysian females prefer heavier figures with a less triangular shape. The authors proposed that this preference is linked to socioeconomic status. In this non-industrialized Malaysian setting, body fat is believed to be an indicator of wealth, prosperity, and sexual capacity. Thus, females prefer a body type that indicates good mate selection (discussed below).

Several theories, which are not mutually exclusive, have been proposed to explain preferences for particular body types in Westernized societies. Attractiveness enhances mating and reproductive success in adult humans (Rhodes, Simmons, & Peters, 2005). Evolutionary psychologists argue that traits that are perceived as attractive signal mate quality, such that preferences for them may be adaptations for finding good mates (Penton-Voak et al., 1999; Thornhill & Gangestad, 1993). Male muscularity may signal the ability to protect a potential mate (Buss, 2003). Although this is not as important in contemporary societies, sexual selection during human evolution may explain deep-seated female preferences for muscular body types (Dixson, Dixson, Bishop, & Parish, 2010). Furthermore, mesomorphy (V-shaped torso) is associated with better cardiac function than an endomorphic constitution (Katzmarzyk, Malina, Song, & Bouchard, 1998). Attractive individuals can also be good mates because benefits can be gained by partnering with an attractive individual given that they are generally treated more favorably (Kalick et al., 1998; Udry & Eckland, 1984).

A preference for mesomorphic males emerges as early as 6 years (Jarvie, Lahey, Graziano, & Framer, 1983) to 10 years of age (Connolly, Slaughter, & Mealey, 2004) in Westernized societies. These early emerging preferences in part reflect a bias away from overweight figures and may be due to a mesomorphic build being associated with a highly favorable stereotype (Jarvie et al., 1983) and/or hormone secretions driving sexual development at 10 years of age (Connolly et al., 2004). To our knowledge, there are no studies on infants' preferences for attractive bodies. Investigating whether infants have