Unresolved Attachment Among Immigrants: An Analysis Using the Adult Attachment Projective

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ABSTRACT. Dutch and Belgian immigrants in California have a high rate of unresolved attachment status compared to nonimmigrant Californians, unrelated to their length of time in the United States, to their marriage status, or to their reasons for immigration. In this study, the author analyzes attachment at the representational level by comparing coherence in responses of 69 immigrants (29 men and 40 women) and 30 nonimmigrants (12 men and 18 women) to drawings in the Adult Attachment Projective (AAP; C. George & M. L. West, 2001; C. George, M. L. West, & O. Pettem, 1999). Analysis of variance indicates that being unresolved with regard to attachment is linked to greater perception of danger in general, and to a lower ability to resolve danger once perceived. Resolution of danger in story responses to AAP images shows that the immigrant group is most troubled by images of departure and isolation, but nonimmigrants are most disturbed by images of illness.

Keywords: Adult Attachment Projective, attachment, immigrants

CENTRAL TO ATTACHMENT THEORY (Bowlby, 1969/1982, 1973, 1980) is the idea that the attachment system is activated when one perceives danger, loss, or threat to the attachment relationship (e.g., abuse, loss through death). Further, the organization of attachment at the behavioral and representational level is the result of how attachment figures respond, especially in these situations (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969/1982, 1973, 1980). Assessments such as the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1996) and the Adult Attachment Projective (AAP; George & West, 2001; George, West, & Pettem, 1999) were developed to assess attachment status in adults, designating attachment groups parallel to those found in children: secure, dismissing, preoccupied, or unresolved. Secure, dismissing, and preoccupied attachment patterns are considered organized. They have rules for coping with attachment system activation, the goals of which are mental or physical proximity to attachment figures for comfort and care. These goals get compromised, however, because of attachment figure insensitivity to attachment needs in insecure individuals (dismissing and preoccupied). Unresolved attachment is comparable
to the disorganized attachment seen in children. Researchers have demonstrated that unresolved attachment in adults and disorganized attachment in children are defined in relation to frightening attachment events (Bowlby, 1980; Main & Hesse, 1990) that activate the attachment system, which is subsequently unable to become reorganized because of the attachment figure’s failure to provide care and protection when the attachment need was the greatest (George & Solomon, 1999). Individuals may develop unresolved attachment status at times when they suffer abuse or gross neglect (Bowlby, 1988; Cole-Detke & Kobak, 1998; Crittenden, 1985), when caregiving is perceived as frightening (Lyons-Ruth, Bronfman, & Atwood, 1999; Main & Hesse; Schuengel, van IJzendoorn, Bakermans-Kranenburg, & Blom, 1998), very erratic and unpredictable (Radke-Yarrow, Cummings, Kuczynski, & Chapman, 1985), or when an adult is mourning a loss, usually from his or her own childhood (Ainsworth & Eichberg, 1991; Hesse & van IJzendoorn, 1998). To summarize, adults with unresolved attachment status may have a history of loss, confusion, fear, or isolation in important emotional relationships.

The proposed explanations for unresolved/disorganized attachment status, following Bowlby (1973), all emphasize fear as the key etiological factor. Main and Hesse (1990) originally proposed a frightened/frightening hypothesis, suggesting that disorganization is the product of the attachment figure frightening the infant, for example, by becoming frightened him or herself, leaving the infant without a resolution for the attachment distress. More recently, Lyons-Ruth and her colleagues (Lyons-Ruth, Bronfman, & Parsons, 1999) noted that what individuals find especially frightening is simultaneous elicitation and rejection of attachment needs, and extreme unresponsiveness. They also argue the merits of the stress-diathesis model (Lyons-Ruth, Bronfman, & Atwood, 1999), which says that attachment trauma is mediated by (a) the characteristic of the threat, (b) the diathesis (existing vulnerability) to stress, and (c) the caring comfort available in close relationships. Alternatively, Solomon and George (1999) stress the attachment-caregiving breakdown hypothesis which states that when the lack of comfort results in repeated breakdowns in the reciprocity of an attachment relationship, the child (and later the adult) becomes overwhelmed and frightened. This has been linked to disorganized attachment, and to representations of the self as frightened, unprotected, abandoned and helpless. George, West, and Pettem (1999) emphasize that the mental representations of disorganized attachment can be better understood by focusing on

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the circumstance or stimuli that lead to segregated systems in the person with disorganized attachment.

In the present study, I examine unresolved attachment by testing several hypotheses regarding how individuals with resolved (i.e., organized) attachment status respond to AAP picture stimuli that represent attachment threat and danger compared with how individuals with unresolved attachment statuses respond. First, I test the hypothesis developed by Lyons-Ruth et al. (1999) that a predisposing vulnerability to attachment stress, in this case unresolved attachment, relates to greater sensitivity to attachment danger in general.

Hypothesis 1 (H1): Individuals with unresolved attachment perceive their world as more dangerous and see more danger in AAP pictures than do those with resolved attachment.

Van Ecke, Chope, and Emmelkamp (2005) found that immigrants had significantly higher rates of unresolved attachment than did nonimmigrants. Immigrant, as compared to nonimmigrant, status can be viewed as a disruption to attachment relationships. Bowlby (1973) postulated that disruption and threat of separation from attachment figures are central to the development of personality and of mental distress. Solomon and George (1999) have argued that parental divorce results in a permanent disruption of a child’s relationships with attachment figures. Physical and psychological proximity to the attachment figures must be reworked, often in the context of parental conflict and chaotic visitation arrangements. Like children of divorce, immigrants also face the difficulties brought about by geographical or physical inaccessibility of one or more of their attachment figures. The disruption in the relationship is a risk factor for attachment distress and regulation. Immigrants are expected to perceive more environmental danger than will nonimmigrants because immigration serves as a form of attachment disruption, including the fact that immigration may preclude the ability to visit attachment figures before they die.

Hypothesis 2 (H2): Immigrants perceive more attachment-related danger signals than do nonimmigrants.

This finding would indicate that at the representational level, immigrants perceive the world around them to be a more dangerous place than do nonimmigrants.

Solomon and George (1999) also have reasoned that repeated failures to repair injury to the attachment relationship leads to unresolved attachment via a lowered ability to resolve successive attachment dangers.

Hypothesis 3 (H3): Attachment-related danger signals in AAP transcripts are less often resolved (i.e. going from a state of feeling alarmed or threatened to a state of feeling safe) by those with unresolved attachment than by those with resolved attachment relationships, indicating a lower ability to re-organize or regulate attachment-related danger once it is perceived.
Immigrants in the van Ecke et al. (2005) study had higher rates of unresolved attachment than did nonimmigrants, a finding I further investigated in the present study.

Hypothesis 4 ($H_4$): Immigrants have a lower ability to resolve attachment-related danger signals in AAP stimuli than do nonimmigrants.

Van IJzendoorn and Bakermans-Kranenburg (1996) reported that unresolved attachment was linked with more psychological problems, and more severe psychological problems than was resolved attachment, and Colon-Downs, Crowell, Allen, Houser, and Waters (1997) found an association between being unresolved for abuse and clinical status. However, Colon-Downs et al. did not find an association between being unresolved for loss and clinical status. Because the immigrants in the van Ecke et al. (2005) study had high rates of unresolved attachment compared with the nonimmigrants in the study, and because I argue that immigration involves disruption of attachment relationships, I further examine the relations between unresolved attachment and loss versus abuse.

Hypothesis 5 ($H_5$): Immigrants perceive loss- and isolation-related attachment stimuli in the AAP as more threatening than do non-immigrants, indicating that unresolved attachment is activated by different experiences or stimuli for immigrants than for nonimmigrants.

Method

Participants

The sample consisted of 69 Dutch and Belgian immigrants (29 men, 40 women) and 30 nonimmigrants (12 men, 18 women) all of whom were living in California and who were not currently receiving any psychological treatment. They were recruited via community and social organizations and given a letter explaining the research. All participants signed informed consent forms. The participants were not compensated. The average age was 57 years ($SD = 17$) in the immigrant group and 47 ($SD = 14.23$) in the nonimmigrant group. Both groups had an average of college level education with incomes in the range from $50,000 to $100,000, which corresponds with the average income in this area ($83,640 in 2002; State of California, 2003). Both groups were mostly Caucasian (98% of immigrants, 73% of nonimmigrants) and Christian (74% of immigrants, 90% of nonimmigrants). Average length of time in the United States for the immigrants was 30 years ($SD = 18.08$), ranging from 2 to 63 years. The immigrants were all living in the greater San Francisco Bay Area. The nonimmigrant group consisted of people born, raised, and still living in the San Francisco Bay area. The sample was originally recruited for a study of adult attachment relationships, in which the immigrant group was found to be higher in unresolved attachment (van Ecke et al., 2005).
Measures

All participants completed a sociodemographic information form and completed the AAP to assess attachment status. The AAP (George & West, 2001; George et al., 1999), was developed to assess the same four states of mind with respect to attachment as the AAI: secure, dismissing, preoccupied, and unresolved. There is extensive reliability and validity evidence for the AAI (Bakermans-Kranenburg & van IJzendoorn, 1993; Sagi, van IJzendoorn, Scharf, & Koren-Karie, 1994). Convergence between the AAP and AAI on the four major attachment groups was .85 (George & West) and more than 40 studies currently in progress are increasing the available reliability and validity evidence for the AAP (see www.attachmentprojective.com). For illustrations of AAP images and examples of how transcripts are coded, specifically for unresolved attachment, refer to the chapter by George, et al. (1999, pp. 318–347) in Attachment Disorganization.

The AAP interview includes questions about eight ambiguous drawings, meant to elicit attachment system activation, about which an individual must tell a story. The interview is tape recorded, transcribed, and then seven of the eight story transcripts are coded for attachment status, with the first story serving as a warm-up. Although the AAP stimulus material may resemble the Thematic Apperception Test (Murray, 1943) the interpretation of coherence in stories is specifically to identify attachment status.

The seven drawings in the AAP that are used for coding the attachment status are, in order of coding:

1. departure (a drawing of two people in coats, standing with suitcases)
2. bed (an older person sitting on a bed facing a young person with outstretched arms in the bed)
3. ambulance (an older female standing next to a seated young person in front of what could be a window, viewing two people outside handle a person on a gurney next to an ambulance)
4. window (showing the back of a young person with braids who faces a window)
5. bench (a figure seated on a bench)
6. cemetery (a male figure standing with hands in coat pockets, facing two gravestones)
7. corner (a young person in a corner with arms slightly raised and face averted).

George, et al. (1999, p. 324) note that the drawings show events that activate attachment because they portray attachment threats such as illness, separation, solitude, death, and danger, while they “gradually increase activation of the attachment system” and are intended to refer to “both child and adult attachment situations” (p. 324).

Procedure

To test $H_1$, I first identified the total number of stories with danger signals in all 99 AAP transcripts generated (69 immigrants and 30 nonimmigrants). I
then compared the mean number of danger signals generated per transcript in the unresolved group (29 immigrants, 5 nonimmigrants) to that of the resolved group (40 immigrants, 30 nonimmigrants) using a $t$ test for significance. Individuals were classified as being resolved or unresolved with respect to attachment in a previous study (see van Ecke, et al., 2005). I tested $H_2$ by comparing the average number of danger signals per transcript between the immigrant and nonimmigrant groups using an initial $t$ test for significance. I tested $H_3$ by comparing the means of danger signals resolved by the resolved group to those of the unresolved group using a $t$ test for significance. I tested $H_4$ by comparing the mean of danger signals resolved by immigrants to that of nonimmigrants, using a $t$ test for significance. I tested interactions between the variables in $H_1$–$H_4$ using two-way analyses of variance (ANOVA$s$). I tested $H_5$ by comparing expected and actual frequencies of resolved to unresolved danger markers per picture for immigrants and nonimmigrants using chi square tests for significance.

**Results**

There were 65 resolved individuals (40 immigrants and 25 nonimmigrants) who generated an average of 2.40 ($SD = 1.3$) danger signals per transcript, and 34 unresolved individuals (29 immigrants and 5 nonimmigrants) who generated an average of 3.30 ($SD = 1.4$) danger signals per transcript. The difference between the means, $t(97) = 3.51$, $p < .01$, two-tailed, supported $H_1$. $H_2$ was not supported because there was no significant difference between the average of 3.30 ($SD = 1.5$) danger signals per transcript generated by the 29 unresolved immigrants, and the average of 3.60 ($SD = 0.5$) danger signals per transcript generated by the 5 unresolved nonimmigrants, $t(32) = 0.38$, $p = .71$, two-tailed. $H_3$, however, was supported as the 34 unresolved individuals resolved an average of 55% ($SD = 0.22$) of the danger signals, which was significantly less than the 100% resolved by the 60 resolved individuals, $t(92) = 15.89$, $p < .01$. Testing for $H_4$ showed that the average ratio of danger signals resolved to danger signals generated in the unresolved immigrant group ($n = 29$) was 0.52 ($SD = 0.23$), and in the unresolved nonimmigrant group ($n = 5$) the average ratio was 0.67 ($SD = 0.10$). This difference was not significant, $t(32) = 1.33$, $p = .19$, two-tailed. Thus $H_4$ was not supported.

To examine the relation between immigrant status and attachment, two separate ANOVAs were conducted. In the first, the dependent variable was the number of danger signals shown on the AAP interview transcripts, and in the second, the dependent variable was the resolution of danger signals. Immigrant status (immigrant vs. nonimmigrant) and attachment status (resolved vs. unresolved) were the between-subjects variables. In both ANOVAs, I found a significant main effect for attachment: $F(1, 95) = 7.81$, $p < .01$ and $F(1, 95) = 113.17$, $p < .001$ for the first and second ANOVAs, respectively. Participants with resolved attachment had fewer perceived danger signals ($n = 64$, $M = 2.41$, $SD = 1.31$) than did participants with unresolved attachment ($n = 35$, $M = 3.34$, $SD = 1.37$).
Participants with resolved attachment also had a higher proportion of resolved danger signals ($M = 1.0$), than did participants with unresolved attachment ($M = .56, SD = .23$). Thus, resolved versus unresolved attachment status, not immigrant status, was the main influence on both the number of danger signals perceived and the resolution of danger signals.

I tested $H_5$ with separate chi-square tests for each of the seven AAP pictures comparing the immigrant and nonimmigrant groups on the number of resolved versus unresolved danger signals. Analyses showed a significant difference between the immigrant and nonimmigrant groups in the resolution of danger signals for picture 5 “bench,” $\chi^2(1, N = 58) = 3.71, p < 0.05$. There was remarkable variation between the immigrant and nonimmigrant groups when comparing the percent of danger signals resolved. The greatest differences between the two groups were for departure and bench (56% and 28% lower resolution rates for immigrants, respectively).

Ranking the AAP pictures according to how hard it was to resolve perceived danger showed that the immigrant group was most threatened by departure (only resolved 44% of the time), followed by bench (72%), cemetery (79%), corner (81%), window (88%), bed, and ambulance (both 92%). For nonimmigrants, the most threatening picture was ambulance (80% of the time resolved), followed by bed (88%), cemetery (94%), and corner (96%), and least threatening were departure, window, and bench (100% each).

**Discussion**

In this study I examined five hypotheses about unresolved attachment at the representational level. The analysis of coherence in responses to images in the AAP using $t$ tests and ANOVAs revealed relations between unresolved attachment status and both the number of danger signals perceived and the number of danger signals resolved. Individuals with unresolved attachment perceive more attachment-related danger signals and are less able to resolve danger than those with resolved status. At the representational level, the world is perceived as being significantly more dangerous by those with unresolved attachment than by those with resolved attachment. However, immigrants with unresolved attachment status experienced the same number of danger signals in AAP images as nonimmigrants with unresolved attachment status. This suggests that at the representational level, the immigrant group does not experience the world as inherently more dangerous than does the nonimmigrant group, nor are they less able to resolve attachment-related danger signals than are unresolved nonimmigrants. These findings support the stress-diathesis hypothesis by Lyons-Ruth et al. (1999) and the attachment-caregiving breakdown hypothesis proposed by Solomon and George (1999). Bowlby (1980) theorized that, when individuals experience irresolvable attachment danger, they segregate it from awareness, and thus keep it from being emotionally and cognitively integrated, in order not to become
overwhelmed by the danger. My findings support the assertion by George and Solomon and George, et al. (1999) that this short-term defense actually weakens the person’s ability to handle successive attachment dangers.

The only difference found between immigrants and nonimmigrants was in which AAP images were the most threatening. The immigrant group had the most problems resolving danger in the departure and bench pictures, which are images of saying goodbye and isolation. In contrast, departure and bench were the least threatening images for nonimmigrants. The images of ambulance and bed were the least threatening for immigrants and the most threatening for nonimmigrants, a finding that is supported by attachment theory. While discussing research on separation in infant monkeys conducted by Hinde and Spencer-Booth (1968), Bowlby (1973) notes that “differences in behavior between the previously separated infants and controls were far more evident when the infant was tested in a strange environment than when it was in its home” (p. 70). In accordance with this reasoning, what may limit the immigrant group’s ability to resolve the specific attachment dangers they perceive is their experiencing them in another country. The results of this study thus also support Bowlby’s assertion that attachment is a developmental concept in that these vulnerabilities to images of aloneness and saying goodbye may have arisen out of the group’s experiences as immigrants. Finally, these findings support the idea that the various AAP pictures stimulate different attachment dangers (George et al., 1999, p. 324).

Limitations of this study are that the sample includes a specifically defined immigrant population comprising only 1.2% of California’s population, compared with a narrowly defined matching group of nonimmigrant Californians, so findings may not be generalizable to other groups with different experiences and backgrounds. Other considerations are the small number of unresolved cases in the nonimmigrant group, although the percentage of unresolved cases (16%) is similar to that found in large \( N = 2000 \) cross-cultural, nonclinical comparisons where 19% of the sample was unresolved (van Ijzendoorn & Bakermans-Kranenburg, 1996).

I noted at the beginning of this article that being unresolved for loss is not a clinical risk factor whereas being unresolved for abuse is a risk factor (Colon-Downs, et al., 1997). Because the immigrant group’s unresolved status shows links to images of separation and isolation, elements of loss, they should not be at a higher risk for clinical symptoms. These individuals are thus less likely to feel the need to seek therapy or help, but if being unresolved with respect to attachment is viewed as an ongoing stressor, they may be less able to handle successive stressors such as health problems, interpersonal conflicts, loss, moving, job-related stress, or financial difficulties.

Further research is needed with other individuals who live in prolonged separation from their attachment figures, such as expatriate employees and individuals in government service abroad as well as with other immigrant groups in the United States and other countries.
REFERENCES


Main, M., & Hesse, E. (1990). Parents’ unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior


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