

# Love and Confidence in Protection as Two Independent Systems Underlying Intimate Relationships

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This comment provides theoretical and empirical support for 2 independent systems, love and security of attachment, that have often been confounded in the literature. These systems have different functions, different emotions, a different distribution among the primates, and a different pattern of theoretically expected sex differences. Evidence for this distinction can be found in M. D. S. Ainsworth's (1967) original empirical studies and the recent work of Phillip R. Shaver and his colleagues (K. A. Brennan, C. L. Clark, & P. R. Shaver, 1998), as well as data reported here. The Experiences in Close Relationships Inventory (ECR) was administered to 239 undergraduates. Participants also filled out the Nurture/Love (LOV) scale from the Interpersonal Adjective Scale Big Five—Revised to explore expected negative correlations between love as measured in standard personality tests and the avoidance factor of the ECR. As predicted, women scored lower on the Avoidance scale and higher on the LOV scale, whereas there were no gender differences in security in close relationships. As predicted, LOV was negatively correlated with avoidance but not with security.

Goldberg, Grusec, and Jenkins's "Confidence in Protection" (1999) is a long overdue contribution to an area in need of some critical distinctions. As the authors point out, Bowlby's (1969) original idea was to describe an attachment system for which the evolutionary function was to keep the baby close to the mother and for which the principal emotions are the negative emotion of fear in the absence of the attachment object and the positive emotion of felt security in the presence of the attachment object.

Mary Ainsworth's (Ainsworth, Blehar, Waters, & Wall, 1978) Strange Situation test is a straightforward assessment of this concept, but as Goldberg et al. (1999) note, there has been remarkably little research directly focused on attachment as a protection system. I think that the reason for this is that, despite its clear conceptualization as a protection system, attachment status rapidly became identified as a general marker of social and cognitive adjustment (as indicated by associations between

attachment status and a variety of developmental outcomes). It became widely accepted that attachment theory provided a more or less complete theory of close relationships in infancy and throughout life.

A focus of my 1992 article (MacDonald, 1992) was providing reasons for distinguishing warmth and affection from attachment as a protection system by arguing that these systems have different functions, different emotions, a different distribution among the primates, and a different pattern of theoretically expected sex differences, and that attachment could be clearly distinguished from warmth and affection in some empirical studies. I suppose that the failure to distinguish between affection and protection occurred at a psychometric level because of the general principle that "good things tend to go together" and its correlative, "bad things tend to go together." That is, parents who are warm and affectionate are more likely to be responsive to children's needs for security and are also more likely to provide a stimulating environment, be more intelligent, and have other positive traits. The view that there are important coherencies in development follows from life history theory in evolutionary biology (MacDonald, 1997).

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Nevertheless, making distinctions between systems designed for very different functions is the hallmark of good theory and should sharpen our empirical findings. Paradoxically, perhaps, I believe that recent developments in the adult attachment literature can shed light on different systems that are also present in infancy. In particular, the Experiences in Close Relationships Inventory (ECR; Brennan, Clark, & Shaver, 1998), a measure of adult attachment, contains two subscales, labeled Avoidance and Anxiety. Anxiety appears to be a fairly straightforward measure of security conceptualized paradigmatically as fear of abandonment. Typical items include "I worry about being abandoned," "I worry a fair amount about losing my partner," and "I worry about being alone." This scale is thus conceptually linked to attachment as a protection system. Avoidance, on the other hand, measures the extent to which people are attracted to close relationships for their own sake. Typical items are "I prefer not to show a partner how I feel deep down," "I am very uncomfortable being close to romantic partners," "Just when my romantic partner starts to get close to me I find myself pulling away," and "I try to avoid getting too close to my partner." Avoidance as measured by the ECR is thus conceptually linked with warmth, nurturance, and love (reversed), which, I proposed, constituted an independent dimension of close relationships (MacDonald, 1992).

The main point of Goldberg et al.'s (1999) article is to focus attention on the protection dimension of attachment, but I report here some findings that firm up the links between ECR Avoidance and personality measures of individual differences in tendencies for affection and nurturance. This study used the Nurturance/Love scale of the Interpersonal Adjective Scale—Revised (IAS–R–B5 LOV; Trapnell & Wiggins, 1990) rather than the dimensions of extraversion and agreeableness typically used in personality research. As Trapnell and Wiggins (1990) pointed out, the difference amounts to a rotational difference between two different ways of conceptualizing the same interpersonal space. Nevertheless, an evolutionary perspective is better conceptualized with dominance and nurturance as the primary axes of interpersonal space because this conceptualization maximizes theoretically important sex differences and is thus likely to have been the focus of natural

selection (MacDonald, 1995, 1998). Nurturance is conceptualized as involving the tendency to provide aid for those needing help, including children and people who are ill (Wiggins & Broughton, 1985), and would therefore be expected to be associated with ideal child-nurturing behaviors. This dimension is strongly associated with measures of femininity and is associated with warm, empathic personal relationships and dependence (Wiggins & Broughton, 1985).

Indeed, women scored higher on the IAS–R–B5 LOV scale by a very robust 0.88 standard deviations (see Trapnell & Wiggins, 1990), and in our study of 238 undergraduates (162 of whom were female), women scored higher than men on the LOV,  $F(1, 237) = 35.83, p < .001$  (MacDonald, Kale, & Clark, 1999). As a corroboration of the theory, we found sex differences for ECR Avoidance (men > women)  $F(1, 237) = 3.99; p = .047$ , but not for Anxiety,  $F(1, 237) = 0.53, p = .467$ . (Sex differences for avoidance were more pronounced on the Avoidance scale if only the items loading greater than 0.60 were used in the analysis,  $F(1, 237) = 5.05, p = .026$ ; this procedure had no effect on the results for anxiety,  $F(1, 237) = 1.673, p = .197, ns$ ). We also replicated the factor structure of the ECR. As expected on the basis of theory, we found that, whereas IAS–R–B5 LOV was negatively correlated with ECR Avoidance ( $r = -.287, p < .01$ ; for men  $r = -.435$ ; for women  $r = -.176$ ), the correlation with ECR Anxiety was not significant,  $r = .035, ns$ .

It appears then that there are two evolved systems underlying close relationships and linked to parenting in infancy. In retrospect, this distinction could have been made at the very beginnings of attachment research. Recently, Brennen et al. (1998) noted that Ainsworth et al.'s (1978) study included a discriminant function analysis based on continuous rating scale data indicating two continuous dimensions recognizable as avoidance and anxiety. Moreover, Ainsworth (1967) found that Ugandan babies were quite securely attached, despite the fact that their mothers rarely showed any affection toward them—a phenomenon also noted by Levine and Levine (1988) for another African group. In the 1967 study, Ainsworth clearly distinguished affection from sensitivity and responsiveness, with the latter two qualities defined mainly in terms of how the mother

responds to infant signals. Sensitivity and responsivity were thus reactive qualities—exactly the qualities that would be elicited in a situation requiring protection: A sensitive, responsive mother would quickly detect the baby's distress and respond in a way that would restore the baby's felt security. The Strange Situation certainly represented a situation that babies perceived as requiring protection but, as Goldberg et al. (1999) have noted, the home situation typically does not, and it is perhaps a bit of a stretch to suppose that sensitivity and responsivity in routine home life would be the main source of internal working models of security of close relationships later in life. Nevertheless, it seems that the emphasis on sensitivity and responsiveness was not ill-advised, although it may well be the case that infants' confidence in the caregiver (their sense of felt security) is more determined by what happens during situations perceived as highly dangerous by the infant than by sensitivity and responsiveness that occurs during routine care-taking. As Goldberg et al. (1999) note, there needs to be more research directly addressed to the protective function of attachment.

Finally, it seems reasonable to suppose that individual differences in the protection system (assessed by ECR Anxiety) are influenced by individual differences in the temperament systems of emotionality and proneness to fear, as suggested by Goldberg et al. (1999; see also MacDonald, 1992). Again, as in the case of nurturance and love, clearly distinguishing between different systems should result in a clearer picture, including a clearer picture of the environmental influences involved. I agree with Goldberg et al. that we have to get beyond attachment status as resulting from generic good parenting (1999, p. 475). Within an evolutionary systems perspective, environmental influences are conceptualized as involving specific types of stimulation directed at particular evolved systems. Thus, environmental influences affecting the protection system would be expected to be events related to fear-inducing situations, whereas environmental influences related to nurturance and love would be expected to involve warmth and affection involved in close family relationships.

For example, if indeed the psychobiology of the human affectional system underlying nurturance and love is a reward system that makes

close relationships pleasurable (MacDonald, 1992), one would expect that adult caretakers and, typically, family members would be the main source of environmental influence on the human affectional system. From an evolutionary systems perspective, the affectional system is designed to function in the close relationships typical of the family (including close friendships), not with strangers or casual acquaintances. If the relevant environmental stimulation is that which we label warm and affectionate, this type of stimulation is unlikely to come from other sources, at least during infancy and early childhood, and it is thus not surprising that behavior genetic studies indicate that nurturance and love show evidence of shared environmental influence (Segal & MacDonald, 1998). Parental warmth is, to a significant extent, an expression of a parental personality trait and is therefore likely to be a general disposition of the parent. Although some children may be easier to love because of they are more biologically inclined to enjoy high levels of warmth and affection and some children may be less favored by parents because, for example, they are physically weak, all things being equal, warm parents are thus likely to treat all their children with a fairly similar level of affection, whereas cold, indifferent parents are likely to treat their children in a similar negative manner.

On the other hand, the behavioral genetic data are compatible with supposing that the environmental influences on the fear temperament system may come from a variety of sources that may well include nonfamily influences as well as family influences that are not shared by siblings (Segal & MacDonald, 1998). I suggest that this makes sense because, unlike the situation with nurturance and love, the fear system is directed to the world beyond the family as well as to the world inside the family. Events that strengthen or weaken the fear system may well occur outside the family context, in schools and in neighborhoods where children are exposed to unshared environmental influences, such as frightening events that affect one sibling and not another or different experiences with peers (e.g., bullies at school). Goldberg et al. (1999) suggest this in their comments on data from Garbarino, Kostelny, and Berry (1997) indicating that "the positive impact of parental care may be muted in high risk neighborhoods where the basic protective

contract between parent and child is constantly violated" (p. 479).

There may also be sex differences in how the fear system interacts with the affectional system. An intriguing finding in our data was that for women the correlation between Avoidance and Anxiety was .381,  $p < .001$ , whereas for men the correlation was .179, *ns*. (Brennen et al., 1998, did not analyze data separately by sex; they found a low correlation of .11 between the Anxiety and the Avoidance scales for their sample as a whole.) This suggests that women tend to conflate protection and affection in relationships, whereas men more easily separate these functions. From an evolutionary perspective, one could speculate that perhaps this is because men do not look to women as a source of physical security, whereas the protective function is a critical aspect of close relationships for women, stemming ultimately from sex differences in physical strength and size.

In any case, I have no doubt that separating the affectional and protection systems will make a major contribution to progress in this area.

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