ABSTRACT
        A sample of college students (N=170) was used to
replicate and extend recent investigations that had conceptualized
adults' close relationships within an early attachment framework.
Analyses were conducted to support the validity of Hazan and Shaver's
(1987) attachment measures, which were designed to assess the three
major styles of attachment: secure, anxious/ambivalent, and
anxious/avoidant. The Single-Item, Multi-Item, and Mental Model
attachment measures were also used to test the association between
young adult attachment and psychosocial adjustment. Results showed
that using a self-classification measure appears to be a valid method
of assessing young adult attachment. Furthermore, findings revealed a
strong relation between mental models and attachment style,
demonstrating construct validity for this assessment of internal
working models. Finally, attachment characteristics were found to be
strongly related to psychosocial adjustment. The secure group had
more positive mental models and were better adjusted overall. Few
differences emerged between the anxious/ambivalent and
anxious/avoidant groups. This result is consistent with findings from
infant attachment studies. (Four data tables and references are
included.) (Author/ABL)

ASSESSING ATTACHMENT IN YOUNG ADULTHOOD: A VALIDATIONAL STUDY

Lizbeth A. Moses, M.A.
David Pellegrini, Ph.D.
Karen T. Cammuso, Ph.D.
Clifford I. Notarius, Ph.D.

Marriage and Family Studies Group
The Catholic University of America

ABSTRACT

A sample of 170 college students was used to replicate and extend recent investigations which had conceptualized adults' close relationships within an early attachment framework (Hazan & Shaver, 1987; Kobak & Sceery, 1988). Analyses were conducted to support the validity of Hazan and Shaver's (1987) attachment measures, which were designed to assess the three major styles of attachment--secure, anxious/ ambivalent, and anxious/avoidant. The Single-Item, Multi-Item (MI), and Mental Model (MM) attachment measures (Hazan & Shaver, 1987) also were used to test the association between young adult attachment and psychosocial adjustment. Results showed that using a self-classification measure appears to be a valid method to assess young adult attachment. Furthermore, findings revealed a strong relation between mental models and attachment style, demonstrating construct validity for this assessment of internal working models. Finally, attachment characteristics were found to be strongly related to psychosocial adjustment.

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AIMS AND HYPOTHESES

Aims:

1.   To assess self-classification of attachment in a sample of college students.

Hypothesis: Based on prior findings (e.g., Hazan & Shaver, 1987) we expected about 60% of our sample to classify themselves as secure and the remainder to split evenly between the two insecure groups (anxious/ ambivalent and anxious/avoidant).

2.   To validate Hazan and Shaver's (1987) Multi-Item (MI) assessment of attachment and their measure of Mental Models (MM).

Hypothesis: We expected to obtain three factors for the MI and MM measures which would correspond to the three major styles of attachment. We also expected to find a high correlation between the MI and MM questionnaires.

3.   To explore the association between attachment characteristics and psychosocial adjustment.

Hypothesis: Given that attachment style has consistently been linked to psychosocial adjustment in childhood (e.g., Sroufe, 1983) and adolescence (Kobak & Sceery, 1988) we expected the following: (a) the MI and MM measures would have high correlations with psychosocial adjustment measures, and (b) the group self-classified as secure on the single-item measure would show higher overall psychosocial adjustment than either of the two groups self-classified as insecure on the single-item measure.

SUBJECTS

Total N = 170 COLLEGE STUDENTS
124 FEMALES / 46 MALES

(120 Freshmen/27 Sophomores/10 Juniors/13 Seniors)

MEASURES

ATTACHMENT

*   <u>Single-Item Adult Attachment Measure</u> (Hazan & Shaver, 1987) describes terms relevant to intimate relationships and is an adaptation of findings (Ainsworth, Blehar, Waters, & Wall, 1978) pertaining to characteristics of infant attachment.

*   <u>Multi-Item Measure</u> (MI; Hazan & Shaver, 1987) separates the single-item measure into thirteen questions on a 4-point Likert scale ranging from (1) "strongly agree" to (4) "strongly disagree".

*   <u>Mental Models Questionnaire</u> (MM; Hazan & Shaver, 1987) yields dimensional information about views of the "self" and "others" in relationships. The questionnaire used in this study was adapted for college students by substituting beliefs about the self and others in close confiding (romantic <u>or</u> non-romantic) relationships for beliefs about the self and others in romantic relationships.

PSYCHOSOCIAL ADJUSTMENT

*   <u>UCLA Loneliness Scale-Revised</u> (Russell, Peplau, & Cutrona, 1980) assesses satisfaction or loneliness in social relationships.

*   <u>Social Support Questionnaire 6-Item</u> (Sarason, Sarason, Shearin, & Pierce, 1987) measures perceived social support and satisfaction in relationships. This measure is divided into two scales, satisfaction and support.

*   <u>Perceived Social Support from Friends and Family</u> (PSS-Fr and PSS-Fa; Procidano & Heller, 1983) assesses the extent to which friends and family are perceived as social and emotional sources of support.

*   <u>The Texas Social Behavior Inventory</u> (TSBI, Helmreich & Stapp, 1974) measures social competence or self-esteem.

*   <u>The Symptom Checklist-90</u> (SCL-90R, Derogatis, 1977) assesses distress and psychopathology.

*   <u>Marlowe-Crowne Social Desirability Inventory</u> (Crowne & Marlowe, 1964) measures defensiveness and was administered to identify individuals who tend to describe themselves, their family, or friends, in overly positive or desirable ways.

RESULTS

FREQUENCIES OF THE THREE ATTACHMENT STYLES

Over half of the sample (69%) classified themselves as secure, whereas the remainder evenly split itself between the anxious/avoidant (15%) and anxious/ambivalent (16%) categories. These percentages resemble those found by Hazan & Shaver (1987) and are consistent with the summarized proportions (62% secure, 23% anxious/avoidant, and 15% anxious/ ambivalent) in studies of infant-mother attachment (Campos et al., 1983).

VALIDITY OF THE MI AND MM ASSESSMENT

Multi-Item Attachment Measure

A forced-factor principal components analysis followed by equimax rotation yielded two MI factors. The first factor ("COMFORT WITH CLOSENESS") explained 31.6% of the common variance and had a reliability coefficient alpha of 0.76. The second factor ("WORRY ABOUT CLOSENESS AND ABANDONMENT") explained 15.1% of the common variance and had an alpha of 0.74.

Mental Models Measure

A forced-factor principal components analysis followed by equimax rotation yielded two MM factors. The first factor ("DOUBT ABOUT SELF AND OTHER") explained 25.1% of the common variance and had an alpha of 0.64. The second factor ("EASE WITH RELATIONSHIPS; PEOPLE ARE GOOD") explained 12.8% of the common variance and had an alpha of 0.59. See Table 1 for factor loadings.

Analysis of Variance comparing MI and MM factor scores with the single-item classification revealed group differences in the expected direction. See Table 2.

ASSOCIATION BETWEEN ATTACHMENT AND PSYCHOSOCIAL ADJUSTMENT

The MI and MM attachment factors were highly correlated both with each other and with measures of psychosocial adjustment. See Table 3.

The group self-classified as secure on the single-item measure had scores indicating greater psychosocial adjustment than either of the two insecure groups. See Table 4.

CONCLUSIONS

1. The results of this study replicate Hazan & Shaver's (1987) findings, snowing that subjects' self-categorization of attachment style appears to be non-random.

2. The findings generally support the validity of self-report measures of attachment characteristics. However, we expected to generate three factors from the MI and MM measures. Our findings suggest that securely attached individuals differ from those who are anxiously attached, but that attachment characteristics of the anxious/ambivalent group are not necessarily mutually exclusive of those found in the anxious/avoidant attachment group.

3. The robust association between attachment quality and psychosocial measures suggests that attachment characteristics may be important markers of overall adjustment in young adulthood. Results from the present study showed that the secure group had more positive mental models (MM) and were better adjusted overall. Few differences emerged between the anxious/ambivalent and anxious/avoidant groups. The latter result is consistent with findings from infant attachment studies.

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Table 1 FACTOR ANALYSIS

ROTATED FACTOR MATRIX FOR MULTI-ITEM

Factor I. COMFORT WITH CLOSENESS	I	II
4. I am nervous when anyone gets close	-.80	.03
1. I am uncomfortable being close	-.74	.05
5. Others want more intimacy than I do	-.68	-.18
2. I find it easy to trust others	.66	-.16
10. I am comfortable depending on others	.66	-.24
9. I find it relatively easy to get close to others	.56	-.30
13. I don't worry someone will get too close	.51	-.30
11. I am comfortable with others depending on me	.46	.03
3. It is difficult to depend on others	-.45	.39
8. I want psychological closeness	.32	.28

Factor II. WORRY ABOUT CLOSENESS AND ABANDONMENT	I	II
12. I don't worry about being abandoned	.14	-.84
7. I worry that people close to me don't love me	-.26	.76
6. Others are reluctant to get as close as I like	.11	.74

ROTATED FACTOR MATRIX FOR MENTAL MODELS

Factor I. DOUBT ABOUT THE SELF AND OTHERS	I	II
7. People often don't understand or appreciate me	.77	-.04
9. Few are willing as I to commit to a friendship	.67	.00
6. You have to watch dealings with others, ...	.66	-.38
3. I have more self doubts than most people	.53	.42
12. It is rare to find someone to really be close to	.47	-.47
2. Despite good intentions, others are unreliable	.46	-.18
5. People almost never like me	.42	-.17

Factor II. EASE WITH RELATIONSHIPS; PEOPLE ARE GOOD	I	II
1. I am easier to get to know than most people	-.11	.67
4. People are well meaning and good hearted	-.15	.57
11. Easy be close ;I often begin close relationships	-.22	.53
8. I am not more independent than most	.11	.51
10. Some friendships last and don't fade with time	-.12	.38

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Table 2 ANALYSIS OF VARIANCE

MENTAL MODEL AND MULTI-ITEM FACTORS

	SINGLE-ITEM ATTACHMENT GROUP			
	SECURE (N = 117)	ANXIOUS (N = 28)	AVOIDANT (N = 25)	
	$\underline{M}$	$\underline{M}$	$\underline{M}$	F (2,169)
SCALES				
MI				
Factor 1:	4.64 b	3.54 b	0.60 c	34.80 ***
Factor 2:	0.61 a	3.16 b	1.57 c	44.17 ***
MM				
Factor 1:	6.52 a	8.79 b	8.76 b	40.49 ***
Factor 2:	4.90 b	4.72 b	3.81 a	11.17 ***

Note: Within each row, means with different subscripts differ at the .05 level of significance according to a Scheffe test.

* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

MI 1   : Comfort with closeness
MI 2   : Worry about closeness and abandonment
MM 1 : Doubt about self and others
MM 2 : Ease with relationships; People are good

Table 3 PEARSON PRODUCT-MOMENT CORRELATIONS

<u>CORRELATIONS BETWEEN MM AND MI FACTORS AND ADJUSTMENT MEASURES</u>

	MI AND MM FACTORS			
	MI1	MI2	MM1	MM2
MI1	--	--	--	--
MI2	-.27 ***	--	--	--
MM1	-.39 ***	.66 ***	--	--
MM2	-.55 ***	-.16 *	-.31 ***	--
LONELY	-.44 ***	.52 ***	.57 ***	-.39 ***
TSBI	.21 ***	-.35 ***	-.26 ***	-.03
PSS-Fr	.26 ***	-.16 ***	-.30 ***	.24 ***
PSS-fa	.13 *	-.28 ***	-.25 ***	.01
SUPPORT	.19 **	-.26 ***	-.22 **	.26 ***
SATISFY	.24 ***	-.30 ***	-.32 ***	.16 *

* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

MI 1	:	Comfort with closeness
MI 2	:	Worry about closeness and abandonment
MM 1	:	Doubt about self and others
MM 2	:	Ease with relationships; People are good
Lonely	:	UCLA Loneliness Scale
TSBI	:	Texas Social Behavior Inventory - Perceived Social Competence
PSS-FA	:	Perceived Social Support Scale-Family
PSS-Fk	:	Perceived Social Support Scale-Friends
Support	:	Social Support Questionnaire - Available Support
Satisfy	:	Social Support Questionnaire - Satisfaction

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Table 4 ANALYSIS OF VARIANCE

<u>MEASURES OF DISTRESS, SOCIAL SUPPORT, AND PERCEIVED SELF COMPETENCE</u>

	SINGLE-ITEM ATTACHMENT GROUP			
	SECURE (N = 117)	ANXIOUS (N = 28)	AVOIDANT (N = 25)	
	<u>M</u>	<u>M</u>	<u>M</u>	F (2,169)
SCALES				
LONELY	34.30 a	40.00 b	45.80 c	35.27 ***
SCL-90R	62.66 a	89.06 b	94.22 b	5.38 **
TSBI	42.19	38.92	39.35	2.98 *
PSS-FA	15.50	14.50	14.39	.764 NS
PSS-FR	17.15 b	16.92 b	14.67 a	6.25 **
SUPPORT	33.60	30.61	31.96	0.91
SATISFY	33.41 a	33.26 a	31.75 b	3.14 *
DEFENSE	14.90	13.82	14.16	.619 NS

Note: Within each row, means with different subscripts differ at the .05
      level of significance according to a Scheffe test.

* $p \le .05$
** $p \le .01$
*** $p \le .001$

Lonely   : UCLA Loneliness Scale
SCL-90R : Measure of distress and psychopathology
TSBI   : Texas Social Behavior Inventory - Perceived Social Competence
PSS-FA   : Perceived Social Support Scale-Family
PSS-FR   : Perceived Social Support Scale-Friends
Support : Social Support Questionnaire - Available Support
Satisfy   : Social Support Questionnaire - Satisfaction
Defense : Score on the Marlowe Crowne Scale