## **Ouachita Baptist University**

## Scholarly Commons @ Ouachita

**Honors Theses** 

Carl Goodson Honors Program

2000

## Adult Attachment Styles and Their Relation to Personality Characteristics

Mai Friesen Swan Ouachita Baptist University

Follow this and additional works at: https://scholarlycommons.obu.edu/honors\_theses



Part of the Social and Behavioral Sciences Commons

#### **Recommended Citation**

Swan, Mai Friesen, "Adult Attachment Styles and Their Relation to Personality Characteristics" (2000). Honors Theses. 160.

https://scholarlycommons.obu.edu/honors\_theses/160

This Thesis is brought to you for free and open access by the Carl Goodson Honors Program at Scholarly Commons @ Ouachita. It has been accepted for inclusion in Honors Theses by an authorized administrator of Scholarly Commons @ Ouachita. For more information, please contact mortensona@obu.edu.

# SENIOR THESIS APPROVAL

This Honors thesis entitled

"Adult Attachment Styles and Their Relation to Personality Characteristics"

written by

Mai Friesen Swan

and submitted in partial fulfillment of the requirements for completion of the Carl Goodson Honors Program meets the criteria for acceptance and has been approved by the undersigned readers.

## Running head: ADULT ATTACHMENT AND PERSONALITY

Ouachita Baptist University

### CHARACTERISTICS

Adult Attachment Styles and Their Relation to Personality Characteristics

Mai Friesen Swan

#### Abstract

This study investigated the concept that attachment style relates to emotional and social well-being by using measures of locus of control, stress-management, and time perspective. Independent t tests compared the high and low quartiles of scores on secure, avoidant, and anxious-ambivalent subscales of the Adult Attachment Scale (Collins & Read, 1990) on measures of personality. Significant results from the 62 (15 men & 47 women) college students (ages 17 - 24) indicate that secure attachments have high past positive and hardiness scores and low sensation-seeking scores. Both insecure attachment styles have high past negative, high present fatalistic, and low hardiness scores. Anxious-ambivalent attachments have an external locus of control. These results are consistent with previous research, infant behavior patterns, and the differences in self-worth between secure vs. insecure attachment working models.

Adult Attachment Styles and Their Relation to Personality Characteristics John Bowlby, founder of attachment theory, recognized that survival is as important to psychological evolution as it is to Darwin's biological evolution (Svanberg, 1998). Individuals are more likely to survive psychologically if they are able to understand their environment and to communicate their needs. The way individuals understand and react to life's occurrences depends largely on their own previous experiences. During the earliest relationship between infants and caregivers, infants begin to form internal representations of the world and of important people in the world, including themselves. Individuals use these representations, called "working models" (Bowlby, 1973), to organize and understand their experiences. There are still many questions concerning the relationship between attachment style and personality variables, but much of the attachment research suggests that individuals with insecure attachment styles may be at a social or personal disadvantage compared to the securely attached. It is the purpose of this study to investigate the relationship between attachment style and certain adaptive behaviors and attitudes.

Attachment theory examines caregiver-infant relationships and the romantic relationship styles that follow (e.g. Hazan & Shaver, 1987). The kind of working model and attachment style that forms depends largely on the degree of responsiveness the caregiver shows. Mary Ainsworth and her colleagues identified three main attachment styles: secure, avoidant, and anxious-ambivalent, and described the formation of each attachment style due to specific caregiving behaviors (as cited in Colin 1996). Children who receive consistent sensitive care

are likely to form secure attachments. Their internal working models include the beliefs that they deserve care and that people are trustworthy and they expect others to behave in a way that confirms their working model. Children who receive inconsistent care are likely to form an anxious-ambivalent attachment. They come to believe they are unworthy of consistent care and are likely to try to attract attention by behaving in a clingy or angry manner. Children who receive harsh or overstimulating care are likely to form avoidant attachments. They feel unworthy of care and close physical affection and are likely to withdraw from their caregiver and focus on objects instead of their hurt feelings. Understanding the behaviors and beliefs in infants with the attachment styles identified as secure, avoidant, and anxious-ambivalent provides a framework for understanding the relationship styles in adults.

Hazan and Shaver (1987) developed a measure in which participants select one of three paragraphs that summarize the proposed working models of secure, avoidant, and anxious-ambivalent attachment styles as they might manifest themselves in adult romantic relationships. According to this measure, secure adults are willing to be close to their partners, believe that others are dependable, and do not worry about being abandoned by their partners. Avoidant adults do not believe people are trustworthy, are not willing to be emotionally close, and do not express anxiety over their relationships. Anxious-ambivalent individuals desire to be close to their partners, do not believe others are trustworthy, and express anxiety over their relationships. These belief patterns suggest that securely attached individuals are more likely to have positive experiences in romantic

relationships than individuals with either of the two insecure attachment styles: avoidant or anxious-ambivalent.

Research has consistently shown that it is more beneficial to have a secure attachment than to have either of the insecure attachments. Bowlby (1973) suggested that the adaptive working models of securely attached individuals enable them to handle challenges better than insecure individuals. For example, Rice, Cunningham, and Young (1997) linked attachment with self-esteem, assertiveness, academic and emotional well-being, and social competence in adolescence.

Researchers have found attachment to relate to many social, emotional, and relational behaviors at different stages of development, and the present study was expected to support the findings of previous research as well as add new information to the field.

The tendency for an individual to retain the attachment style they had as an infant probably has a lot to do with how the individual views their past, which includes memories of the early experiences that influenced the formation of their attachment style. The participants in the study by Purvis and Matzenbacher (1999) who remembered their mothers as not being warm were more likely to have a preoccupation with relationships, whereas those participants who remember their mothers as being warm were more likely to feel confidence in relationships.

Therefore in the present study it was hypothesized that individuals with insecure attachments would have a negative view of the past and that secure individuals would have a positive view of the past. Because anxious-ambivalent attachments are characterized by focusing on relationships, it was hypothesized that they would

be even more likely to have a negative view of the past than the participants with avoidant attachments. It was therefore also hypothesized that the participants with secure attachment styles would view their past in a positive manner, because it would include the fond memories of a good relationship with their caregiver.

Consistent with the working models of attachment styles mentioned above, Collins and Read (1990) found securely attached individuals to be more likely than avoidant and anxious-ambivalent individuals not only to have positive experiences in romantic relationships, but also to have a greater sense of self-worth and sense of control over the outcome of their lives. It was expected that this study would also find securely attached individuals to feel in control of their lives, whereas it would find the participants with insecure attachments to not feel in control. Because feelings of anxiety are commonly associated with feelings of powerlessness, it was expected that the participants with anxious-ambivalent attachments would feel very little control over their lives.

A strong sense of personal control has been shown to be helpful in managing stress (Nowicki, 1974). In a study by Kobak and Sceery (1988), avoidantly attached individuals reported loneliness and hostility, and anxious-ambivalent individuals reported anxiety and distress. In contrast, secure individuals reported low anxiety and hostility. The difference in distress levels shown in their study indicates that there might be a difference in the way that attachment styles cope during stressful situations in adulthood as well as infancy. Therefore, in the present study it was expected that securely attached individuals would be better equipped to handle stressful situations, and would therefore display a high sense of

hardiness. Conversely, both insecure attachment styles were expected to display a low sense of hardiness, and again the anxious-ambivalent participants were expected to have particularly poor stress-resistance because they experience more distress and anxiety.

One poor reaction to stressful situations may involve risk-taking behavior.

Brennan and Shaver (1995) connected attachment in adolescents with unsafe habits concerning food, alcohol, and sex. Participants with avoidant attachment styles in Brennan and Shaver's study reported consuming alcohol frequently, in large amounts, and in order to reduce tension. Avoidant individuals also were more likely to have casual sexual encounters as a means of avoiding intimacy.

Anxious-ambivalent individuals were more likely to binge and drink to reduce anxiety, and to behave in a clingy or jealous manner in relationships. The securely attached individuals were more likely to behave in moderation. In the present study, it was hypothesized that both insecure attachments would exhibit risk-taking behaviors partly as an attempt to avoid stressful situations and partly because they place less value on their well-being, as indicated in the sense of worthlessness evident in their internal working models.

The purpose of this study is to identify aspects of personality that relate to attachment. The characteristics evaluated in this study include stress-management, risk-taking, personal conceptions of time, and perception of locus of control. In agreement with past research, the general hypothesis of this study is that insecure individuals—those with avoidant and anxious—ambivalent attachment styles—are likely to demonstrate less adaptive behaviors and beliefs in their attempts at stress—

management, time-perspective, and sense of control than securely attached individuals.

#### Method

### Participants and Procedure

The sample consisted of 62 undergraduate students at a private university in rural Arkansas. All of the students were white and between the ages of 17 and 25. Participants were identified by number. The participants completed a sheet of demographic information and a battery of tests for extra credit in a General Psychology class. The tests were randomized to control for order expectation. The participants completed the questionnaire at their own pace, ranging from approximately twenty to forty-five minutes.

#### Measures

Adult Attachment Scale. Collins and Read (1990, Table 2) adapted this eighteen-item scale from Hazan and Shaver's (1987) Attachment Style Measure. It includes statements characteristic of three underlying components of attachment: the willingness to get close to someone, the tendency to worry about relationships, and the belief that people are not dependable. Participants rate each item on a Likert scale of one to five. Participants receive a score in each attachment style: secure, avoidant, and anxious-ambivalent.

Zimbardo Time Perspective Inventory (ZTPI). This measure assesses individual conceptions of time. The five subscales that measure different time perspectives are as follows: (a) "Past Positive," which indicates a nostalgic view of the past; (b) "Past Negative," which indicates focusing on unhappy memories; (c)

"Future," which indicates focusing on long-range goals; (d) "Present Hedonistic," which indicates a desire for instant gratification; and (e) "Present Fatalistic," which indicates a tendency to passively accept the present as more certain that the future.

The participants rate Zimbardo's (1994) fifty-six items on a five-point Likert scale.

Hardiness. Kobasa and Pucetti (1983) developed this twelve item fourpoint scale to measure stress-management. The concept of hardiness is one that
combines a personal sense of control, a sense of commitment or purpose, and a
willingness to accept challenge. The possession of the combination of these
characteristics is proposed to enable a person to cope effectively and actively with
stressful situations.

Locus of Control. Nowicki and Duke (1974) developed this forty-item forced-choice measure to assess the participants' perceptions of control. Low scores indicate an internal locus of control, which means that the participants believe themselves to be in control of the outcome of their lives. High scores indicate an external locus of control, which means the participants believe that an outside force (e.g. fate, God, or other people) dictates what happens to the participant.

Sensation-Seeking. Zuckerman's (1979) thirty-four item forced-choice measure assesses the tendency to seek exciting experiences that may be unusual or dangerous.

#### Results

Each attachment style was evaluated separately, with independent t tests comparing the upper quartile of an attachment styles' personality variable scores

(e.g. the hardiness of the high avoidant participants) with lower quartile of an attachment styles' personality variable scores (e.g. the hardiness of the low avoidant participants). The low quartile of avoidant scores included the participants who scored between 7 and 11 (M = 9.56, SD = 1.41). The high quartile of avoidant scores consisted of the participants who scored between 19 and 25 (M = 20.65, SD = 2.06). The low quartile of anxious-ambivalent scores consisted of the participants who scored between 6 and 11 (M = 8.88, SD = 1.90). The high quartile of anxious-ambivalent scores consisted of the participants who scored between 19 and 27 ( $\underline{M} = 21.94$ ,  $\underline{SD} = 2.38$ ). The low quartile of secure scores included the participants who scored between 12 and 18 ( $\underline{M} = 16.17$ ,  $\underline{SD} =$ 1.95). The high quartile of secure scores was comprised of participants who scored between 24 and 30 ( $\underline{M} = 26.06$ ,  $\underline{SD} = 1.89$ ). Degrees of freedom for the avoidant, anxious-ambivalent, and secure t-tests were, in order, 31, 32, and 33. As Collins and Reed (1990) also found, there were no statistically significant differences in attachment style between the sexes, so they were not separated.

Table 1 shows the differences in personality characteristics between high and low avoidant groups. There was a significant difference between the high and low avoidant groups on the past negative scale, with the high avoidant group having higher past negative scores than the low group, p < .005. The high avoidant group also scored lower on the control subscale of hardiness than the low avoidant group, p = .005. High avoidant participants had significantly higher present fatalistic scores than the low avoidant group, p < .01. The participants with high avoidant scores had lower scores on the commitment scale of hardiness as well as

on the combined hardiness scale, ps < .05. There was a marginally significant difference between high and low avoidant groups on the scale of present hedonism, with highly avoidant participants scoring high, p < .10.

In Table 2 the differences in personality variables between high and low anxious-ambivalent quartiles are shown. The high anxious-ambivalent group reported higher past negative scores than the low anxious-ambivalent group, p < .001. The high anxious-ambivalent group also had significantly lower past positive scores than the low anxious-ambivalent group, p = .001. Participants with high anxious-ambivalent scores reported a more external locus of control than did the participants with low anxious-ambivalent scores, p < .005. The high anxiousambivalent quartile had lower control scores on the hardiness scale than the low quartile, p < .01. The high anxious-ambivalent group had lower overall hardiness than the low anxious-ambivalent group, p < .05. The participants with high anxious-ambivalent scores reported more of a present fatalistic time perspective than did those with low anxious-ambivalent scores, p = .05. Of marginal significance is that the participants with high anxious-ambivalent scores had lower scores on the commitment subscale of hardiness, p < .10.

Table 3 summarizes the differences of the personality characteristics between participants with secure scores in the upper quartile and those with secure scores in the lower quartile. The high group of secure scores had higher control scores on the hardiness scale than the low group of secure scores,  $\mathbf{p} < .005$ . The participants with high secure scores had significantly lower scores on the past negative scale than those with low secure scores,  $\mathbf{p} < .01$ . The high secure group

also had lower sensation-seeking scores and higher overall hardiness scores than the low secure group, p < .05. The high secure quartile was significantly higher on the past positive scale, p < .05. Of marginal significance is that the high secure group had higher scores on the commitment subscales of hardiness than the low secure group, p < .10.

#### Discussion

The present study investigated the relationship between attachment styles and adaptive aspects of personality. Previous research on personal and social implications of attachment style show insecurely attached individuals to be at disadvantage compared to securely attached individuals; the present data indicate similar results.

Participants who scored highly on the secure scale also scored significantly high on past positive orientation, measures of hardiness, hardiness--control, and marginally high on hardiness--commitment. They were significantly low on the past negative and sensation-seeking scales. This demonstrates that secure individuals are likely to have a positive view of their pasts and to exhibit a hardiness that enables them to handle stressful situations in a positive and active manner. They are not likely to focus on unpleasant memories or to engage in risk-taking behaviors.

The people with high scores in avoidant attachment also scored significantly high on measures of past negative time perspective, present fatalistic time perspective, and marginally high on the present hedonistic scale. These people also scored low on the hardiness subscales of control and commitment, as well as

the composite hardiness scale. This suggests that people with an avoidant attachment style are very likely to have a negative view of the past and a fatalistic view of the present, and may also be likely to emphasize enjoying the present.

Avoidant individuals are not likely to possess either of the stress-management tools of feeling in control of the situation or making a commitment to change the situation.

Participants who scored high on the anxious-ambivalent scale also scored significantly high on the measures of past negative time perspective, present fatalistic time perspective, and external locus of control. These participants also scored significantly low on the scales measuring past positive time perspective, overall hardiness, the control subscale of hardiness, and marginally low on the commitment subscale of hardiness. This demonstrates that anxious-ambivalent individuals are likely to focus on the negative aspects of their past, have a fatalistic sense of the present, and feel that something or someone outside them has control over their lives. These participants are not likely to feel a positive or nostalgic view of the past, nor are they likely to employ their sense of control or willingness to make commitments to handle stress.

The results of this study support previous research. They also develop a picture of each of the distinctive attachment styles. In doing so, they offer new perspectives concerning attachment and view of self, sense of control, and stress-management.

The relationship of attachment and views of the past are indicative of the individuals' view of themselves. Scoring high on the past negative scale of the

ZTPI indicates a preoccupation with the unpleasant things done by and to the participant. This corresponds with the feelings of unworthiness in the internal working models of both avoidant and anxious-ambivalent attachments. The fact that participants with anxious-ambivalent attachments scored low on the past positive scale as well as high on the past negative scale may indicate a tendency for this attachment style to dwell more on their past and present relationships than avoidant or secure attachment styles. This relates to the same characteristics that influenced some researchers to give this attachment style the label of "preoccupied with attachment" (e.g. Brennan & Shaver, 1995).

This study also provides data to support Collins and Read's (1990) findings of an association between attachment and a sense of personal control. Securely attached individuals were significantly high and both kinds of insecurely attached individuals were significantly low in both the hardiness—control and present fatalistic scale. This is consistent with the infant attachment research that shows that insecurely attached babies are not able to communicate their needs to the parent and have them met in a timely or consistent manner (as cited in Colin, 1994). Although only the anxious-ambivalent individuals, and not the avoidant individuals, indicate a significantly external locus of control on Nowicki and Duke's scale (1974), this may be because it is the aspect of anxiety in attachment working models that is most strongly associated with a sense of powerlessness (Collins & Read, 1990).

The results that show insecure people having low hardiness and secure people having high hardiness demonstrate the relationship between attachment and

stress-management. Hardiness, a combination of control, commitment, and challenge, enables a person to actively handle stressful situations. It is consistent with infant attachment patterns that insecure individuals do not have such a proactive pattern for stress relief. One of the main characteristics of avoidant attachment in infancy is coping with stressful situations by withdrawing and focusing on something else (as cited in Colin, 1994). Likewise, a distinctive pattern for anxious-ambivalent attachments is to try to get attention in a clingy or angry manner (as cited in Colin, 1994). Neither of these behaviors could be described as proactive or hardy. A distinguishing characteristic of secure infants, however, is the ability to participate in two-way communication with the caregiver, which probably develops into good communication in adulthood (as cited in Colin, 1994). This agrees with the findings that secure individuals have better interpersonal problem-solving skills than insecure individuals (e.g. Davila, Hammen, Burge, Daley, & Paley, 1996; Kobak & Hazan, 1991). Being able to solve problems is a crucial part of dealing with stress efficaciously, and it is evident that secure individuals have an advantage in this area.

The results of the t tests showing secure people with low sensation-seeking and avoidant people with marginally high present hedonism suggest that secure individuals are less likely to put themselves at risk than insecure, especially avoidant, individuals. Secure individuals are likely to value their lives and well-being too much to put themselves at risk, which is consistent with secure people having a strong sense of self-worth. In previous research, the present hedonistic time perspective related significantly to sensation-seeking (Wight, Friesen, &

Frazier, 1999). The avoidant participants' high present hedonistic time perspective indicates a tendency to live for the moment and not worry about the consequences of their actions. This is indicative of a lower sense of self-worth, as their fun today may have a high price tomorrow. The lack of significant results for the anxiousambivalent participants may suggest be that they do not have high sensationseeking or present hedonistic scores, not because they value their safety, but because they exhibit more global anxiety. The lack of high sensation-seeking scores for either of the insecure attachment groups may be influenced by the fact that the subject pool is from a religious university in a rural area of the South where there may be fewer opportunities for, or more perceived disadvantages of, risk-taking than at a school that is more representative of the population.

This study suggests that the attachment working models organize concepts of stress-management, view of self, and perception of control. Our findings were consistent with attachment research in suggesting that the secure working model better enables individuals to take control over life, handle stressful situations, view themselves and others in a positive manner, and stay out of danger. Secure working models are clearly more adaptive in nature than the insecure working models. This underscores the importance of understanding attachment and finding ways for insecurely attached individuals to alter their working models, and to keep from passing their insecure attachments on to their infants. Future research should further investigate the relationship between attachment style, sense of control, and stress-moderation techniques, along with evaluating current and past stressors in the participants' lives. The more we as psychology researchers know about

attachment working models and related characteristics, the more we can help people develop and benefit from secure attachments.

Table 1

The Differences in Personality Variables Based on High or Low Scores on the Avoidant

Subscale of the Adult Attachment Scale

Personality Measures	Avoidant					
	High $(\underline{N} = 17)$		Low ( $\underline{N} = 16$ )		-	
	<u>M</u>	SD	$\underline{\mathbf{M}}$	SD	<u>t</u>	р
Hardiness						
Total Score	4.00	3.30	6.44	2.99	-2.25	.032
Control	1.76	1.56	3.44	1.59	-3.05	.005
Commitment	1.29	1.99	2.81	2.01	-2.18	.037
Challenge	.94	2.28	.19	1.94	1.02	.315
Sensation-seeking	18.06	6.56	15.44	6.99	1.11	.275
Time Perspective						
Future	45.88	9.26	41.94	7.22	1.36	.184
Past Positive	33.41	6.43	35.19	5.83	83	.413
Present Fatalistic	22.12	4.87	17.38	4.47	2.91	.007
Past Negative	35.18	6.71	27.50	5.96	3.47	.002
Present Hedonistic	53.94	5.53	49.63	8.79	1.70	.099
Locus of Control	12.12	3.71	9.75	4.31	1.69	.100

Table 2 The Differences in Personality Variables Based on High or Low Scores on the Secure Subscale of the Adult Attachment Scale

Personality Measures						
	High $(\underline{N} = 17)$		Low ( $\underline{N} = 17$ )		-	
	<u>M</u>	SD	$\underline{\mathbf{M}}$	SD	<u>t</u>	р
Hardiness		-				
Total Score	3.59	3.57	5.88	2.60	-2.14	.040
Control	1.47	1.42	2.94	1.56	-2.88	.007
Commitment	2.00	1.87	3.12	1.90	-1.73	.094
Challenge	.12	2.29	18	1.55	.44	.664
Sensation-seeking	17.35	6.02	15.71	6.47	.77	.448
Time Perspective						
Future	46.41	8.57	46.35	10.56	.02	.986
Past Positive	29.88	5.30	36.94	5.49	-3.81	.001
Present Fatalistic	22.06	3.70	19.47	3.73	2.03	.050
Past Negative	34.65	6.21	26.47	4.18	4.42	.000
Present Hedonistic	51.82	6.53	51.59	7.43	.10	.922
Locus of Control	13.24	4.55	9.00	2.74	3.29	.002

Table 3

The Differences in Personality Variables Based on High or Low Scores on the Secure

Subscale of the Adult Attachment Scale

dienea, C.	Secure				div	but	
	High $(\underline{N} = 17)$		Low $(\underline{N} = 18)$				
Personality Measures	<u>M</u>	SD	$\underline{\mathbf{M}}$	SD	<u>t</u>	р	
Hardiness		ALC: N	Total Victor	Thomas			
Total Score	6.35	2.89	3.78	2.86	2.65	.012	
Control	3.29	1.61	1.78	1.31	3.06	.004	
Commitment	2.71	2.20	1.33	1.81	2.02	.052	
Challenge	.35	1.69	.67	2.03	50	.624	
Sensation-seeking	14.71	6.34	19.44	5.41	-2.38	.023	
Time Perspective							
Future	44.82	8.73	46.28	8.08	51	.612	
Past Positive	36.59	4.77	32.44	6.50	2.14	.040	
Present Fatalistic	19.76	5.41	20.39	3.87	39	.696	
Past Negative	27.29	6.46	33.28	5.49	-2.96	.006	
Present Hedonistic	51.76	8.97	52.22	4.05	20	.846	
Locus of Control	9.94	4.52	11.44	3.99	-1.05	.304	

References

Bowlby, J. (1973). <u>Attachment and loss: Vol. 2. Separation.</u> New York Basic Books.

Brennan, K. A., & Shaver, P. R. (1995). Dimensions of attachment, affect regulation, and romantic relationship functioning. <u>Personality and Social</u>

<u>Psychology Bulletin, 21, 267-283.</u>

Colin, V. L. (1996) Human Attachment. New York: McGraw-Hill.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship qualities in couples. <u>Journal of Personality and Social Psychology</u>, 58, 644-663.

Davila, J., Hammen, C., Burge, D., Daley, S. E., & Paley, B. (1996).

Cognitive/interpersonal correlates of adult interpersonal problem-solving strategies. [CD-ROM] Cognitive Therapy and Research, 20, 465-480. Abstract from SilverPlatter File: PsycLIT Item: 1996-00495-003

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. <u>Journal of Personality and Social Psychology</u>, 52, 511-524.

Kobak, R. R., & Hazan, C. (1991). Attachment in marriage: Effects of security and accuracy of working models. <u>Journal of Personality and Social</u>

<u>Psychology</u>, 60, 861-869.

Kobak, R. R., & Sceery, A. (1988). Attachment in late adolescence:

Working models, affect regulation, and representations of self and others. Child

Development, 59, 135-146.

Kobasa, S. O. C., & Pucetti, M. C. (1983). Personality and social resources in stress resistance. Journal of Personality and Social Psychology, 45, 839-850.

Nowicki, S., & Duke, M. P. (1974). A locus of control scale for noncollege as well as college adults. <u>Journal of Personality Assessment</u>, 38, 136-137.

Purvis, K. B., & Matzenbacher, D. L. (1999, April). <u>Parental Warmth as a Predictor of Adult Attachment Style.</u> Poster session presented at the annual meeting of the Southwestern Psychological Association, Albuquerque, NM.

Rice, K. G., Cunningham, T. J., & Young, M. B. (1997). Attachment to parents, social competence, and emotional well-being: A comparison of black and white late adolescents. Journal of Counseling Psychology, 44, 89-101.

Svanberg, P. O. G. (1998). Attachment, resilience and prevention. <u>Journal</u> of Mental Health, 7, 543-579.

Wight, R., Friesen, M. E., & Frazier, B. (1999, April). What time is it and when does the fun start? Poster session presented at the annual meeting of the Southwestern Psychological Association, Albuquerque, NM.

Zimbardo, P. G. (1994). Whose time it is I think I know: Research on time perspective. Unpublished manuscript, Stanford University.

Zuckerman, M. (1979). <u>Sensation seeking: Beyond the optimal level of arousal.</u> Hillsdale, NJ: Erlbaum.