The Adult Attachment Scale (AAS) (N. Collins and S. Read, 1996) and the Adolescent Relationship Questionnaire (ARQ) (E. Scharfe and K. Bartholomew, 1995) widely used self-assessment measures of attachment behavior. This study investigated the validity of these two measures by administering them concurrently to 117 introductory psychology college students participating in a larger study of the attachment consequences for children of employed and unemployed mothers. The AAS includes three subscales: Depend, Close, and Anxiety. The ARQ contains subscales of: Secure, Fearful, Preoccupied, and Dismissing. Intercorrelations among the seven subscales were calculated. Overall, inspection of the correlation matrix revealed high concurrent validity across several of the subscales. Scores on several were significantly associated, generally in a direction with consistent with predictions. Simultaneously there was evidence of suitable discriminant validity, as subscales within both the AAS and ARQ showed only modest association. There was a significant positive correlation between the ARQ Secure subscale and the AAS Close subscale, and there was a significant positive correlation between the Secure and the AAS Depend subscale. There was a significant negative correlation between Secure and the AAS Anxiety subscale. There were significant strong negative correlations between the ARQ Fearful subscale and the AAS Close and Depend subscales. These and other correlations show that, as predicted, the AAS and the ARQ parallel each other. The Fearful subscale had the strongest intercorrelations among all of the subscales, possibly because it taps a very negative attachment pattern with pervasive effects. (Contains 1 table and 10 references.) (SLD)
Concurrent Validity of the Adult Attachment Scale
and the Adolescent Relationship Questionnaire

Meera Domingo

Catherine Chambliss, Ph.D.

Ursinus College
Attachment Validity

Introduction

The Adult Attachment Scale (Collins & Read, 1996) and the Adolescent Relationship Questionnaire (Scharfe & Bartholomew, 1995) are widely used self assessed measures of attachment behavior. The Adult Attachment Scale (AAS) includes three subscales: Depend, Close and Anxiety. The Adolescent Relationship Questionnaire (ARQ) contains four subscales: Secure, Fearful, Preoccupied, and Dismissing.

The present study investigated the validity of these two measures by administering them concurrently to 117 introductory psychology students at Ursinus College. They were included in a larger survey exploring the attachment consequences for children of employed and nonemployed mothers (Domingo, Keppley & Chambliss, 1997).

The field of adult attachment research is developing with remarkable speed. Attachment theory (Bowlby, 1973) posits that past attachment experiences become crystallized into an internal working model or state of mind that shapes responses to future relationships. Main, Kaplan, and Cassidy (1985) define attachment in terms of “a set of rules for the organization of information relevant to attachment and for obtaining or limiting access to that information”. It is hypothesized that the current mental representation of childhood attachment experiences is related to an individual’s representation of attachment during childhood and to parents’ interactive behavior toward the individual. Attachment style has been linked to the occurrence of psychological disorders in adolescents and adults, as well as to problems in children of those with attachment difficulties (Main, 1990).
Theoretically, the internal working model of attachment may affect personality to some degree (Bowlby, 1973). Attachment experiences may contribute to the feeling that one is loved and valued. This positive self-image directs one's behavior in interactions with others, establishing supportive relationships that reinforce the positive self view. Securely attached children have favorable images of themselves, and therefore differ from insecurely attached children in social ease and competence. Although adult attachment problems should not be considered a necessary or sufficient condition for the development of psychological disorders, Bowlby assumed that environmentally determined disorders might at least partly be related to insecure attachment representations.

There is an important distinction between attachment experiences (primarily with parents) that have probably taken place in the past, and the way in which these experiences are represented (the current state of mind with respect to attachment). There is some controversy about how to best measure these aspects of attachment. The Adult Attachment Interview, or AAI (Main, Kaplan & Cassidy, 1985) coding system provides measures of both aspects. According to De Haas et al. (1994), AAI scales reflecting the form rather than the content of the transcribed interview do not converge with self-reported memories of parental behavior (in one's own childhood). Thus, self-reported instruments seem to yield little or no information about the state-of-mind dimension of attachment. The internal working model of attachment might indeed reflect deeper representations of attachment. This notion was suggested by Bretherton (1990), who
distinguished between information that is accessible, and information that is difficult to access consciously. The easily accessible information is assumed to be verbally transmitted by parents, while the less accessible information is assumed to be based on the original experience. This second kind of information may not become accessible unless a clinically oriented in-depth interview such as the AAI is conducted.

The attachment style questionnaire is an instrument that is administered and coded very easily. Respondents are supposed to choose one out of three or four descriptions of attachment styles that fits their ideas best. Classifications and ratings might measure only the easily and directly accessible perception of the respondent, rather than the more influential and psychologically meaningful deeper substrate.

The controversy over how to measure attachment best continues to interest many researchers. Less direct and open measures of attachment style (an AAI-like interview) offer some advantages, while direct questionnaires offer others. De Haas et al. (1990) found that the AAI enables researchers of attachment to focus either on a specific aspect of personality, or on the state of mind with respect to attachment (working models), whichever seems most appropriate. Different states of mind seem to predict both differences in sensitive responsiveness and the quality of the attachment relationship of subjects and their own children. Their study showed that attachment representations are not necessarily associated with attachment style or with temperament, and they concluded that in research on attachment representations, the current available self-report questionnaires should not be the first choice.
Despite these concerns, most attachment research continues to make use of these readily administered questionnaires. The AAS and the ARQ are commonly used instruments. They assess attachment in different but conceptually related ways. Both are based on the assumption that attachment style is a relatively stable personality feature, influenced by early relational experiences. Because internal working models of attachment become more refined over the years (Bowlby, 1969), one might expect the adult attachment representations to be relatively stable across time. The test-retest reliability of the Adult Attachment Interview was tested by Benoit and Parker (1994). They showed that 90% of their sample of 84 Canadian mothers received the same AAI classification across a 1.5-year period.

The empirically-derived three AAS scales include an Anxiety subscale that closely parallels the Fearful subscale of the ARQ, and might be expected to be significantly negatively correlated with the ARQ Secure subscale. The AAS Depend subscale is conceptually somewhat similar to the ARQ Secure subscale, so a positive correlation is expected here. The AAS Close subscale measures adaptive capacity for intimacy, and is expected to correlate negatively with the ARQ Dismissing subscale. No AAS subscale directly parallels the ARQ Preoccupied subscale, but a modest association between this scale and the AAS Close scale was expected.

Method

Measures

The Adult Attachment Scale (AAS) was developed by Collins and Read (1996). This scale measures self-assessment of relationship-building skills and self-described
style in forming close attachments. The AAS consists of 18 items scored on a five point scale ranging from "not at all characteristic of me" (1) to "very characteristic of me" (5). Factor analysis identified three subscales of six items each. The Depend subscale measures the extent to which participants trust others and rely on them to be available if needed ("I am comfortable depending on others"). The Close subscale assesses comfort with intimacy and emotional closeness ("I find it relatively easy to get close to people"). The third subscale, Anxiety, measures fear of being abandoned in relationships ("I often wonder whether romantic partners really care about me"). The test-retest correlations for the Close, Depend, and Anxiety subscales were .68, .71, and .52 respectively (Collins & Read, 1996).

The Adolescent Relationship Questionnaire (ARQ) was developed by Scharfe and Bartholomew (1995). It consists of 17 items in which a five point Likert Scale is used to show the degree to which a statement describes the subject's feelings. The items range from (1) "not at characteristic of me" to (5) "very characteristic of me". The questionnaire yields scores on four subscales: Secure, Fearful, Preoccupied, and Dismissing. These subscales describe aspects of subjects' relationships and patterns of attachment. The Secure subscale assesses comfort with being close to and depending on others ("I find it easy to get emotionally close to others"). The Fearful subscale measures anxiety over being hurt by others in relationships ("I find it difficult to trust others completely"). The Preoccupied subscale measures the extent to which participants worry that people do not really care about them ("I find that people don't want to get as close as I would like"). The Dismissing subscale measures lack of desire for emotional closeness with others ("I
prefer not to depend on people”). Scharfe and Bartholomew (1995) report good reliability for the instrument (Cronbach alpha \( r = .60 \)).

Results

Intercorrelations among the seven subscales were calculated (see Table 1). Overall, inspection of the correlation matrix revealed high concurrent validity across several of the subscales. Scores on several of the AAS and ARQ subscales were significantly associated, generally in a direction consistent with predictions. Simultaneously, there was evidence of suitable discriminant validity, as subscales within both the AAS (mean \( r = .42 \)) and ARQ (mean \( r = .36 \)) only showed modest association.

There was a significant positive correlation between the ARQ Secure subscale and the AAS Close subscale (\( r = .48 \)). There was also a significant positive correlation between Secure and the AAS Depend subscale (\( r = .45 \)). There was a significant negative correlation between Secure and the AAS Anxiety subscale (\( r = -.48 \)).

There were significant strong negative correlations between the ARQ Fearful subscale and the AAS Close (\( r = -.63 \)) and Depend (\( r = -.65 \)) subscales. The significant correlation between Fearful and Anxiety was only a moderately positive one (\( r = .45 \)).

The correlation between the ARQ Preoccupied subscale and the AAS Close subscale was not significant. The correlation between the ARQ Preoccupied subscale and the AAS Depend subscale was a significant negative one (\( r = -.24 \)). Preoccupied had a significant strong positive correlation to the AAS Anxiety subscale (\( r = .53 \)).

The ARQ Dismissing subscale and the AAS Close subscale had a significant negative correlation (\( r = -.30 \)). The correlation to the AAS Depend subscale was also a
significant negative one ($r=-.50$). The correlation between Dismissing and the AAS Anxiety subscale was a weak positive one ($r=.28$).

Discussion

As predicted, the ARQ Fearful subscale and the AAS Anxiety subscale were found to parallel each other. The Fearful subscale was also found to be measuring the opposite of what the AAS Close and Depend subscales are measuring. The ARQ Secure subscale was found to be similar to the AAS Close and Depend subscales, as was expected. The ARQ Dismissing subscale was found to measure the opposite of what the AAS Close and Depend subscales measured. It also measured something different from the AAS Anxiety subscale. The ARQ Preoccupied subscale, which did not parallel any of the AAS subscales, was found to be somewhat similar to the AAS Anxiety subscale. Both the AAS and the ARQ showed discriminant validity. However, the ARQ showed more modest $r$'s among its four subscales, which makes it the better scale for measuring discrete aspects of attachment.

The Fearful subscale had the strongest intercorrelations among all of the subscales. Possibly, this is because the Fearful scale taps a very negative attachment pattern with pervasive effects. Those high on the Fearful scale may be so anxious that they become avoidant. High fear may prevent someone from being close to others and inhibit their ability to depend upon others. This attachment pattern may be especially important to examine because of its positive association with other types of attachment difficulty. Since the Fearful scale was significantly correlated with so many of the other scales, it might be useful to distinguish it conceptually from the other variables. The
Fearful scale may be measuring an underlying motivational factor, whereas the other scales may more directly assess the behavioral consequences of a subject’s expectations of and attitudes toward other people.
References


Table 1  

Correlations Among Attachment Scales

<table>
<thead>
<tr>
<th></th>
<th>CLOSE</th>
<th>DEPEND</th>
<th>ANXIETY</th>
<th>SECURE</th>
<th>FEARFUL</th>
<th>PREOCCPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPEND</td>
<td></td>
<td>.57**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANXIETY</td>
<td>-26*</td>
<td></td>
<td>-.44**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SECURE</td>
<td>.48**</td>
<td>.45**</td>
<td>-.48**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FEARFUL</td>
<td>-.63**</td>
<td>-.65**</td>
<td>.45**</td>
<td>-.55**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PREOCCPD</td>
<td>.05</td>
<td>-.24*</td>
<td>.53**</td>
<td>-.36**</td>
<td>.30**</td>
<td></td>
</tr>
<tr>
<td>DISMISS</td>
<td>-.30**</td>
<td>-.50**</td>
<td>.28*</td>
<td>-.30**</td>
<td>.43**</td>
<td>.23*</td>
</tr>
</tbody>
</table>

* p < .01  
** p < .001  
N=117
I. DOCUMENT IDENTIFICATION:

Title: Concurrent Validity of the Adult Attachment Scale and the Adolescent Relationship Questionnaire

Author(s): Dominigo M. & Chambless, C.

Corporate Source: Ursinus College

Publication Date: 1998

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

[ ] For Level 1 Release:
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) and paper copy.

[ ] For Level 2 Release:
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but not in paper copy.

The sample sticker shown below will be affixed to all Level 1 documents.

The sample sticker shown below will be affixed to all Level 2 documents.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: [Signature]

Printed Name/Position/Title: Catharine Chambless, Ph.D., Chair, Psychology

Organization/Address: Dept. of Psychology, Ursinus College, Collegeville, PA 19426

Telephone: (610) 499-3000

E-Mail Address: cchambless@acad.ursinus.edu

Fax: (610) 499-0627

Date: 3/5/97
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1301 Piccard Drive, Suite 100
Rockville, Maryland 20850-4305

Telephone: 301-258-5500
FAX: 301-948-3695
Toll Free: 800-799-3742
e-mail: ericfac@inet.ed.gov