The Functional Discrimination of Attachment and Affiliation Theory and Empirical Demonstration

ADRIENNE E. R. SHELDON and MALCOLM WEST

Volunteer college students completed a categorisation task designed to test the hypothesis that adults organise their expectations of relationships in a manner that reflects a functional distinction between attachment and affiliation. Terms associated with the provision of security and with characteristics theoretically identified as definitive of attachment relationships were significantly more likely to be associated with the relationship indentified as 'lover'. There was substantial overlap between attachment and affiliation relationships in functions relating to intimacy and disclosure. These results highlight the need to differentiate close relationships by functional rather than structural characteristics.

The literature on social support acknowledges attachment to be an important component of adult social networks. For example, Troll & Smith (1976) cited studies providing evidence that "particularized attachments may persist throughout life". Rutter (1981) wrote, "deep attachments and loving bonds are an important feature of adult life". Ainsworth (1985) has stated that "the most important elements in social networks and social support systems alike are relationships that constitute affectional bonds, and particularly those with attachment components that provide a sense of security".

Most of the literature on social support uses attachment, either explicitly or implicitly, to denote the upper range of the affiliative spectrum within social networks. Attachment is assumed to arise from the same needs as other close social relationships, to fulfil the same functions, and to be maintained by the same types of behaviour, cognitions, and affects. The underlying thesis in this paper is that, although attachment and affiliative relationships may serve similar important needs for intimacy and support, only attachment relationships provide the sense of security that is crucial to buffering the effects of stressful life events. The specific hypothesis tested here is that adults organise their expectations of relationships in a manner that reflects this functional distinction.

The study of attachment began with John Bowlby (1969/82, 1973, 1980). Influenced by the findings of ethologists such as Lorenz (1931) and Harlow (1958), Bowlby (1969/82) proposed that attachment is a primary, biologically determined behavioural system in many species, including man, with the function of protecting the altricial animal from danger. The goal of attachment is to maintain or re-establish proximity to an identified protector. Attachment behaviour is "any form of behavior that results in a

person attaining or retaining proximity to some other differentiated and preferred individual, who is usually conceived as stronger and/or wiser" (Bowlby, 1977).

Most attachment research has focused on infant-parent relationships. Henderson (1977) is one of the few investigators to attempt a systematic research study that takes into account adult attachment relationships. Henderson stated (in agreement with Caplan, 1974) that "'psychosocial supplies' [are] the essential commodity that people obtain from their social network". He further proposed that an individual has "affective attachments" towards members of his/her primary group and "it is from them that his psychosocial supplies are said to be derived".

Henderson's approach to adult attachments appears, therefore, to define attachment relationships as a subset, identified by intensity and intimacy, of an individual's social support or affiliative network. Similarly, Heard & Lake (1986) have said:

"'Preferred relationships' refers to relationships in which individuals regularly expect to find opportunities for companionable and/or supportive interactions... People who are so classed constitute an individual's attachment network.... The concept of preferred relationships in the attachment network circumvents difficulties in describing attachment relationships and affectional bonds in adults."

There are two implicit assumptions in this approach: (a) attachment can be characterised using the same criteria as affiliation (for example, if affiliative relationships provide companionship and intimacy, attachment relationships provide preferred or more salient companionships and intimacy); and (b) attachment and affiliation serve the same function(s), with attachment, again, doing the job more and better (West & Sheldon, 1987). Neither of these

assumptions agrees with theoretical formulations about the nature of the attachment system in infancy and childhood.

In a cogent article, Weiss (1982) characterised attachment relationships for adults. First, he delineated the following three central criteria for defining an attachment relationship in infancy: (a) proximity-seeking - "The infant will attempt to remain within protective range of the attachment figure"; (b) secure base - "In the presence of an attachment figure, so long as there is no threat, an infant will give indication of comfort and security"; and, (c) separation protest - "Threat to continued accessibility to the attachment figure or actual separation . . . will give rise to protest and to attempts to ward off the attachment figure's loss or to regain the attachment figure's presence". Based on evidence from interview studies, Weiss stated that relationships "that meet the three criteria for attachment are to be found regularly" in adults.

Weiss then delineated three characteristics which differentiate attachment in adults from attachment in children. (a) In adults, attachment relationships are typically between peers, rather than between care-receiver (infant) and care-giver (parent). (b) Unlike infant attachment, adult attachment does not normally overwhelm "other behavioral systems" such as the exploratory system. (c) Attachment in adults often includes a sexual relationship.

Finally, Weiss differentiated attachment from other social relationships. This differentiation is based largely on the effects of the absence of different types of bonds. In the absence of an attachment bond, Weiss observed that individuals experienced persistent 'loneliness' which was not relieved by participation in a friendship network. In contrast, individuals "without access to a community of others" experienced distress associated with isolation. In Weiss' terms:

"What they lacked might be characterized as 'affiliation' – associations in which shared interests and similarity of circumstances provided a basis for mutual loyalty and a sense of community."

This 'affiliation' need is thus congruent with both the 'psychosocial supplies' (Caplan, 1974) provided by the social network and with the exploratory behavioural system which Bowlby (1977) characterised as 'antithetical' to the attachment system.

The study of adult attachment and affiliative relationships, and especially of discrete attachment patterns among adults, presents empirical as well as theoretical challenges. The identification of attachment patterns in infancy and early childhood relies on the structured observation of behaviour in

attachment-eliciting situations (Ainsworth et al, 1978). Researchers such as Ainsworth & Bell (1970) and Hinde & Spencer-Booth (1970) have characterised attachment bonds in human and other primate infants through systematic observation of specific types of behaviour for maintaining proximity (e.g. clinging), re-establishing proximity (e.g. reaching), protesting separation (e.g. crying), and demonstrating pleasure in reunion (e.g. smiling). The infant and young child have relatively limited behavioural repertoires physiologically available. restricted environments of action and, at most, brief stores of past experiences to contribute expectations and learned responses. The relationship between behaviour, behavioural system, and system goal is therefore relatively linear and proximate.

The evaluation of adult attachment relationships is more complex. Adult behaviour typically has multiple determinants, arising from and serving the needs of more than one behavioural system (Bretherton & Ainsworth, 1974; Hinde, 1975; Bateson, 1976). No behaviour is exclusively an attachment behaviour, and relationships may serve more than one function (Sroufe & Waters, 1977: Hinde, 1982). For example, in Western culture, it is a common expectation that one's spouse may also be one's confidante or 'best friend', thereby confounding attachment and affiliative functions. This is congruent with the findings of the Camberwell study, where Brown et al (1975) rated 'intimacy' on a four-point scale (a-d). Type a and type b relationships were both defined as "close, intimate, and confiding". Type a relationships were with "husband or boyfriend, or in exceptional cases a woman with whom they lived". Type b relationships were with "mother, sister or friend whom they saw at least weekly". Only type a relationships provide "almost complete protection" against psychiatric sequelae to stressful life events; type b relationships "failed to provide even relative protection".

While the authors admit they cannot explain this difference, attachment theory provides an explanation. In the absence of a stressor causing decreased security, type a and type b relationships fulfil similar affiliative needs equally well. But when a stressor activates the attachment system, attachment needs (the need to re-establish a sense of security) predominate. Only type a relationships have predominant attachment components and thus fulfil attachment needs. The shared residence evokes the secure base hallmark of attachment relationships in infancy. The findings of the Camberwell study can, therefore, be understood as differentiating the attachment from the affiliative components of close relationships.

A further complication in the assessment of adult attachment is that observed attachment patterns in adults arise primarily from set 'representational models' rather than from current environmental stimuli (Bowlby, 1977; Main et al, 1985). Findings from another prominent study can be understood in this context. Henderson et al (1981) found that the availability of attachment and the perceived adequacy attachment could be reliably differentiated, and that perceived adequacy was more strongly correlated with adjustment following stressful life events than simple availability. These results can be understood as supporting Bowlby's observation (1977) that adult attachment patterns arise largely from:

"representational models of attachment figures and of self [which] an individual builds during his childhood and adolescence, [and which] tend to persist relatively unchanged into and throughout adult life. As a result he tends to assimilate any new person with whom he may form a bond . . . to an existing model . . . and often to continue to do so despite repeated evidence that the model is inappropriate."

An individual's representational model would thus have greater influence on his or her perception of the adequacy of attachment than objective environmental supplies (i.e. availability).

Finally, although all attachments are affectional bonds, not all affectional bonds are attachments (Ainsworth, 1985). As implied in the above discussion of the Camberwell study, relationships can look equivalent when classified only according to affectional components but can nonetheless be quite different in terms of the ability to fulfil attachment functions. In accordance with the implications of Bowlby's theory (1978), attachment is restricted to dyadic relationships in which proximity to a special 'other' is sought or maintained to provide a sense of security. The principal function of adult attachment is protection from danger (as it is during childhood), although adults recognise other dangers than those recognised by infants and children: specifically, threats to the individual's self-concept and integrity (Hinde, 1975; West et al, 1986). Affiliative relationships have a quite different function, serving to promote exploration and expansion of interests from the secure base provided by attachment.

The present study was designed to investigate whether adults organise their expectations of relationships in a manner that reflects a functional distinction between attachment and affiliation.

Method

The study consisted of a simple paper-and-pencil categorisation task. The functions of relationships were

operationalised through 45 terms (descriptors) used in the literature to describe attachment, affiliation, and social relations. These relationships were differentiated according to the three primary types: 'lover' was used to denote an attachment relationship, 'best friend' to denote an affiliative relationship, and 'friend' to denote a social relationship. Instructions to subjects stated that the category 'lover' included a person identified as someone the subject is 'in love with', whether or not there is a sexual relationship. Each subject was asked to categorise each descriptor as to whether it applied primarily to 'lover', 'best friend', or 'friend'. The endorsement of more than one category for each descriptor was allowed.

Subjects

Subjects were 90 volunteer participants from an undergraduate psychology course at the University of Calgary. Although this is a non-random sample, it is especially suited to this investigation for two reasons: (a) the subjects have comparable levels of reading skills, and they could understand the task fairly easily; (b) most subjects were 19-25 years old. This age range is desirable because most subjects will have formed specific ideas about types of relationships, but these ideas will not ordinarily have been greatly modified by contradictory environmental responses. That is, the subjects' ideas about the functions of different types of relationships should reflect generalised expectations (i.e. representational models) at least as much as practical experience.

The questionnaires were anonymous, and only age and sex of respondents were requested. Two returns were discarded because most descriptors had not been categorised. Of the remaining 88 returns, seven did not give age or sex. The 81 returns coded for age and sex included 55 women, aged 22.9 ± 6.8 years, and 26 men, aged 20.6 ± 3.6 years. This age difference was not significant by *t*-test.

Data analysis

The operationalised null hypothesis was "No terms will be preferentially endorsed by most subjects for 'lover' only". Since the data are categorical, the analyses focused on descriptive and non-parametric statistics. First, the descriptors were classified according to modal response category, that is, any descriptor most frequently endorsed as applying to 'lover' only was accepted as a function of attachment relationships. Descriptors most frequently endorsed as applying to both 'lover' and 'best friend' were accepted as common to both attachment and affiliative relationships.

The non-parametric Kruskal-Wallis procedure was used to test for statistically significant differentiation of attachment and affiliative functions (Rosner, 1986). The test was performed on the number of subjects endorsing only the 'lover' category for each descriptor. Those descriptors with a modal response category of 'lover' were identified as group 1; all other descriptors were identified as group 0. The Kruskal-Wallis test ranks all observations, and tests the null hypothesis that the centre of group 0 equals the centre of group 1. The test statistic, H, follows

TABLE I
Descriptors assigned to attachment relationships

Descriptor	No. endorsing 'lover' only	Mode = 'lover' only
Sexual intimacy	83	Yes
Plan future with	63	Yes
Exclusive	59	Yes
Separation causes distress	56	Yes
You protest separation from	56	Yes
Other's happiness is a goal for you	50	Yes
Opportunity to give	45	Yes
Provides sense of being needed	40	Yes
Provides sense of security	40	Yes
Care giver	34	Yes
Faithful	33	Yes
You fear loss of	29	No
You protect	25	No
Permanent relationship	24	No
Sought out when stressed	21	No
Enduring tie	21	No
Prevents loneliness	18	No

a χ^2 distribution with degrees of freedom equal to one less than the number of groups (i.e. for this study, d.f. = 1).

Because we had prior expectations (based on our understanding of the function of attachment relationships for adults) of which descriptors would be preferentially assigned to the 'lover' category only, a Kruskal-Wallis test was also done with the descriptors with divided into two groups based on expected association with attachment. The first column of Table I lists the 17 descriptors we predicted would be uniquely associated with the 'lover' category.

Results

Two related descriptors ('fixed and complementary' and 'variable and equivalent') were discarded from the analysis as most subjects either ignored them or indicated confusion as to their meaning. Only four modal response categories were observed for all 43 remaining descriptors.

Nine descriptors were endorsed most frequently either for 'friend' only or for all three categories. These patterns of endorsement are interpreted as indicating functions assigned to general social relationships. The nine terms are: 'shares common interests', 'competitive at times', 'independent', 'provides companionship', 'helps you to be sociable', 'prevents loneliness', 'prevents isolation', 'co-operative', and 'comfortable'. The association of these functions with general social relationships has a face validity that lends credence to the general approach.

Twenty-three descriptors were endorsed most frequently for both 'lover' and 'best friend' (Table II). This pattern of endorsement was interpreted as indicating functions assigned to close affiliative relationships. Additionally, this pattern of endorsement indicates the functional overlap between attachment and affiliative relationships in Western culture. The relationship entitled 'lover' is clearly expected to fulfil the same functions as the relationship 'best friend'.

Eleven descriptors were endorsed most frequently for 'lover' only. The null hypothesis was therefore rejected for this sample. All were from the set of 17 descriptors hypothesised to be uniquely associated with attachment (Table I).

For the first Kruskal-Wallis test, groups were identified according to modal response category; only the 11 descriptors with a modal response of 'lover' were identified as attachment descriptors. The descriptors were ranked according to the number of subjects endorsing only the 'lover' category; the 32 non-attachment descriptors had an average rank of 16.5; the 11 attachment descriptors had an average rank of 38.0. The H statistic, adjusted for ties, is 24.07; the cumulative distribution function at 24.07 of χ^2 with d.f.=1 is 1.0. The null hypothesis of no difference can therefore be rejected (P < 0.001).

TABLE II

Descriptors associated with affiliative relationships

Descriptor	No. of endorsements for both 'lover' and 'best friend'
Mutually confiding	58
Knows a lot about you	58
Mutual trust	47
Wants to maintain closeness	47
Provides you with a sense of	
worth	44
You cherish	43
Provides reassurance	40
Important as a unique individual	39
Enduring tie	39
Provides guidance and advice	39
Loyal	39
You fear loss of this person	37
Permanent relationship	37
Sought out at times of stress	37
Loss means grief	36
Frequent shared activities	36
Pleasure in reunion	36
Frequently sought out	35
Offers help when needed	30
Shared interpretations	29
You try to protect	27
Predictable	26
Shared activities most important	25

The second test assigned all 12 descriptors hypothesised as unique to attachment to the attachment group. The 26 non-attachment descriptors had an average rank of 14.3; the 17 attachment descriptors had an average rank of 33.8. The H statistic, adjusted for ties, is 24.88. The cumulative distribution function χ^2 with d.f. = 1 at 24.88 is 1.0. Therefore, the inclusion of all hypothesised attachment descriptors does not decrease the confidence with which the null hypothesis can be rejected.

Because of the large number of subjects who endorsed the item 'sexual intimacy' for lover only, we questioned whether this single item was unduly biasing the results. We therefore repeated both analyses omitting that item. The Kruskal-Wallis test for the ten remaining items with a modal response of 'lover only' versus all other items yielded an H statistic, adjusted for ties, of 22.39. The test for the 16 theoretically predicted attachment items versus all others yielded an H statistic, adjusted for ties, of 23.66. Both of these values still lead to rejection of the null hypothesis (P < 0.001).

P values are a component of inferential statistics, indicating the probability of a type I error. As this sample is not a random sample of any population, inferential statistics must be accepted with caution. Inferences from observed findings to the generalised research question must therefore be accepted primarily on logical, not statistical, grounds.

Discussion

The 11 terms endorsed preferentially for 'lover' only compare favourably with the characteristics of adult attachment relationships delineated by Weiss (1982) (see earlier). Two of the characteristics common to infant and adult attachment can be related directly to terms endorsed for 'lover' only: secure base with 'provides sense of security', and separation protest with 'you protest separation from' and 'separation causes distress'. Proximity-seeking does not seem to be strongly associated with adult attachment relationships as the terms 'frequently sought out', 'sought out when stressed', and 'wants to maintain closeness' were each endorsed for both 'lover' and 'best friend'.

One possible interpretation of these results is that affiliative relationships include the expectation of frequent contact but not the expectation that this contact is guaranteed or will necessarily always be available when wanted or in the future. In contrast, the association of the terms 'plan future with', 'faithful' and 'care-giver' with only the 'lover' category suggest that adults expect attachment relationships to provide availability and security not only in the present but also in the future. Thus, expectations of a shared future become a crucial hallmark of adult attachment relationships.

Weiss also identified three characteristics which differentiated adult from infant attachment (see earlier). The peer relationship component is indicated

in these results by the expectation of reciprocity: 'other's happiness is a goal for you', 'opportunity to give nurturance' and 'provides sense of being needed', all of which were preferentially endorsed for the category of 'lover' only. The term 'sexual intimacy' indicates the association of a sexual relationship with attachment. (The terms 'exclusive' and 'faithful' could also be interpreted as relating to the sexual component of the relationship.) The third characteristic, decreased ability of the attachment system to overwhelm other behavioural systems. is not directly tested in this study, but can be inferred from the large number of functions assigned to both 'lover' and 'best friend'. The attachment and affiliative systems are not, therefore, antithetical in all functions. One system would not ordinarily be capable of completely overwhelming the other, in that the shared functions, at least, would be maintained.

The results of this study suggest that attachment for adults must be defined for investigation primarily in terms of function (protection from 'danger' with achievement of security being the signal that terminates attachment behaviour) rather than in terms of structure (specific behaviour or form of relationship or role-defined 'other'). Any relationship may have an attachment component to the degree that the relationship promotes security. A relationship becomes an attachment relationship when the primary function of the relationship is the protection from 'danger'.

The delineation of the functions of attachment versus affiliative relationships could also help clarify the often confusing findings regarding social support and stressful life events. In a longitudinal study of single and non-single mothers in Islington, Brown et al (1986) found that the existence of a confiding relationship was not associated with a lower risk of depression among wives, but access to socially supportive relationships was protective against depression for single mothers. These findings do seem to suggest, at a minimum, that there exist three different kinds of relationships: marital relationships, confidante relationships, and socially supportive relationships. The association between confidents, social support, life events, and onset of depression is apparently different in the presence or absence of what appears to be an attachment relationship. It would appear that the attachment relationship has to be taken into account before the contribution of affiliative relationships, whether intimate or more distant, to buffering stressful life events can be understood.

Bowlby (1988) has recently stated that "the extent to which [each individual] becomes resilient to

stressful life events is determined to a very significant degree by the pattern of attachment he or she develops during the early years'. Our research suggests that, in adults, these patterns of attachment are best investigated by attention to functional rather than structural differences in relationships and, further, that the essential function of attachment relationships for adults is protection from 'dangers'; the primary signal that this function has been achieved is the sense of present and future security within the relationship.

Acknowledgements

Ms Sheldon's graduate work is supported by a studentship from the Alberta Heritage Foundation for Medical Research. In addition, this work forms part of research funded through the Canadian Psychiatric Research Foundation in a grant to Dr West. The authors thank Ms Linda Reiffer, Research Associate, for her continuing valuable contributions to all aspects of the research.

References

- AINSWORTH, M. D. S. (1985) Attachments across the life span. Bulletin of New York Academy of Medicine, 61, 792-812.
- & Bell, S. M. (1970) Attachment, exploration and separation: illustrated by the behaviour of one-year-olds in a strange situation. Child Development, 41, 49-67.
- —, Blehar, M., Waters, E., et al (1978) Patterns of Attachment. Hillsdale, New Jersey: Lawrence Erlbaum.
- BATESON, P. P. G. (1976) Specificity and the origins of behavior. In Advances in the Study of Behavior (eds J. S. Rosenblatt, R. A. Hinde, E. Shaw, et al). New York: Academic Press.
- BOWLBY, J. (1969/82) Attachment and Loss, Vol. 1: Attachment. (2nd edn). New York: Basic Books.
- (1973) Attachment and Loss, Vol. 2: Separation: Anxiety and Anger. New York: Basic Books.
- —— (1977) The making and breaking of affectional bonds. British Journal of Psychiatry, 130, 201-210.
- (1978) Attachment and loss: retrospect and prospect. American Journal of Orthopsychiatry, 52, 664-678.
- —— (1980) Attachment and Loss, Vol. 3: Loss: Sadness and Depression. New York: Basic Books.
- —— (1988) Developmental psychiatry comes of age. American Journal of Psychiatry, 146, 1-10.
- Bretherton, I. & Ainsworth, M. (1974) Responses of one-yearolds to a stranger in a strange situation. In *The Origins of Fear* (eds M. Lewis & L. Rosenblum). New York: Wiley.
- Brown, G. W., Bhrolchain, M. N. & Harris, T. (1975) Social

- class and psychiatric disturbance among women in an urban population. Sociology, 9, 225-254.
- —, Andrews, B., Bifulco, A., et al (1986) Social support, selfesteem and depression. Psychological Medicine, 16, 813-831. Caplan, G. (1974) Support Systems and Community Mental Health. New York: Behavioral Publications.
- HARLOW, H. F. (1958) The nature of love. American Psychologist, 13, 673-685.
- HEARD, D. H. & LAKE, B. (1986) The attachment dynamic in adult life. British Journal of Psychiatry, 149, 430-438.
- HENDERSON, S. (1977) The social network, support and neurosis: the function of attachment in adult life. British Journal of Psychiatry, 131, 185-191.
- —, BYRNE, D. G. & DUNCAN-JONES, P. (1981) Neurosis and the Social Environment. Sydney: Academic Press.
- HINDE, R. (1975) The concept of function. In Function and Evolution in Behavior (eds G. P. Barends, C. Beer & A. Manning). Oxford: Clarendon Press.
- —— (1982) Attachment: some conceptual and biological issues. In *The Place of Attachment in Human Behavior* (eds C. M. Parkes & J. Stevenson-Hinde). New York: Basic Books.
- & SPENCER-BOOTH, Y. (1970) Individual differences in the response of rhesus monkeys to a period of separation from their mothers. *Journal of Child Psychology and Psychiatry*, 11, 159-176.
- LORENZ, K. (1931) Beitrage zur Ethologie sozialer Corviden. Translated (1970) in Studies in Animal and Human Behaviour, vol. I (ed. R. B. Martin). Cambridge, MA: Harvard University Press.
- MAIN, M., KAPLAN, N. & CASSIDY, J. (1985) Security in infancy, childhood and adulthood: a move to the level of representation. In Growing Points in Attachment Theory and Research (eds I. Bretherton & E. Waters). Monograph of the Society for Research, in Child Development, Serial No. 209, 50 (1-2), 66-104.
- ROSNER, B. (1986) Fundamentals of Biostatistics (2nd edn). Boston: Duxbury Press.
- RUTTERO, M. (1981) Attachment and the development of social relationships. Scientific Foundations of Developmental Psychiatry (ed. M. Rutter). Baltimore: University Park Press.
- SROUFE, L. A. & WATERS, E. (1977) Attachment as an organizing construct. Child Development, 48, 1184-1199.
- Troll, L. E. & Smith, J. (1976) Attachment through the life span: some questions about dyadic bonds among adults. *Human Development*, 19, 156-170.
- Weiss, R. S. (1982) Attachment in adult life. The Place of Attachment in Human Behavior (eds C. M. Parkes & J. Stevenson-Hinde). New York: Basic Books.
- West, M., Livesley, J., Reiffer, L., et al (1986) The place of attachment in the life events model of stress and illness. Canadian Journal of Psychiatry, 31, 202-207.
- & SHELDON, A. (1987) Letter to the editor. British Journal of Psychiatry, 150, 408-409.
- *Adrienne E. R. Sheldon, BA, Graduate student, Behavioral Sciences Research Group, Faculty of Medicine, University of Calgary; Malcolm West, PhD, Adjunct Associate Professor, Department of Psychiatry, University of Calgary; Supervisory Psychologist, Department of Psychology, Calgary General Hospital
- *Correspondence: Department of Psychiatry, M7-033, Calgary General Hospital, 641 Centre Ave, NE, Calgary, Alberta T2E OA1, Canada