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Invariance of adult attachment across gender, age, culture, and socioeconomic status?

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ABSTRACT

Is attachment in adulthood associated with gender, age, culture, or socioeconomic context? There is a widely held belief that males and younger individuals exhibit a more avoidant or dismissive stance toward attachment experiences, as would subjects from individualized, Western societies and from poorer socio-economic environments. Distributions of Adult Attachment Interview (AAI) classifications in various gender, cultural, socioeconomic, and age groups were compared with the normative distribution of North American non-clinical Caucasian mothers (23% dismissing, 58% secure, 19% preoccupied) through analysis of correspondence. Indeed, adolescent and student samples contained a higher proportion of dismissing attachment classifications than the normative group. No gender differences were found in the use of dismissing versus preoccupied attachment strategies in relatively affluent social environments, and the AAI distributions were largely independent of language and country of origin. Most strikingly, low SES adolescent mothers showed the strongest over-representation of dismissing attachments, which supports the life history theory prediction that in harsh environments individuals adopt a quantity-oriented reproductive strategy in tandem with a dismissing view of attachment.

KEY WORDS: attachment • evolution • gender • intercultural/interracial • language • love • meta analysis

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Is attachment orientation in adulthood associated with gender, age, culture, or socioeconomic status? Although it is widely believed, as we hear at conferences and in informal discussions, that males and young and poor individuals are more avoidant or dismissive in their attachment experiences and relationships, as are persons from individualistic, Western societies, the available evidence from empirical studies seems equivocal. Here we show that adult attachment representations are largely invariant across gender and culture. However, younger age groups and adolescent mothers living in poverty seem more often to exhibit dismissing attachment.

Bowlby (1984) defined attachment in terms of seeking proximity (literally or mentally) in times of (dis-)stress to a protective attachment figure considered to be stronger, wiser, or older. He also stated that attachment remains important across the entire lifespan, from the cradle to the grave, and that attachment is a universal characteristic of human beings, because it is rooted in our evolutionary heritage. However, individual differences in attachment patterns exist, and they might conceivably be related to gender, age, or cultural and socioeconomic differences, similar to the existence of differences in language performance despite the existence of a universal human competence for language. In the present paper we consider evidence based on studies using the Adult Attachment Interview (AAI) to determine whether these various individual differences are or are not associated with the distribution of adult attachment patterns.

Gender

Remarkably few gender differences have been found in studies of attachment in infancy. In adulthood, however, some studies using attachment-style questionnaires have found differences between males and females in self-descriptions of avoidant or dismissing attachment, with males being more avoidant, whereas women are sometimes found to be more anxiously attached or anxiously preoccupied with attachment (Del Giudice, 2009; but see Bakermans-Kranenburg & Van IJzendoorn, 2009a, and Mikulincer & Shaver, 2007, for claims of no consistent differences). His interpretation of the literature caused Del Giudice (2009) to speculate that gender-specific reproductive strategies might cause a gender difference in attachment strategies. By adopting avoidant strategies, insecure males would maximize their fitness in a threatening environment by engaging in uncommitted mating and providing low parental investment. In normal or only mildly stressful environments, insecure females would adopt preoccupied/ambivalent, care-eliciting strategies that kept them in close contact with supportive kin. In very stressful settings they would be inclined to opt for an avoidant attachment style, like males, to maximize their reproductive fitness.

Age

Transformations in attachment patterns have been suggested to occur with age. For example, Main, Hesse, and their co-workers (as summarized by

Hesse, 2008) have demonstrated that infant disorganized attachment transforms into controlling forms of attachment at kindergarten age, and that disorganized infants tend to become dismissing as adults. These transformations pertain to shifts from one insecure attachment category to another, and the rate of attachment security has not been speculated to change across age, with one possible exception, adolescence. Adolescents may temporarily show elevated levels of dismissing attachment as they move away, literally or psychologically, from their primary attachment figures (e.g., parents) and become more involved with peers and romantic partners who become additional important attachment figures (Allen, 2008). This conception of adolescence as a period of *Sturm und Drang* has become obsolete in recent times, because relationships between most adolescents and their parents do not seem to change drastically after middle childhood. Nevertheless, adolescence with its increasing meta-cognitive abilities and sharper self-other distinctions might provide some individuals with an opportunity to reevaluate their relationships with their parents (Allen, 2008). This may temporarily lead to what seem to be more insecure forms of adolescent–parent attachment.

Culture

As part of the International Sexuality Description Project, Schmitt et al. (2004) had 17,804 participants from 62 cultural regions complete the Relationship Questionnaire (RQ), a self-report measure of adult romantic attachment. They found that secure romantic attachment styles were normative in the large majority of cultures but that preoccupied romantic attachments were particularly prevalent in East Asian cultures. In studies on infant attachment across various cultures, we found that a majority of children were securely attached in all cultures studied, with an over-representation of anxious or ambivalent attachments within the insecure category in some African countries and in Japan, Indonesia, and Israel. Nevertheless, intracultural differences seemed to be larger than inter-cultural differences (Van IJzendoorn & Sagi-Schwartz, 2008). Despite this cross-cultural evidence supporting the universality of attachment processes and patterns in infancy, the universality of attachment theory has been hotly debated, because the theory may be biased toward Western, industrialized societies, and the more individualized and distant ways of relating in those societies, in contrast to more collective cultures that emphasize interdependence between individuals and groups (Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000), which might be thought to favor anxious or insecure-preoccupied attachments.

Poverty

The influence of culture on attachment should not be confused with the effects of poverty. In a study on differences in sensitivity and attachment security in African-American and White American infants, we found that

poverty mediated the larger part of the effect of ethnicity on parental sensitivity and consequently on infant attachment. African-American families were handicapped by low income and poor housing, with negative effects on infant security (Bakermans-Kranenburg, Van IJzendoorn, & Kroonenberg, 2004). Without consideration of family income, we would have held (African-American) ethnicity responsible for the significantly lower rate of infant attachment security in these families compared with White families. Schmitt et al. (2004) found that across 54 countries, stress and economic hardship, as indexed by national per capita income, was strongly associated with romantic attachment styles as assessed with the RQ, and that in resource-limited countries insecure (both preoccupied and dismissing) attachment styles were prevalent.

The present study

Here we examine associations between adult attachment classifications and gender, age, culture, and socioeconomic status, using studies conducted with the AAI, a narrative method of assessing adult attachment patterns (George, Kaplan, & Main, 1985). The AAI measures the representation of childhood attachment experiences in a narrative format. The AAI is an hour-long, semi-structured interview that probes alternately for general descriptions of attachment relationships, specific supportive memories, and descriptions of current relationships with parents and other attachment figures. Participants are asked to retrieve attachment-related autobiographical memories from early childhood and to evaluate these memories from their current perspective. It is the coherence of discourse rather than the content of the autobiographical account that determines their attachment classification (see Hesse, 2008, for a detailed description of the assessment), although content and coherence may be related, for example in so-called "continuous secure" participants. Numerous studies have documented the reliability and validity of the AAI (Hesse, 2008; Van IJzendoorn, 1995). More than 10,000 respondents of various ages, both genders, different cultural backgrounds, and different socio-economic and clinical statuses have been administered the AAI since it was created almost 25 years ago (Bakermans-Kranenburg & Van IJzendoorn, 2009b). Coding of the AAI yields one of three main adult attachment classifications: Secure-Autonomous (F), Insecure-Dismissing (Ds), and Insecure-Preoccupied (E) (Hesse, 2008). (The letters D, E, and F are meant to parallel the infant attachment patterns that Ainsworth et al., 1978, called B, A, and C for short.) Adults with the F classification tend to value attachment relationships, to describe their attachment experiences (whether positive or negative) coherently, and to consider them important in the development of their personality. Adults with the Ds classification tend to idealize their childhood experiences without being able to provide concrete illustrations, or tend to minimize the importance of attachment in their own lives. Adults with the E classification tend to emphasize the impact, often negative, of their attachment experiences. They are still very much involved and preoccupied with these

bygone experiences. Anger or passivity characterizes their mode of discourse. Adults with the Ds and E classifications are both considered to be insecure. An additional classification, unresolved (U), is used if an interview shows signs of unresolved trauma or loss. Here we focus on the main attachment classifications (Ds, F, E) because they are central to the debates about the influence of gender, age, and cultural differences on relative frequencies of the different attachment patterns.

Categorical data-analysis

We selected pertinent studies from ones listed on the Web of Science (WoS, Institute for Scientific Information) and PsycLIT, and through systematic searches of pertinent references to AAI studies in the most recent edition of the *Handbook of Attachment* (Cassidy & Shaver, 2008). This search resulted in a 15 samples with reported three-way (Ds, F, E) AAI distributions of non-clinical mothers from North America (N = 748), 11 samples of fathers (N = 439), 8 samples of (non-clinical) adolescents (N = 617), 6 samples of (college) students (N = 391), 13 samples of non-clinical mothers from non-American countries (N = 614), 6 samples of low SES mothers (N = 275), 5 samples of low SES adolescent mothers (N = 368), and 1 sample of low SES fathers (N = 20).

To illustrate the configuration of AAI classifications across various sets of participants, we used correspondence analysis (Bakermans-Kranenburg & Van IJzendoorn, 2009b). This categorical data-analysis approach allows for simultaneous inspection of configurations of attachment classifications and types of groups, and to search for specific patterns of attachment in relation to particular types of respondents (ANACOR; Greenacre, 1985). The method was applied to the North American, non-clinical-mother samples to create a baseline. The total of male (father) samples, adolescent and student samples, low SES samples, and samples from non-American countries are projected onto the graphical representation of the normative group using regression procedures (Greenacre, 1985); see Figure 1.

The center of the plot at the intersection of the Ds, F, and E vectors represents the normative distribution. The formula for calculating the x-coordinate for each group from the frequencies of the Ds (nDs), the F (nF), and the E (nE) classifications was

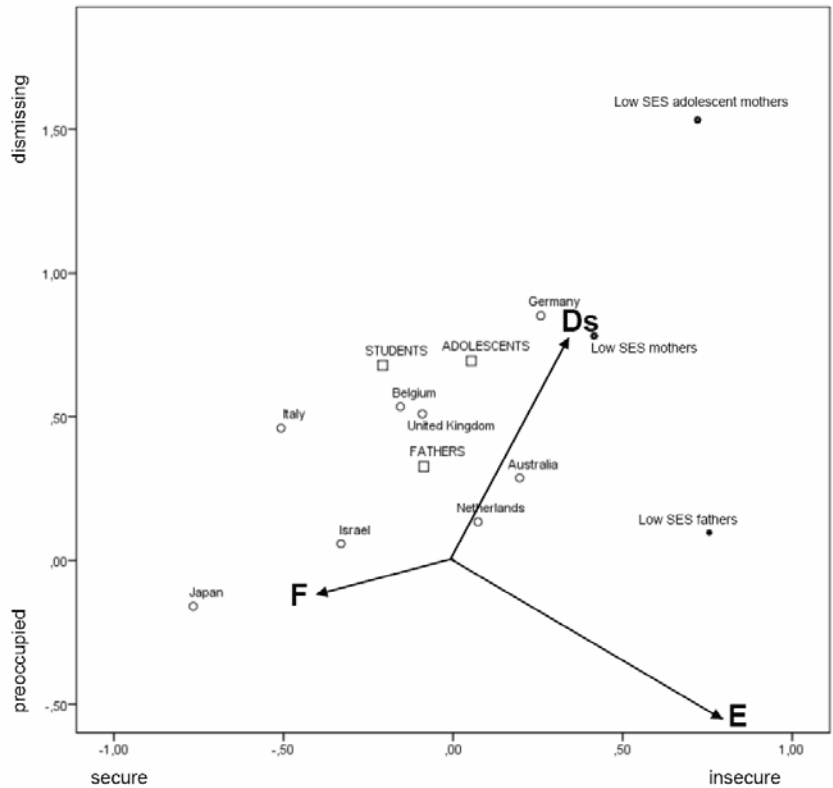
$$x = (.337 * \text{nDs} - .396 * \text{nF} + .793 * \text{nE}) / (.239 * \text{N}),$$

where N = (nDs + nF + nE). The formula for calculating the Y coordinate was

$$y = (.766 * \text{nDs} - .114 * \text{nF} - .550 * \text{nE}\ ) / (.199 * \text{N}).$$

The X-axis of Figure 1 indicates an overrepresentation of insecure classifications on the right, and of secure classifications on the left. The Y-axis indicates an overrepresentation of dismissing classifications in the upper part of the figure and an overrepresentation of preoccupied classifications in the lower part. The centers of gravity for the combined fathers and non-Western countries were located quite near the origin, indicating their similarity to the normative distribution of non-clinical mothers. The younger

FIGURE 1
Correspondence analysis solution for the three-way Adult Attachment Interview classifications



Note. The center of the plot represents the normative distribution of non-clinical North American mothers. Distributions closer to the center are more similar to the norm. The *X*-axis indicates overrepresentation of insecure classifications toward the right. The *Y*-axis indicates an overrepresentation of dismissing classifications in the upper part of the figure and an overrepresentation of preoccupied classifications in the lower part.

samples and the low SES female samples were located near the Ds region, indicating an over-representation of dismissing attachment.

Gender

Figure 1 summarizes the most recent data on AAI classifications of males (fathers, because their social role as parents is most similar to that of the mothers). We do *not* find a reliable gender difference in distribution of Ds, F, E attachment classifications. This "forced" attachment classification (into three categories, ignoring the Unresolved category) is the decisive data for testing Del Giudice's (2009) hypothesis that males would fall disproportionately in the dismissing category. Although we note a slightly higher percentage of fathers who were classified as dismissing compared with

mothers, the difference amounts to only 5%. Gender differences might be more prevalent in studies using attachment style or close relationship measures than in studies using the AAI to assess current mental representations of past attachment experiences. Self-report measures of romantic attachment style may index not only the attachment dimensions but also the sexual component of intimate relationships that might be more affected by gender differences (see Van IJzendoorn & Bakermans-Kranenburg, 2010). However, in an extensive review of self-report attachment studies, Mikulincer and Shaver (2007) did not find clear gender differences, in contrast to Del Giudice's (2009) claims.

Age

Figure 1 shows that the combined adolescent attachment distribution is close to the Ds vector, which means that, on average, adolescents have a higher proportion of Ds attachments than the normative sample. The difference is substantial, there being 12% more Ds attachment classifications in the forced three-way distribution of adolescents than in the normative sample. Most adolescents who attend high school still live with their parents, and some of them may be striving for autonomy and stressing independence while downplaying or diminishing the importance of parental attachment figures. The same might be true of college students who show a 10% overrepresentation of dismissing attachments compared to the normative group. Most of them might have recently left home, and those with less positive attachment experiences might need more time away from parents to work through these experiences and reach a more balanced view of their relationship history.

Culture

The possible bias of non-Western cultures in favor of preoccupied attachment is not evident in the few studies conducted in non-Western societies (e.g., Japan), and in fact the AAI results are remarkably similar across studies conducted in different languages (Japanese, Hebrew, Dutch, Swedish, German, and Italian), even though the interview is coded in terms of discourse properties. Coherence of discourse, which is coded in part based on Grice's (1975) philosophical analysis of coherent communication, is one of the central criteria for attachment security, and as Grice suggested, it may be a universal characteristic of human linguistic communication. More attachment studies are needed in cultures that have not received sufficient attention from attachment researchers: countries such as India, China, and countries in Africa and South America. So far, the evidence from countries where the AAI has been used is compatible with the idea that attachment theory and attachment classifications are likely to be cross-culturally universal (Van IJzendoorn & Sagi-Schwartz, 2008).

Poverty

The effect of poverty on the distribution of adult attachment classifications based on the AAI is notable. Figure 1 shows that the combined distribution

of the six samples of low-SES mothers (from Western countries) is strikingly different from the normative distribution, with dismissing attachment being over-represented. Even more deviant from the normative distribution is the combined distribution of five samples of low SES *adolescent* mothers (all from North America), with dismissing attachment again being over-represented. These results support Chisholm's (1996) and Simpson and Belsky's (2008) life history theory of attachment and mating, which argues that individuals in harsh environments adopt an early and quantity-oriented reproductive strategy rather than a later, quality-oriented strategy. It should be noted that the only low SES sample of males ($N = 20$) indicates over-representation of both dismissing and preoccupied attachment (see Figure 1), in concordance with Schmitt et al.'s (2004) data, which counts against the hypothesis based on life history theory that in harsh environments dismissing attachment would prevail. More AAI studies of lower SES males in resource-limited countries are badly needed.

Conclusions: A life history perspective

In sum, we did not find gender differences in dismissing versus preoccupied attachment strategies, as assessed with the AAI. Fathers yielded distributions similar to that for the normative group of mothers. Furthermore, the AAI distributions were independent of language and culture, at least in the samples studied thus far. Adolescents and young adults (college students) seem to be characterized by more prevalent dismissing attachment. The most striking finding in our correspondence analysis is the extremely distinctive position of adolescent mothers from poor backgrounds (Figure 1). As predicted by life history theory, in harsh environments a dismissing perspective on attachment relationships may be associated with an early-onset, quantity-oriented reproductive strategy (Simpson & Belsky, 2008). Young males would be expected to show the same dismissing attachment and quantity-oriented reproductive strategies in poor environments but the only study addressing this issue points in another direction. It would be premature to reflect on the implications of this finding before it has been replicated.

Future research should broaden the scope of the cultural evidence to include largely uncharted cultures and countries, and longitudinal studies should be conducted on samples ranging in age from adolescence to old age, because there are remarkably few attachment studies covering the whole span of adult ages. The issue of gender differences might be more fruitfully studied if both the AAI and self-report attachment style measures were used in combination with assessments of mating and parenting strategies. It is important to determine whether there are reliable gender differences and, if so, how they are related to mating and parental investment strategies. Finally, the question of the cross-cultural validity of attachment theory will profit from a sharp distinction between culture and socioeconomic status, because findings accumulated to date indicate that poverty is likely to be

more important than culture in determining the distribution of adult attachment patterns.

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