

ADULT SCALE OF PARENTAL ATTACHMENT-SHORT FORM

Directions: Please answer all of the following questions on the behavior of the person who you most identified as a mother figure while you were a child. This person may have been a step-parent, a grandmother, an aunt, or a woman who was unrelated but a primary caregiver. Choose the person you spent the most time with before age fourteen. Should you feel there was not a person in your life who you considered a mother figure, do not complete this section, but move on to the next section. Answer each question individually and as accurately as possible. Do not worry about consistency across answers; we expect contradictions will exist in some cases.

Survey Item	Scale				
	Never	Seldom	Sometimes	Frequently	Constantly
1. I had my mother with me when I was upset.	1	2	3	4	5
2. I resented my mother spending time away from me.	1	2	3	4	5
3. I was helpless without my mother.	1	2	3	4	5
4. I felt there was something wrong with me because I was distant from my mother.	1	2	3	4	5
5. I put my mother's needs before my own.	1	2	3	4	5
6. I felt abandoned when my mother was away for a few days.	1	2	3	4	5
7. I turned to my mother for many things including comfort and reassurance.	1	2	3	4	5
8. I wish there was less anger in my relationship with my mother.	1	2	3	4	5
9. I enjoyed taking care of my mother.	1	2	3	4	5
10. I got frustrated when my mother left me alone.	1	2	3	4	5
11. I was never certain about what I should do until I talked to my mother.	1	2	3	4	5
12. I often felt angry with my mother without knowing why.	1	2	3	4	5
13. I talked things over with my mother.	1	2	3	4	5
14. It was hard for me to get on with my work if my mother had a problem.	1	2	3	4	5
15. I felt it was best to depend on my mother.	1	2	3	4	5
16. I had a terrible fear that my relationship with my mother would end.	1	2	3	4	5
17. It made me feel important to be able to do things for my mother.	1	2	3	4	5
18. I needed my mother to take care of me.	1	2	3	4	5
19. I wanted to get close to my mother, but I kept pulling back.	1	2	3	4	5
20. I usually discussed my problems and concerns with my mother.	1	2	3	4	5

The Adult Scale of Parental Attachment was created by Snow, Sullivan, Martin, and Helm (2005), and later revised by Michael and Snow (2014) into a short form.

ADULT SCALE OF PARENTAL ATTACHMENT-SHORT FORM

Directions: Please answer all of the following questions on the behavior of the person who you most identified as a father figure while you were a child. This person may have been a step-parent, a grandfather, an uncle, or a man who was unrelated but a primary caregiver. Choose the person you spent the most time with before age fourteen. Should you feel there was not a person in your life who you considered a father figure, do not complete this section. Answer each question individually and as accurately as possible. Do not worry about consistency across answers; we expect contradictions will exist in some cases.

Survey Item	Scale				
	Never	Seldom	Sometimes	Frequently	Constantly
21. I turned to my father for many things including comfort and reassurance.	1	2	3	4	5
22. I felt abandoned when my father was away for a few days.	1	2	3	4	5
23. I put my father's needs before my own.	1	2	3	4	5
24. I worried my father would let me down.	1	2	3	4	5
25. I often felt too dependent on my father.	1	2	3	4	5
26. I resented my father spending time away from me.	1	2	3	4	5
27. It was easy for me to be affectionate with my father.	1	2	3	4	5
28. I wish there was less anger in my relationship with my father.	1	2	3	4	5
29. I sacrificed my own needs for the benefit of my father.	1	2	3	4	5
30. I felt it was best to depend on my father.	1	2	3	4	5
31. I got frustrated when my father left me alone.	1	2	3	4	5
32. It was hard for me to get on with my work if my father had a problem.	1	2	3	4	5
33. I talked things over with my father.	1	2	3	4	5
34. I often felt angry with my father without knowing why.	1	2	3	4	5
35. I needed my father to take care of me.	1	2	3	4	5
36. I had a terrible fear that my relationship with my father would end.	1	2	3	4	5
37. I usually discussed my problems and concerns with my father.	1	2	3	4	5
38. I enjoyed taking care of my father.	1	2	3	4	5
39. I felt there was something wrong with me because I was distant from my father.	1	2	3	4	5
40. I was never certain about what I should do until I talked to my father.	1	2	3	4	5

The Adult Scale of Parental Attachment was created by Snow, Sullivan, Martin, and Helm (2005), and later revised by Michael and Snow (2014) into a short form.

ADULT SCALE OF PARENTAL ATTACHMENT-SHORT FORM

Technical Guide

The Adult Scale of Parental Attachment–Short Form (ASPA-SF) is an instrument to obtain information concerning an adult's perception of patterns of relating to both mother and father figures. Patterns of relating can help determine a person's attachment style. Attachment styles influence an individual's relationship with others throughout life and particularly influence the parent-child relationship. By assessing patterns of relating, an individual becomes aware of how they may relate to others.

Persons experiencing safe patterns of relating to parents will feel secure in relationships; whereas those who have primarily related in a dependent or parentified pattern may experience problems in feeling securely attached to those around them. The dependent or parentified patterns may influence the person to feel insecure and anxious in relationships. For those who experienced fearful or distant patterns of relating with parents, relationships may be difficult. There may be a feeling of insecurity and a need to avoid close relationships with a partner or children.

The scoring of the ASPA-SF includes a pattern of relating to both mother and father. The mean score of the ASPA-SF is located at "50" and plus or minus 10 points indicates 1 standard deviation. The graph created from scoring will assist in understanding the patterns of relating. It is important to consider the patterns of relating to both parents. The ASPA-SF is meant as a guide to perceptions of childhood relationships and should only be used to help the person understand experiences of relationships.

Below are definitions of the different patterns of relating. The total score for the ASPA-SF may indicate either a secure or insecure attachment with measures over (+)(-) 1 standard deviation indicating a tendency toward an insecure attachment. However, individuals develop and change throughout the lifespan, and patterns of relating in childhood may have changed through other experiences.

PATTERNS OF RELATING

M = Mother

F = Father

Safe (MS & FS) – This pattern of relating provided comfort and security. The child may have experienced confidence in parent's availability and support.

Dependent (MD & FD) - This pattern of relating indicates a need for the parent to always be available. The child may have experienced helplessness and uncertainty when the parent was not available.

Parentified (MP & FP) - This pattern of relating indicates feeling responsible for meeting the parent's needs. The child may have experienced feelings of importance and enjoyed being helpful.

Fearful (MF & FF) – This pattern of relating indicates a fear of abandonment and a belief that the parent would not be available for support. The child may have experienced anger toward parent or frustration with the parent.

Distant (MA & FA) – This pattern of relating indicates disappointment in the parent's support and availability. The child may have experienced a need to distance from the parent and may have experienced anger toward the parent.

Scale: 50 = Mean of Sample, (60)(40) = 1 standard deviation, (70)(30) 2 standard deviation, etc.

Means were established using a sample of 1,075 participants from different genders, races, ages, and educational backgrounds.

High scores on any of the patterns of relating may indicate attachment issues and influence an individual's experiences in relationship with others and parenting style.

TO SCORE:

1. Place number for each individual item on the scoring sheet for both mother and father. Total each pattern of relating and overall total.
2. Transfer total for each pattern of relating and overall total to profile sheet. Circle the number indicating the score for each pattern of relating. Draw line graph connecting score to view overall profile.

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Scoring Mother

Item	MS-Safe	MD-Dependent	MP-Parentified	MF-Fearful	MA-Distant
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
Total					

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Scoring Father

Item	FS-Safe	FD-Dependent	FP-Parentified	FF-Fearful	FA-Distant
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
Total					

ADULT SCALE OF PARENTAL ATTACHMENT-SHORT FORM

Technical Guide

PROFILE

Scoring Directions: Using scoring sheet, circle score for each pattern of relating and then draw a graph to view overall profile.

80				14	16			18	19	16	20
79											
78											
77											
76											
75		19	20	12	14			16	18	14	18
74											
73											
72											
71											
70	20	17	18	11	13			20	15	16	13
69											
68											
67											
66											
65	19	15	16	10	12			18	13	14	12
64											
63											
62											
61											
60	18	13	15	8	10			16	12	13	10
59											
58											
57											
56											
55	17	12	13	7	8			14	11	12	8
54											
53											
52											
51											
50	15	11	12	6	7			12	9	10	7
49											
48											
47											
46											
45	13	9	11	5	6			10	7	8	6
44											
43											
42											
41											
40	12	8	9	4	4			8	6	7	4
39											
38											
37											
36											
35	10	6	8					6	5	5	
34											
33											
32											
31											
30	8	4	6					4	4	4	
29											
28											
27											
26											
25	6		4								
24											
23											
22											
21											
20	4										
	MS	MD	MP	MF	MA			FS	FD	FP	FF
	—	—	—	—	—			—	—	—	—



The Adult Scale of Parental Attachment-Short Form: Psychometric Properties, Factor Analyses, and Validation

Tony Michael¹  • Marilyn Snow²

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Abstract

A 40-item short form version (ASPA-SF) of the Adult Scale of Parental Attachment (ASPA; Snow et al. 2005) was constructed with a focus on instrument item selection, factor structure, and psychometric properties. The ASPA is a self-report measure that assesses individuals' perceptions of patterns of relating based on their relationships with both mother and father figures in childhood. An exploratory factor analysis (EFA), involving archived responses from the original work on developing the ASPA, supported the 5 factors of Safe, Dependent, Parentified, Fearful, and Distant in the ASPA-SF. Further verification of the ASPA-SF was established through confirmatory factor analysis (CFA) and validity was determined in relation to the Parental Bonding Instrument (PBI; Parker et al. in *British Journal of Medical Psychology*, 52, 1–10, 1979) with a separate group of 250 respondents.

Keywords Attachment · Patterns of relating · Self-report · Personality · Internal working model

Introduction

Adult attachment has become a major concentration of research in personality, social, clinical, counseling, and developmental psychology (Wei et al. 2007). According to attachment theorists (Ainsworth et al. 1978; Bowlby 1969, 1973, 1980, 1982, 1988; Main et al. 1985), the interplay between environmental (particularly parental) and hereditary influences in early development produces individual differences in patterns of attachment. Over the last 30 years, various interview protocols and self-report instruments have been created to measure these individual differences in patterns of attachment behavior (Ravitz et al. 2010). One specific

✉ Tony Michael
tmichael@tntech.edu

¹ Department of Counseling and Psychology, Tennessee Technological University, Box 5031, Cookeville, TN 38505, USA

² Department of Leadership and Counselor Education, University of Mississippi, 117 Guyton Hall, University, MS 38677, USA

instrument, the Adult Scale of Parental Attachment (ASPA; Snow et al. 2005), was developed to obtain information concerning an adult's perceptual memory of patterns of relating to mother and father figures in childhood. Due to both the lack of evidence to support the instrument's psychometric properties (i.e., confirmatory factor analysis and concurrent and discriminant validity) and the time associated with completing this 84-item instrument, researchers seem to have been reluctant to utilize the ASPA in empirical studies. For this reason, the purpose of this study was to examine whether an abbreviated version of the ASPA could be developed with special attention provided in regard to instrument item selection, factor structure, and psychometric properties.

Literature Review

Although there are distinct procedures for evaluating and determining attachment styles, all measures distinguish patterns of secure attachment and subtypes of insecure attachment. According to Maunder and Hunter (2009), different methods of measuring attachment style accentuate different attachment phenomena. Ravitz et al. (2010) stated that individuals should consider six important factors when evaluating measures of attachment. First, researchers need to consider whether to utilize a self-report evaluation or a coding of observed data. Second, investigators should contemplate whether they would utilize categorical or dimensional measurement. Third, examiners ought to reflect on the nature of attachment in terms of state versus trait. Fourth, researchers should consider that, although developmental attachment experiences do produce stable conscious attitudes and preferences in adulthood, some interpretations of adult attachment style are exclusive for the circumstances of a specific type of relationship or particular dyad. Fifth, examiners should recognize how named attachment categories or dimensions may overlap and differ. Lastly, Ravitz et al. cited the importance of researchers being aware that none of the measures of adult attachment in current use had been developed for psychosomatic research, which may affect the relevance to that domain of research. This particular context is important for counseling professionals, as attachment has indicated an ability to effect a broad range of biopsychosocial phenomena that includes social functioning, coping, stress response, psychological well-being, health behavior, and morbidity.

Parental Bonding Instrument

In regard to constructs of adult attachment and parental bonding, the Parental Bonding Instrument (PBI; Parker et al. 1979) is one of the most widely used instruments to measure parent-child bonding. The PBI focuses on the "parental contribution to the parent-child bond" (Garbarino 1998, p.32). The PBI asks adult individuals to recollect their parents' behaviors and attitudes from their childhood. Through factor analysis, the PBI measures the two parental styles of overprotection and care, thereby dividing child-rearing styles into the following four categories: "high care-low control", "high care-high control", "low care-low control" and "low care-high control". In terms of assessing parenting styles, the PBI considers high care and low overprotection as most optimal and low care and high overprotection (i.e., "affectionless control") as least optimal. The two scales are inversely correlated as the parental care scale assesses the extent to which a parent was empathic and caring or cold and

indifferent, while the parental overprotection scale appraises the degree to which a parent was intrusive and infantilizing or, in contrast, promoted independence in the individual.

The PBI was designed to measure parental styles as perceived by respondents during their first 16 years. The instrument utilizes a Likert-type scale (ranging from 0 to 3) consisting of 25 items related to father and mother. The scale was originally conceived to measure two factors: care (affection and warmth versus coldness and rejection) and protection (control and intrusion versus encouragement of autonomy). While the initial formulation perceived a two-factor model, psychometric analyses have since yielded discrepant results as to whether the PBI is best represented by a two-factor model—care and overprotection—or a three-factor model—care, overprotection, and autonomy (Murphy et al. 1997). In the three-factor model, researchers suggested the second factor—overprotection—could be split into two other factors (i.e., protection and autonomy).

Development of the Adult Scale of Parental Attachment

Test Conceptualization of the ASPA

In reviewing literature, Snow et al. (2005) found that many of the self-report instruments focused on romantic relationships for evaluating adult attachment styles. The researchers also discovered that few researchers have focused on how memory of parent-child interactions relates to the internal working models and the representational model of an adult. In particular, Snow et al. noticed that a review of attachment instruments indicated a need for a self-report instrument that examined adult attachment by recalling childhood experiences of parental interaction. Furthermore, the researchers determined that self-report instruments rarely consider the role of the father figure in attachment behavior.

To address the need for a self-report instrument that examined patterns of relating and attachment styles to mother and father figures, Snow et al. developed the Adult Scale of Parental Attachment utilizing the general constructs of West and Sheldon-Keller (1994). Thus, the test conceptualization of the ASPA included the purpose of obtaining information concerning the adult's perception of patterns of relating to mother and father figures before the age of 14. Snow et al. anticipated that such an instrument would be useful in determining an individual's patterns of relating to others, and particularly in relationship to parenting.

Test Construction of the ASPA

Snow et al. obtained permission to base the items in the ASPA on the interview questions developed by West and Sheldon-Keller for assessing patterns of attachment. The construction of the ASPA included the creation of 42-items for both mother and father, with Likert-type response choices. The Likert-type response choices included: 1) never, 2) seldom, 3) sometimes, 4) frequently, and 5) constantly. Out of the 84-items, the ASPA was constructed to measure the adult attachment relationship by focusing on the individual's internal working models of his or her specific attachment to both mother and father. Snow et al. stated that the test construction of the ASPA sought to determine the specific patterns of relating and how those patterns formed a profile to assess adult attachment styles. The researchers noted that the construction of the ASPA would serve a beneficial purpose in research as the instrument would be useful in determining a person's patterns of relating to others, and particularly in relationship to parenting.

Test Tryout of the ASPA

After Snow et al.'s (2005) construction of the ASPA, the test tryout of the instrument was needed before item analysis. In order to accomplish a test tryout of the ASPA, a team of counselor education graduate students rated each individual item for clarity. Based on these ratings, Snow et al. collaborated on editorial changes before administering the instrument to 587 undergraduate and graduate students.

Item Analysis of the ASPA Utilizing the responses from the study of 587 participants, Snow et al. (2005) analyzed the responses to establish the psychometric properties through an exploratory factor analysis and multidimensional scaling. The 587 participants were undergraduate and graduate students from two universities in the southeastern United States. The sample included 565 usable responses involving 436 women and 129 men. Participants' ages ranged from 17 to 59 with a mean age of 26.45. In particular, the sample included 436 Caucasians, 106 African-Americans, and 23 "other" racial groups that contributed in the first study.

Exploratory Factor Analysis of the ASPA Snow et al. (2005) factor analyzed items 1–42, which focus on the respondent's relationship with his or her mother figure, separately from items 43–84, which focus on the relationship with his or her father figure. The researchers' initial set of factor analyses examined a four-factor solution—so as to be consistent with the four attachment styles most commonly seen in the literature: Secure, Anxious, Avoidant, and Disorganized. The researchers employed a varimax-normalized rotation with a .40 factor loading value. In this factor solution, the researchers' discovered a factor with items containing Secure attachment along with reverse loading values of items related to Avoidant attachment. To explain the issue of reverse loading values with positive values, the researchers performed a subsequent factor analysis using a five-factor solution with a varimax-normalized rotation with a .40 factor loading value. According to Snow et al., the five-factor solution for items related to mother attachment resulted in a cumulative eigenvalue score of 21.69 and a cumulative percent variance of 51.65. In particular, the five-factor solution for items related to father resulted in a cumulative eigenvalue score of 23.10 and a cumulative percent of variance of 55.01.

Snow et al. (2005) indicated that the resulting five factors—for both mother and father—consisted of the following patterns of relating: Safe, Dependent, Parentified, Fearful, and Distant. The researchers defined and described the subscales as followed:

Safe – The authors referenced this subscale as measuring the extent to which the child felt the relationship provided comfort and security. A child with a safe pattern of relating may have experienced confidence in the parent's availability and support.

Dependent – The researchers regarded this subscale as measuring the extent to which the child felt a need for the parent to be available. A child with a dependent pattern of relating may have experienced helplessness and uncertainty when the parent was not available.

Parentified – The authors noted this subscale as measuring the extent to which the child felt responsible for meeting the parent's needs. A child with a parentified pattern of relating may have experienced feelings of importance and enjoyed being helpful.

Fearful – The investigators cited this subscale as measuring the extent to which the child experienced a fear of abandonment and a belief that the parent would not be available for

support. A child with a fearful pattern of relating may have experienced anger toward the parent or frustration with the parent.

Distant – The authors referenced this subscale as measuring the extent to which the child experienced disappointment in the parent's support and availability. A child with a distant pattern of relating may have experienced a need to distance from the parent and may have experienced anger toward the parent.

Psychometric Properties of the ASPA The Cronbach's alpha, means, and standard deviations for the ASPA are presented in Table 1.

In terms of norms, Snow et al. indicated that female participants' mean score ($M = 37.52$) on Safe for mother exceeded that of male participants ($M = 34.31$), $t(545) = 4.05$, $p < .001$. In addition, the researchers stated that female participants ($M = 10.61$) scored higher than males ($M = 9.68$) on Fearful in relation to mother, $t(556) = 2.62$, $p = .009$. On Dependent for mother, Snow et al. referenced the mean score of female participants ($M = 12.70$) as exceeding that of males ($M = 11.66$), $t(553) = 2.84$, $p = .005$.

Test Revision of the ASPA

No revision of the ASPA has been attempted before this study. For this reason, the purpose of this study was to provide a critical item analysis of the ASPA with the intent of creating a short-form assessment (ASPA-SF). Following Widaman et al.'s (2011) guidelines for creating short forms, the revision sought to maintain the ASPA's reliability, and thus, precision of the instrument.

Method

The methodology of this study was performed in three stages. Before performing the stages, approval from the International Review Board at the University of Mississippi was acquired. The first stage was to construct the ASPA-SF through an exploratory factor analysis on 1075 archived participant responses from the studies of Snow et al. 2005 and Dempster, 2007 which were the basis for creating the original ASPA. After the items were selected for internal consistency reliability, the second stage was to include a test tryout of the ASPA-SF with the

Table 1 ASPA number of items, Cronbach's alpha, means, and standard deviations

Scale	Mother					Father				
	#Items	Cronbach's alpha	Max score	Mean	SD	#Items	Cronbach's alpha	Max score	Mean	SD
Safe	10	.92	45	36.79	7.89	9	.91	45	27.61	9.38
Dependent	5	.74	25	12.46	3.69	4	.65	20	11.08	3.60
Parentified	7	.67	35	18.03	4.45	7	.81	35	16.58	5.24
Fearful	5	.75	30	10.40	3.51	5	.82	25	10.25	4.60
Distant	9	.86	45	15.54	6.07	13	.91	65	16.58	5.24

met the minimum requirement suggested by Tabachnick and Fidell (2007) of a minimum of 200 participants for a factor analysis. While the purpose of the EFAs was to find the one underlying factor model that best fitted the data, the CFA permitted the researchers to enforce the predetermined factor model on the data and see how well the model explained responses to the measure. Therefore, this aspect of the study allowed the researchers to develop a factor model a priori and determine whether the ASPA-SF represented a tool for theory testing.

This stage also provided an understanding of the ASPA-SF's validity. Utilizing the same 250 participants, stage three also examined the concurrent and discriminant validity of the ASPA-SF in relation to the PBI (Parker et al. 1979). Through comparing both the ASPA-SF and PBI instruments, the psychometric properties of the ASPA-SF instrument were examined for validity and additional meaning through a comparison of the two instruments' factor models.

Results

Stage One: Test Construction of the ASPA-SF

A principal axis factoring (PAF) with a promax rotation was employed to analyze the original 84-items on the ASPA with the intention of developing an abbreviated version. Due to the ASPA's evaluation of mother and father caregivers independently, items 1–42 (i.e., pertaining to the mother) and item 43–84 (i.e., evaluating the father) were examined separately. The different factor analyses and rotational methods provided an opportunity to evaluate the items of the ASPA in regard to the different caregiver roles.

Demographics of Participants

Participants were 1075 undergraduate and graduate students from two universities in the southeastern United States who were involved in the creation of the original ASPA instrument. A total of 1050 valid data packets were considered for analysis. The sample included 71% ($n = 743$) women and 29% ($n = 307$) men ranging in age from 17 to 59, with a mean age of 23.43. The racial demographics indicated 79% ($n = 838$) Caucasians, 16% ($n = 165$) African-Americans, and 5% ($n = 47$) listed as "other".

Test Construction of the Mother Portion of the ASPA-SF

The test construction of the mother portion of the ASPA-SF transpired through three analyses. First, the exploratory factor analysis of the mother items of the ASPA was examined. Second, an evaluation of the inter-item correlations of each mother subscale in the ASPA occurred. Lastly, the test construction of the ASPA-SF ensued, as the processes consisted of determining the item selection based on these analyses.

EFA on the Mother Items of the ASPA Maintaining the original ASPA's factor structure, the PAF analysis extracted five factors with eigenvalues greater than 1.0 that accounted for 43.6% of the cumulative percentage. The initial eigenvalues for each of the components were 10.12, 5.41, 2.44, 1.62, and 1.37, respectively. A summary of the PAF is displayed within the pattern matrix that appears in Table 2. The coefficient display format is sorted by size and suppresses small coefficients with an absolute value below .4.

Table 2 PAF with promax rotation pattern matrix on the Mother items of ASPA

Pattern matrix ^{ab}		Factor				
Item#	tem	1	2	3	4	5
14	I talked things over with my mother.	.963				
33	I usually discussed my problems and concerns with my mother.	.912				
13	I turned to my mother for many things including comfort and reassurance.	.776				
12	When I was upset, I was confident my mother would be there to listen to me.	.608				
34	It was easy for me to be affectionate with my mother.	.593				
1	I had my mother with me when I was upset.	.542				
15	Things had to be really bad for me to ask my mother for help.	-.529				
10	I was confident that my mother would try to understand my feelings.	.494				
3	When I was anxious, I desperately needed to be close to my mother.	—				
21	I often felt angry with my mother without knowing why.		.762			
22	My mother was always disappointing me.		.705			
36	I felt there was something wrong with me because I was distant from my mother.		.655			
16	I wish there was less anger in my relationship with my mother.		.605			
31	I wanted to get close to my mother but I kept pulling back.		.558			
20	I got angry at my mother because I thought she could have made more time for me.		.549			
11	I worried that my mother would let me down.		.543			
4	I felt relieved when my mother went away for a few days.		.451			
35	I was so used to doing things on my own that I did not ask my mother.		.432			
19	I got furious when I did not get any comfort from my mother.		.422			
18	My mother seemed to notice me only when I was angry.	—				
26	I expected my mother to take care of her problems.	—				
6	I felt abandoned when my mother was away for a few days.			.868		
5	I resented my mother spending time away from me.			.737		
17	I got frustrated when my mother left me alone.			.735		
7	I had a terrible fear that my relationship with my mother would end.			.521		
8	I was afraid that I would lose my mother's love.			.459		
2	I felt lost when I was upset and my mother was not around.			—		
9	I was confident that my mother would always love me.			—		
40	I needed my mother to take care of me.				.714	
42	I was helpless without my mother.				.707	
30	I felt it was best to depend on my mother.				.607	
41	I was never certain about what I should do until I talked to my mother.				.558	
39	I relied on myself and not my mother to take care of me.		.403		-.516	
37	I often felt too dependent on my mother.				.426	
38	I wish I could be a child again and be taken care of by my mother.				—	
28	I sacrificed my own needs for the benefit of my mother.					.787
23	I put my mother's needs before my own.					.711
25	I enjoyed taking care of my mother.					.560
24	It was hard for me to get on with my work if my mother had a problem.					.526
29	It made me feel important to be able to do things for my mother.					.412
32	I wanted my mother to rely on me.					—
27	I made a fuss over my mother.					—

Extraction Method: Principal Axis Factoring

Rotation Method: Promax with Kaiser Normalization

^a Rotation converged in 7 iterations^b Coefficient display format was set on suppress small coefficients at absolute value below .40

Table 3 40-item ASPA-SF (20 items pertaining to Mother caregivers)

ASPA-SF item#	ASPA item#	ASPA scale	Item
1	1	Safe	I had my mother with me when I was upset.
2	5	Fearful	I resented my mother spending time away from me.
3	42	Dependent	I was helpless without my mother.
4	36	Distant	I felt there was something wrong with me because I was distant from my mother.
5	23	Parentified	I put my mother's needs before my own.
6	6	Fearful	I felt abandoned when my mother was away for a few days.
7	13	Safe	I turned to my mother for many things including comfort and reassurance.
8	16	Distant	I wish there was less anger in my relationship with my mother.
9	25	Parentified	I enjoyed taking care of my mother.
10	17	Fearful	I got frustrated when my mother left me alone.
11	41	Dependent	I was never certain about what I should do until I talked to my mother.
12	21	Distant	I often felt angry with my mother without knowing why.
13	14	Safe	I talked things over with my mother.
14	24	Parentified	It was hard for me to get on with my work if my mother had a problem.
15	30	Dependent	I felt it was best to depend on my mother.
16	7	Fearful	I had a terrible fear that my relationship with my mother would end.
17	29	Parentified	It made me feel important to be able to do things for my mother.
18	40	Dependent	I needed my mother to take care of me.
19	31	Distant	I wanted to get close to my mother, but I kept pulling back.
20	33	Safe	I usually discussed my problems and concerns with my mother.

Item Selections for the Mother Portion of the ASPA-SF After following the item selection procedure outlined previously, a 40-item abbreviated version of the ASPA-SF (i.e., 20-items in regard to mother caregivers) was created. In doing so, the procedure identified 22 items for removal. The mother items selected for retention in the 40-item version of the ASPA-SF are presented in Table 3.

Test Construction of the Father Portion of the ASPA-SF

Following the same protocol as the mother portion, the test construction consisted of an exploratory factor analysis, an evaluation of the inter-item correlations, and the selection of what items to retain. The subsequent subsections evaluate the test construction of the father portion of the ASPA-SF.

EFA on the Father Items of the ASPA Preserving the ASPA's original theoretical factor foundation, a PAF with a promax rotation that accounted for 48.08% of the cumulative percentage was created. The initial eigenvalues for each of the factors were 11.68, 5.62, 2.17, 1.66, and 1.50, respectively. A summary of the pattern matrix for the PAF appears in Table 4. The coefficient display format is sorted by size and suppresses small coefficients with an absolute value below .4.

Item Selections for the Father Portion of the ASPA-SF After following the item selection procedure outlined previously for the mother portion, 22 items in regard to the father were identified

Table 4 PAF with promax rotation pattern matrix on the Father items of the ASPA

Item#	Item	Pattern matrix ^{ab}				
		Factor				
		1	2	3	4	5
63	I expected my father to take care of his problems.	.747				
58	I wish there was less anger in my relationship with my father.	.747				
78	I felt there was something wrong with me because I was distant from my father.	.724				
73	I wanted to get close to my father but I kept pulling back.	.612				
46	I felt relieved when my father went away for a few days.	.606				
64	My father was always disappointing me.	.593				
60	My father seemed to notice me only when I was angry.	.564				
77	I was so used to doing things on my own that I did not ask my father.	.564				
53	I worried that my father would let me down.	.509				
81	I relied on myself and not my father to take care of me.	.508				-.466
57	Things had to be really bad for me to ask my father for help.	.475				
62	I got angry at my father because I thought he could have made more time for me.	.415				
61	I got furious when I did not get any comfort from my father.	.414				
68	I expected my father to take care of his problems.	—				
56	I talked things over with my father.		.983			
55	I turned to my father for many things including comfort and reassurance.		.909			
75	I usually discussed my problems and concerns with my father.		.904			
54	When I was upset, I was confident my father would be there to listen to me.		.736			
52	I was confident that my father would try to understand my feelings.		.604			
43	I had my father with me when I was upset.		.598			
45	When I was anxious, I desperately needed to be close to my father.		.533			
76	It was easy for me to be affectionate with my father.		.530			
51	I was confident that my father would always love me.		—			
44	I felt lost when I was upset and my father was not around.		—			
48	I felt abandoned when my father was away for a few days.			.918		
47	I resented my father spending time away from me.			.849		
59	I got frustrated when my father left me alone.			.719		
49	I had a terrible fear that my relationship with my father would end.			.580		
50	I was afraid that I would lose my father's love.			.427		
70	I sacrificed my own needs for the benefit of my father.				.915	
65	I put my father's needs before my own.				.842	
66	It was hard for me to get on with my work if my father had a problem.				.605	
67	I enjoyed taking care of my father.				.518	
71	It made me feel important to be able to do things for my father.				.417	
74	I wanted my father to rely on me.				—	
69	I made a fuss over my father.				—	
82	I needed my father to take care of me.					.721
72	I felt it was best to depend on my father.					.579
84	I was helpless without my father.					.578
79	I often felt too dependent on my father.					.501
83	I was never certain about what I should do until I talked to my father.					—
80	I wish I could be a child again and be taken care of by my father.					—

Extraction Method: Principal Axis Factoring

Rotation Method: Promax with Kaiser Normalization

^a Rotation converged in 7 iterations^b Coefficient display format was set on suppress small coefficients at absolute value below .40

Table 5 40-item ASPA-SF (20 items pertaining to Father caregivers)

ASPA-SF Item#	ASPA Item#	ASPA scale	Item
21	55	Safe	I turned to my father for many things including comfort and reassurance.
22	48	Fearful	I felt abandoned when my father was away for a few days.
23	65	Parentified	I put my father's needs before my own.
24	53	Distant	I worried my father would let me down.
25	79	Dependent	I often felt too dependent on my father.
26	47	Fearful	I resented my father spending time away from me.
27	76	Safe	It was easy for me to be affectionate with my father.
28	58	Distant	I wish there was less anger in my relationship with my father.
29	70	Parentified	I sacrificed my own needs for the benefit of my father.
30	72	Dependent	I felt it was best to depend on my father.
31	59	Fearful	I got frustrated when my father left me alone.
32	66	Parentified	It was hard for me to get on with my work if my father had a problem.
33	56	Safe	I talked things over with my father.
34	63	Distant	I often felt angry with my father without knowing why.
35	82	Dependent	I needed my father to take care of me.
36	49	Fearful	I had a terrible fear that my relationship with my father would end.
37	75	Safe	I usually discussed my problems and concerns with my father.
38	67	Parentified	I enjoyed taking care of my father.
39	78	Distant	I felt there was something wrong with me because I was distant from my father.
40	83	Dependent	I was never certain about what I should do until I talked to my father.

for removal, thus resulting in 20 items assessing an individual's early childhood experiences with a father caregiver. Items selected for retention in this version are presented in Table 5.

Stage Two: Test Tryout of the ASPA-SF

The test tryout of the ASPA-SF utilized the same 1050 responses from stage one of the test construction. The test tryout of the ASPA-SF provided the initial determination as to whether an abbreviated version could maintain the five-factor structure and the psychometric properties of the original ASPA.

Test Tryout of the Mother Portion of the ASPA-SF

The test tryout results of the 40-item ASPA-SF assessed the mother and father scales separately. The results of the mother portion of the 40-item ASPA-SF extracted five factors with initial eigenvalues greater than 1.0 that accounted for 62.6 of the cumulative percentage. The initial eigenvalues were 5.27, 3.31, 1.64, 1.26, and 1.02, respectively. Table 6 displays the pattern matrix of the PAF with promax rotation matrix of the mother portion in the 40-item ASPA-SF.

Test Tryout of the Father Portion of the ASPA-SF

The test tryout results of the father portion of the 40-item ASPA-SF extracted five factors with initial eigenvalues greater than 1.0 that accounted for 67.15 of the cumulative percentage. The

Table 6 PAF with promax rotation pattern matrix on the Mother portion of the ASPA-SF

Pattern matrix ^{ab}					
	Factor				
	1	2	3	4	5
Var13	1.001				
Var20	.838				
Var7	.715				
Var1	.456				
Var6		.933			
Var2		.747			
Var10		.683			
Var16		.406			
Var4			.734		
Var12			.718		
Var8			.657		
Var19			.536		
Var18				.706	
Var3				.697	
Var11				.597	
Var15				.553	
Var5					.669
Var9					.632
Var14					.572
Var17					.492

Extraction Method: Principal Axis Factoring

Rotation Method: Promax with Kaiser Normalization

^a Rotation converged in 6 iterations

^b Coefficient display format was set on suppress small coefficients at absolute value below .40

initial eigenvalues were 6.14, 3.31, 1.70, 1.23, and 1.03, respectively. Table 7 displays the pattern matrix for the PAF with a promax rotation of the father portion of the 40-item ASPA-SF.

The Cronbach's alpha, mean scores, and standard deviations for the 40-item version (i.e., including both mother and father portions) of the ASPA-SF are presented in Table 8.

The analyses specified acceptable levels of internal consistency reliability (i.e., $\geq .7$) with all of the subscales except for Mother-Parentified (.68) and Father-Dependent (.69) in the test tryout of the ASPA-SF. While these two subscales were just below the internal consistency acceptable levels, the researchers determined there was empirical support to examine the ASPA-SF further with a Confirmatory Factor Analysis.

Stage Three: Confirmatory Factor Analysis and Validity

The third stage consisted of a confirmatory factor analysis and an evaluation of the validity of the 40-item abbreviated version of the ASPA in relation to the PBI. These analyses provided an examination of whether the structural model and constructs in the ASPA-SF were reliable and valid. This data-set was provided from Rayner (2008), who conducted a study using the original ASPA and the PBI. Therefore, this stage included the selected items of the ASPA-SF (i.e., determined within Stage 2) from Rayner's research to provide further evidence of the psychometric properties of the ASPA-SF.

Table 7 PAF with promax rotation pattern matrix on the Father portion of the ASPA-SF

Pattern matrix ^{ab}					
	Factor				
	1	2	3	4	5
Var33	.982				
Var37	.944				
Var21	.830				
Var27	.509				
Var28		.829			
Var34		.780			
Var39		.661			
Var24		.628			
Var22			.922		
Var26			.791		
Var31			.639		
Var36			.413		
Var23				.885	
Var29				.871	
Var32				.610	
Var38				.467	
Var35					.722
Var30					.572
Var25					.543
Var40					.401

Extraction Method: Principal Axis Factoring

Rotation Method: Promax with Kaiser Normalization

^a Rotation converged in 6 iterations^b Coefficient display format was set on suppress small coefficients at absolute value below .40

Demographics of Participants

Participants were 250 undergraduate students enrolled at a university in the southeastern United States. The sample included 53.6% ($n = 134$) female and 46.4% ($n = 116$) male. The mean age was 20.36. The racial demographics were 86% Caucasian ($n = 215$), 7.6% ($n = 19$) African-American, 2.4% ($n = 6$) Asian, 1.6% ($n = 4$) Hispanic, 0.4% Native American ($n = 1$), and 2% ($n = 5$) listed as “other”.

Table 8 ASPA-SF number of items, Cronbach's alpha, means and standard deviations

Mother						Father				
	#Items	Cronbach's alpha	Max score	Mean	SD	#Items	Cronbach's alpha	Max score	Mean	SD
Safe	4	.88	20	15.01	3.80	4	.90	20	11.77	4.58
Dependent	4	.73	20	10.50	3.29	4	.69	20	9.49	3.28
Parentified	4	.68	20	11.97	2.98	4	.81	20	9.52	3.50
Fearful	4	.81	20	6.17	2.72	4	.81	20	6.63	3.24
Distant	4	.77	20	7.13	3.26	4	.83	20	7.86	4.00

ASPA-SF Confirmatory Factor Analysis

To further explore and cross validate the five factor structure of the ASPA-SF, a CFA using AMOS 6.1 was undertaken on all 250 responses from Rayner's (2008) study. Utilizing AMOS, the estimation was set on a discrepancy of maximum likelihood and the computing fit measures were arranged to fit the saturated and independence models. In doing so, AMOS was able to analyze the structural model of the ASPA-SF, which was developed through the

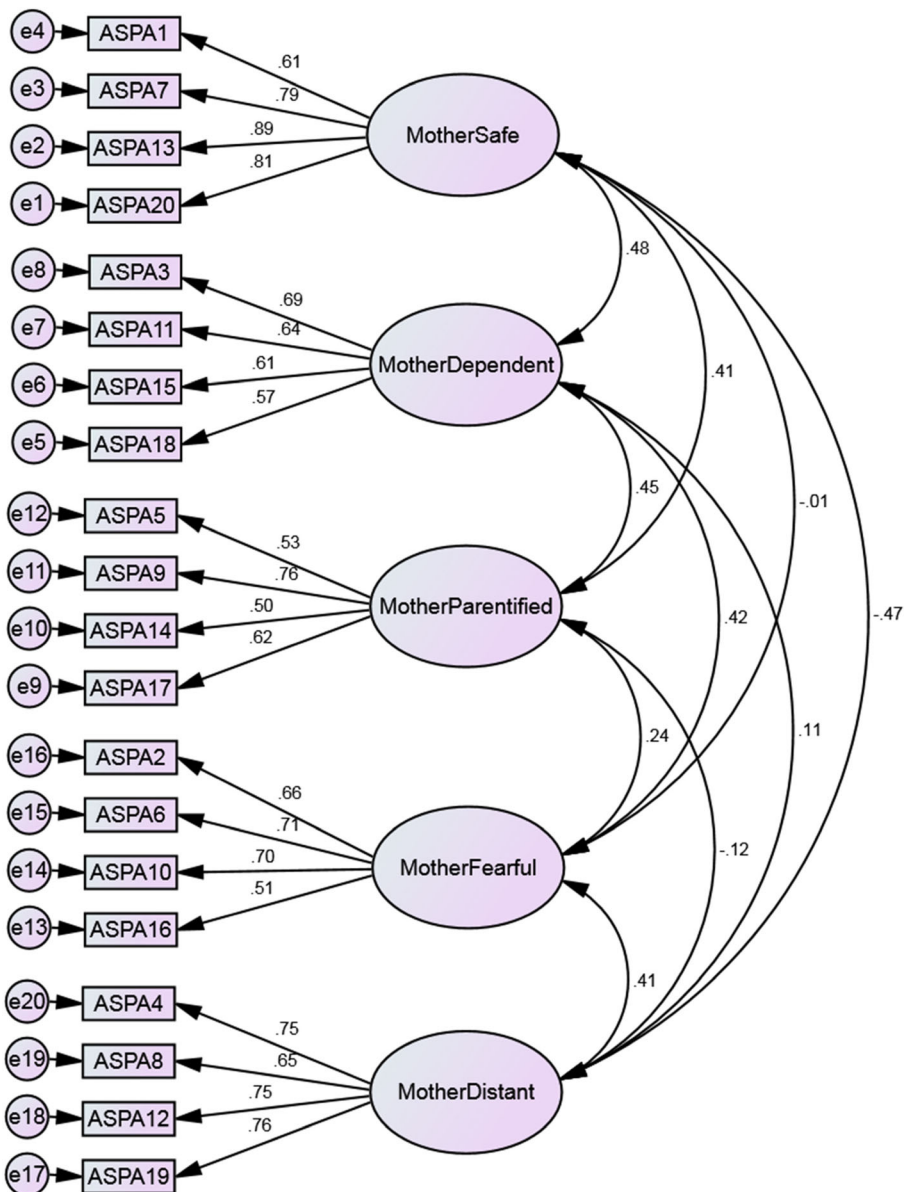


Fig. 1 CFA standardized estimates of the Mother ASPA-SF

test construction and test tryout. The results showed that fit indices for the mother items indicated a fit between the model and the data, χ^2 ($df=160$) = 274.46, CMIN/DF = 1.715, CFI = .93, TLI = .91, RMR = .07, and RMSEA = .05. Figure 1 presents the standardized estimates of the five-factor solution and item loadings of the mother items in the ASPA-SF. These factors were labeled, as on the original ASPA: Factor 1, Mother-Safe; Factor 2, Mother-Dependent; Factor 3, Mother-Parentified, Factor 4, Mother-Fearful; and Factor 5, Mother-Distant.

A confirmatory factor analysis of the father portion of the ASPA-SF indicated a fit between the model and the data, χ^2 ($df=160$) = 395.72, CMIN/DF = 2.47, CFI = .90, TLI = .90, RMR = .10, and RMSEA = .07. Figure 2 presents the standardized estimates of the five-

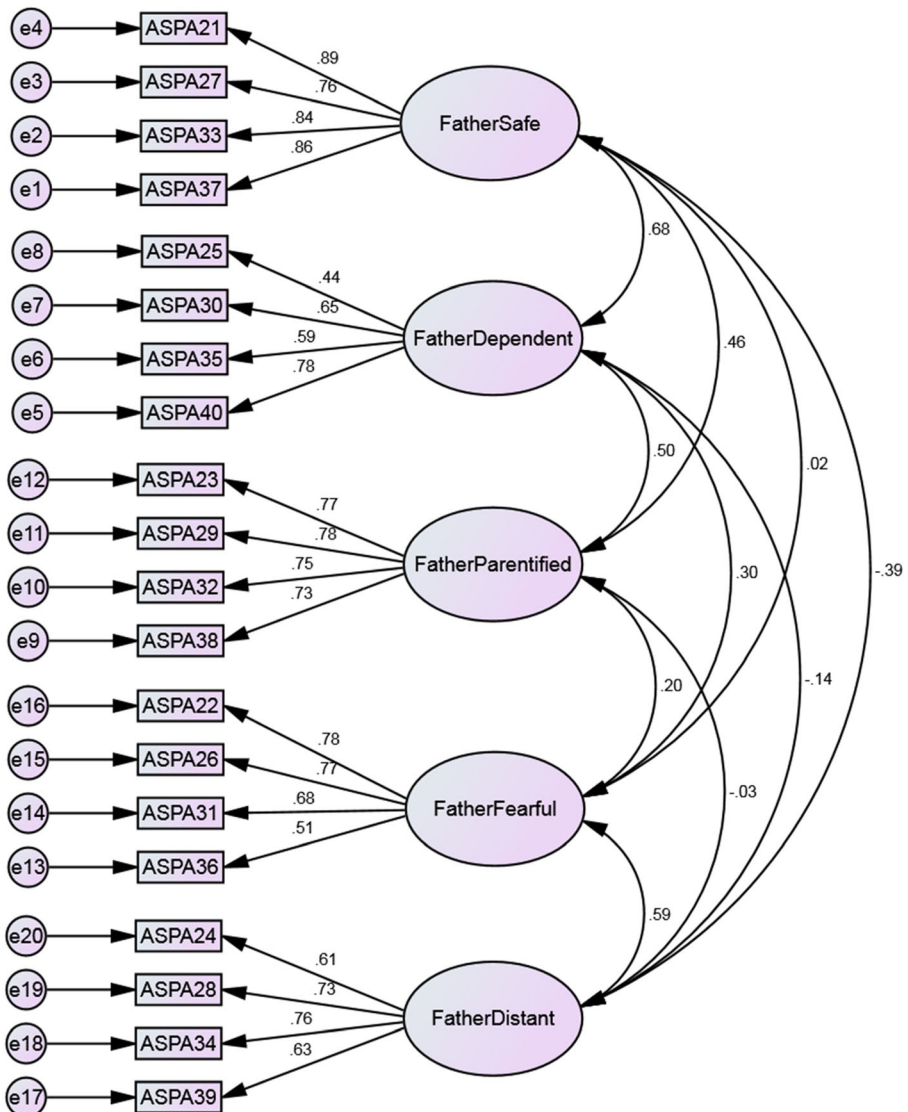


Fig. 2 CFA standardized estimates of the Father ASPA-SF

Table 9 Correlation matrix of ASPA-SF Mother subscales and PBI Mother subscales

		MS	MD	MP	MF	MA
MCAre	Pearson Correlation	.235**	-.046	.080	.049	-.034
	Sig. (2-tailed)	.000	.479	.223	.457	.600
	N	235	235	235	235	235
MOverpro	Pearson Correlation	-.385**	-.036	-.077	.264**	.551**
	Sig. (2-tailed)	.000	.584	.236	.000	.000
	N	236	236	236	236	236

**Correlation significant at the .01 level (2-tailed)

factor solution and item loadings of the father items in the ASPA-SF. Similar to the mother items, these factors were labeled identical to those on the original ASPA: Factor 1, Father-Safe; Factor 2, Father-Dependent; Factor 3, Father-Parentified; Factor 4, Father-Fearful; and Factor 5, Father-Distant.

Validity of the ASPA-SF in Relation to the PBI

The ASPA-SF was analyzed to evaluate the validity of the instrument in relation to the original two-factor PBI model (Parker et al. 1979) and Kendler's (1996) three-factor model of the PBI. The results of the analyses are provided below.

Correlations to the Original PBI Model Table 9 displays the correlations between the mother subscales on the ASPA-SF in relation to the mother subscales on the 2-factor version of the PBI. Similarly, Table 10 presents the correlations between the father subscales on the ASPA-SF in relation to the father subscales on the 2-factor version of the PBI.

While some of the ASPA-SF and original PBI model subscales correlated on both Mother and Father portions, the results suggested that the instruments were measuring conceptually different yet associated constructs. In particular, the results indicated that the largest correlations were between Mother-Distant of the ASPA-SF and Mother-Overprotection of the original PBI model with .55 and Father-Safe of the ASPA-SF and Father-Care of the original PBI model with .48. According to Cohen (1988), an absolute value of r of 0.1 is classified as small, an absolute value of 0.3 is classified as medium and of 0.5 is classified as large. Therefore, these two correlations would suggest a moderate to strong relationship while the other subscales would suggest low to moderate relationships.

Table 10 Correlation matrix of ASPA-SF Father subscales and PBI Father subscales

		FS	FD	FP	FF	FA
FCare	Pearson Correlation	.477**	.253**	.208**	.115	-.155*
	Sig. (2-tailed)	.000	.000	.001	.081	.019
	N	231	231	231	231	231
FOverpro	Pearson Correlation	-.027	.115	.056	.347**	.296**
	Sig. (2-tailed)	.681	.080	.399	.000	.000
	N	232	232	232	232	232

**Correlation significant at the .01 level (2-tailed)

*Correlation significant at the .05 level (2-tailed)

Table 11 Correlation matrix of ASPA-SF Mother subscales and Kendler's PBI Mother subscales

		MS	MD	MP	MF	MA
MWarmth	Pearson Correlation	.468**	.085	.179**	-.036	-.284**
	Sig. (2-tailed)	.000	.194	.006	.585	.000
	N	235	235	235	235	235
MProtectiveness	Pearson Correlation	-.135*	.194**	.110	.168**	.303**
	Sig. (2-tailed)	.038	.003	.091	.010	.000
	N	236	236	236	236	236
MAuthoritarianism	Pearson Correlation	-.414**	-.213**	-.160*	.253**	.527**
	Sig. (2-tailed)	.000	.001	.014	.000	.000
	N	237	237	237	237	237

**Correlation significant at the .01 level (2-tailed)

*Correlation significant at the .05 level (2-tailed)

Correlations to Kendler's PBI Model In terms of Kendler's (1996) PBI model (i.e., 3-factor structure), Table 11 displays the correlations between the mother subscales of the ASPA-SF to that version of the PBI model. Likewise, the father subscales of ASPA-SF were evaluated in relation to Kendler's 3-factor model of the PBI and are presented in Table 12.

These results suggested that the subscales of the ASPA-SF correlated more with the subscales of Kendler's 3 factor model of the PBI than the original PBI model. In particular, the largest correlations were between the subscales of Mother-Safe and Mother-Warmth (.47), Mother-Safe and Mother-Authoritarianism (-.41), Mother-Distant and Mother-Authoritarianism (.53), and Father-Safe and Father-Warmth (.69). Corresponding with Cohen's (1988) classifications, these correlations would indicate a moderate to strong relationships (i.e., positive and negative). Similar to the original PBI model, the findings between the subscales of the ASPA-SF and Kendler's 3 factor model of the PBI suggested that the instruments were measuring conceptually different yet associated constructs.

Discussion

The ASPA (Snow et al. 2005) is a rating scale designed to assess individuals' patterns of relating based on their recalled early childhood experiences with their mother and father

Table 12 Correlation matrix of ASPA-SF Father subscales and Kendler's PBI Father subscales

		FS	FD	FP	FF	FA
FWarmth	Pearson Correlation	.687**	.363**	.340**	-.040	-.361**
	Sig. (2-tailed)	.000	.000	.000	.544	.000
	N	232	232	232	232	232
FProtectiveness	Pearson Correlation	.065	.228**	.203**	.225**	.163*
	Sig. (2-tailed)	.319	.000	.002	.001	.013
	N	234	234	234	234	234
FAuthoritarianism	Pearson Correlation	-.065	-.009	-.088	.283**	.229**
	Sig. (2-tailed)	.318	.891	.179	.000	.000
	N	237	237	237	237	237

**Correlation significant at the .01 level (2-tailed)

*Correlation significant at the .05 level (2-tailed)

caregivers. In several studies (e.g., Dempster 2007; Rayner 2008), the ASPA has demonstrated strong psychometric properties, including reliability and validity. Given increasing demands on clinicians to do more with less time, a need for efficient and effective methods of assessment has emerged. The present study was designed to evaluate whether a shorter form of the ASPA (i.e., ASPA-SF) could be constructed, while still maintaining similar psychometric properties to the original instrument. The following section will discuss the implications of the study, limitations, and future research before ending with a conclusion.

Implications of this Study

The implications of this study involve providing support for the utilization of the ASPA-SF in counseling contexts with undergraduate and graduate students. The study displayed the process of creating an abbreviated version through exploratory factor analyses, a confirmatory factor analysis, and examining the validity of the instrument in comparison with two versions of the PBI. The analyses specified acceptable levels of internal consistency reliability (i.e., $\geq .7$) with all of the subscales except for two (i.e., Mother-Parentified = .68, and Father-Dependent = .69). While this is the case, the two subscales were very close to the threshold and the confirmatory factor analysis also indicated strength in them through having acceptable model fit indices.

In addition, the implications of these results suggest that each factor is a recalled childhood pattern of relating to mother and father figures, and that each subscale could represent a conceptually different pattern for undergraduate and graduate student participants. Furthermore, the examination of the ASPA-SF in relation to the PBI suggests evidence that the ASPA-SF is measuring conceptually different yet associated constructs, as each pattern of relating subscale in the ASPA-SF related with varying significance to the parental bonding subscales in the 2-factor and 3-factor PBI models. Although Authoritarianism may exhibit some similar characteristics to Distant relationships with mother figures, the participants in the study conceptualized two separate variables as indicated by the strength and significance of their correlations. In doing so, this indicates support for the utilization of the ASPA-SF in measuring distinct constructs of adult parental attachment from early childhood experiences.

From a counseling perspective, the implications are noteworthy as the utilization of the ASPA-SF could be worthwhile in helping counselors and clients understand the client's patterns of relating to significant others, children, and in relationships in general. For this purpose, the final version of the ASPA-SF can be obtained from the corresponding author. In a similar method to the original ASPA, a graphing of the scores on each of the scales was created for the ASPA-SF to assist clinicians and clients in being able to identify clients' likely early childhood experiences and patterns of relating to their caregivers. This graphing of the scores provides a profile of an individual's patterns of relating. By analyzing the profile, a Secure versus Insecure attachment style can be determined, along with a predisposition for particular patterns of relating to others in adulthood.

Limitations and Future Research

The following limitations of the study are noted, which confine the implications of the research. The first limitation includes the validity of self-report measures of attachment styles being questioned. While researchers have argued that self-report measures can access unconscious motivators to attachment patterns (Rholes and Simpson 2004; Snow et al. 2005), the position has been debated. Attachment could be construed as a rote (rather than a conscious)

process. This viewpoint emphasizes a mechanical perception of memories rather than a psychological framework for understanding a sense of self and others through an internal working model as referenced by Bowlby (1969). The second limitation of the study includes the restriction by sampling bias. The study's sample involves issues with generalizability, as the participants came from college students in the southeastern United States. Therefore, additional studies from a variety of populations would be needed to strengthen the meaning of the ASPA-SF and to fine-tune the significance of the patterns. These include and are not limited to diverse populations, such as racial, ethnic, age ranges, same sex parents, socio-economic, and clinical demographics.

Building upon the issue of generalizability, another limitation is in regard to contextual and cultural variations. In his early writings, Bowlby (1969) stressed explicitly the contextual nature of attachment, as the philosophy was rooted in evolutionary theory with its fundamental principle that every human characteristic is formed within selection processes and signifies an adaptation to contextual demands. While this is apparent, some researchers argue that Bowlby focused too heavily on the social environment, particularly the mother, since he did not include information about other caregivers in the family and their living conditions (Otto and Keller 2014). The researchers van IJzendoorn and Sagi-Schwartz (2008) referenced the importance of attachment research acknowledging contextual variations conducted with non-Western samples. In doing so, they stated the necessity for a thorough expansion from a dyadic perspective to a network approach in defining and assessing for attachment. Although the ASPA-SF includes the ability to examine the perception of attachment to caregivers who may not be the individual's biological mother or father, future studies should examine the instrument in the context of distinct cultural variations (e.g., cultural models and premises, living conditions, etc.) from this Western sample.

Furthermore, the ASPA-SF was created from archived responses from work on developing the original ASPA. For this reason, future research should evaluate whether the abbreviated version would be altered involving a current population. Although the study evaluated the meaning of the ASPA-SF in relation to the PBI, further studies should also compare the results of the ASPA-SF with other self-report measures of attachment in order to continue to strengthen the psychometric properties of the instrument. Future studies should also attempt to determine differences in responses on the ASPA-SF across the lifespan. In particular, studies should examine the idea of attachment as a perceptual issue and how it may apply to recalled memory. Additional research utilizing the ASPA-SF may contribute to a better understanding of the patterns and how the abbreviated instrument may be used to assist clinicians in various settings.

Like the ASPA, the ASPA-SF also can help further research on attachment with future studies exploring the relationship of parentification and dependency on attachment styles. Exclusive to the ASPA and ASPA-SF is the opportunity for researchers to study attachment to both mother and father figures and the difference in patterns of relating. Hence, more research is needed to determine the influence of caregivers who are not viewed as primary in childhood. Although attachment theory considers the primary caregiver as having the major influence on a person's development of a sense of self and self in regard to others, more research is needed to determine the influence of other caregivers in such development (e.g., step-parents, grandparents, and siblings). Although the ASPA-SF provides the participant the opportunity to select a caregiver outside of their mother and father when completing the form, further studies should examine the influence of these other caregivers in comparison to mothers and fathers. Lastly, studies could also utilize the ASPA-SF in conjunction with parenting styles to determine the intergenerational component of patterns of relating and attachment styles.

Conclusion

Although more research is needed to examine the meaning of the ASPA-SF across populations, it is considered that the results of this study have provided adequate evidence to support the usage of the instrument. Similar to the original ASPA, the ASPA-SF is a unique self-report instrument assessing patterns of relating to caregivers. The ASPA-SF can be used to determine a pattern of relating to both mother and father figures, and in a counseling situation can help the client understand his or her patterns of relating to significant others, to children, and to relationships in general.

In conclusion, there is a need for further studies involving the use the ASPA-SF, as the current study had issues of generalizability. The ASPA-SF shows promise for determining Secure versus Insecure attachment and defining patterns of relating. The strength of the instrument was demonstrated by the exploratory factor analysis, the confirmatory factor analysis, and the comparison with the Parental Bonding Instrument to support future use of the ASPA-SF. Therefore, this study has provided evidence that the ASPA-SF has the ability to be an instrument with value for theory building and theory testing. Most of all, the ASPA-SF appears to offer the opportunity to provide counselors and clients with information on clients' patterns of relating to caregivers from childhood and allow exploration of how those patterns may influence a sense of self and self in relation to others in a more time efficient manner.

Compliance with Ethical Standards

Conflict of Interest The authors declared that they have no conflict of interest.

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