# Attachment Patterns and Separation Anxiety Symptom

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## Abstract

Literature suggests that child attachment and anxiety symptoms are related. One purpose of the present study was to assess this relatedness, whether attachment patterns related differently to separation anxiety symptoms (fear of being alone, and fear of abandonment). Three attachment patterns assessed were secure, avoidant and ambivalent attachment. Findings indicate that ambivalent attachment was most consistently related with higher separation anxiety symptoms. And also, different associations were found between the three patterns of attachment and separation anxiety symptoms. In conclusion, responsive and supportive mothers were more dependable for the child's health than non responsive mothers.

**Keywords:** Attachment, Separation anxiety, Fear of being alone, Fear of abandonment

## 1. Introduction

Separation anxiety is defined as a negative emotion or feeling like loneliness, lose or sadness experienced when children are separated from their attachment figure (Cassidy & Shaver, 1999). The concept also refers to a developmental stage when children experience anxiety due to separation from a primary caregiver usually the mother (Spencer, 2006). Theoretically, separation anxiety in infants is a natural process in development, which helps their survival (Bowlby, 1969). Bowlby (1969) proposed that infants who experience separation from a caregiver demonstrate some behavior characteristics like crying, chasing and calling. The goal of these tantrums is to end separation and permit a return to close proximity with the caregiver. As a result of this intimacy seeking behaviors, infants increase their life chances.

The development of the infant's caregiver directed separation protest, and contact-seeking behavior coincides with the development of the infant's attachment to his or her major caregivers (Cassidy & Shaver, 1999). Therefore, the quality of an infant's attachment to major caregivers does not influence the development of separation anxiety, but it may influence the infant's separation protest behaviors and the child's ability to cope during separations. Insecurely attached infants may have increased or decreased levels of separation protest (Sroufe, Carlson, Levy, & Egeland, 1999).

Bowlby (1973) explained that attachment, separation, and reunion responses are learned as infants develop. The scholar theorized that anxiety and the fear of abandonment are the driving forces behind attachment formation. Insecure attachment can often result when an attachment relationship is threatened, or the attachment figure is not consistently available. Bowlby (1969) proposed that children's level of anxiety might be affected, by the way, in which they are attached to their caregivers. Ambivalently attached children the scholar stated were constantly afraid of being alone and in danger, because their caregivers were unreliable concerning their needs (Bowlby, 1973;

Cassidy & Shaver, 1999; Kerns, Abraham, Schlegelmilch, & Morgan, 2007), whereas avoidant children learn not to expect comfort from their caregivers, thereby internalizing their distress, conflicting feeling, and confusion about their relationship (Greenberg, 1999). Pursuant to inconsistent and conflicting dyadic interaction, ambivalent children were usually overwhelmed by the constant anxiety of getting their needs met (Cassidy & Shaver, 1999).

On the other hand, according to etiological models of anxiety (Chorpita & Barlow, 1998), it is assumed that children with ambivalent attachment develop perceptions of autonomy that is impeded by parental difficulty, in times of separation. These types of children may perceive the environment as uncontrollable, based on their parents' unpredictable behaviors. Parent's dismissive behaviors are causes of avoidant attachment which leads to the development of negative self evaluation among children (Cassidy, 1999; Rohner, 2004).

#### 2. Previous research

Studies indicate that sense of security consisted of a set of expectations about availability and responsiveness to others in times of stress (Bar-Haim, Dan, Eshel, & Sagi-Schwartz, 2007; Bohlin, Hagekull, & Rydell, 2000; Dallaire & Weinraub, 2005). Secure attachment in infancy is considered to be a protective factor for later mental health, while insecure attachment is considered to be a risk factor for the development of psychopathology (Wenar & Kerig, 2000). McCartney, Owen, Booth, Clarke-Stewart and Vandell (2004) contend that secure base provides the child with comfort and basic trust, which enables the child to handle distress, and facilitate engagement behaviors like environmental exploration. Some researchers (Rohner, 2004; Rohner, Khaleque & Cournoyer, 2007) presuppose that insecure attachment (i.e. avoidant and ambivalent attachment) should be viewed as a risk factor for psychopathology.

Although ambivalent attachment has been theoretically implicated in setting the stage for later development of anxiety disorders (Bowlby, 1973; Van-Emmichoven, Van-Ijzendoorn, DeRuiter, & Brosschot, 2003), supportive research data are surprisingly limited (Greenberg, 1999). The study by Bar-Haim et al. (2007) revealed that ambivalent attachment was not related to anxiety levels in a normal sample of children.

## 3. Objective

The main objective of the present study is to discover which symptoms of separation anxiety were associated with avoidant and/or ambivalent attachment.

## 4. Methodology

## 4.1 Sample and procedure

A sample of 120 children (54% boys and 55% girls) and their mothers were randomly selected from public school in Bushehr, a city of Iran to participate in the study. The age of the children as reported by the respondents, ranged from 6 to 8 years. All the children spoke Persian language at home and lived with their parents. The current study was explained to each child. The children were also encouraged to ask any question they may have about the study. All the children were interviewed in a private classroom for the purpose of completing the instruments. The interviewer read the questionnaire items loud and had each response recorded, so the reading ability of the children would not influence the child's capacity to understand the question.

## 4.2 Measures

Attachment Questionnaire-Child version (AQC): The AQC (Muris, Meesters, Merckelbach, & Hulsenbeck, 2000) is an age-downward adaptation of Hazan and Shaver (1987) instrument for measuring attachment patterns. The AQC is based on the assumption that attachment to a considerable extent defines affectionate relationships. This implies that one can infer attachment style from children and adolescents' perception of close relationships. Respondents determine that each item fits their characteristic style in their relationship. The AQC consists of three descriptions that correspond with three basic patterns of attachment: 1-"I find it easy to become close friends with other children. I trust them and I am comfortable depending on them. I do not worry about being abandoned or about another child getting too close friends with me" (Secure attachment), 2- "I am uncomfortable to be close friends with other children. I find it difficult to trust them completely and difficult to depend on them. I get nervous when another child wants to become close friends with me. Friends often come more close to me than I want them to" (Avoidant attachment), 3-"I often find that other children do not want to get as close as I would like them to be. I am often worried that my best friend doesn't really like me and wants to end our friendship. I prefer to do everything together with my best friend; however this desire sometimes scares other children away" (Ambivalent attachment). A previous study by Muris et al. (2001) provided support for the validity of the AQC. In the present study, the scales yielded high internal consistency of .89(secure), .93(avoidant) and .89(ambivalent). The mean alphas for the six sub-scales were 0.90 respectively.

Separation Anxiety Assessment Scale- Child version (SAAS-C) is a 34-item measure designed to assess separation anxiety and related anxiety symptoms (Hahn, Hajinlian, Eisen, Winder, & Pincus, 2003). The frequency of symptoms extends from 1 (never) to 4 (all the time) this indicates the relative frequency of child's problem behaviors. SAAS-C was designed to assess four key dimensions of separation anxiety which include fear of being alone (FBA; e.g., "How often are you afraid to go on a play date at a new friend's home?"), fear of physical illness (FPI; e.g., "How often are you afraid to go to school if you feel sick?") and worry about calamitous events (WCE; e.g., "How often do you worry that bad things will happen to you?") (Eisen & Schaefer, 2005). FBA and FAB are considered the avoidance dimension for separation anxiety. The FPI and WCE are considered the maintenance dimensions of the SAAS-C. For example, children may fear the physical sensation of nausea because of the potential consequence of vomiting. Children with separation anxiety experience frequent and intense somatic complaints (Last, 1991). The Cronbach's alpha of the SAAS\_C for each subscale of FBA, FAB, FPI, and WCE were 0.93, 0.90, 0.83, and 0.82 respectively. Mean alpha for the four sub-scales were 0.86 in the current study.

#### 5. Results

SPSS was used to calculate mean scores, and standard deviations. Correlations were computed to examine the significant association between attachment pattern and separation anxiety symptoms in children. Regression analysis was used to find the significant predictor of child's separation anxiety dimension.

The mean and standard deviation for separation anxiety scale was M=75.6, SD=12.6, secure attachment was M=1.5, SD=.14, avoidant M=1.2, SD=.25 and ambivalent M=1.2, SD=.29. When the final distribution of children attachment classification was determined, it proved that a proportionate number of children fell into the three attachment categories secure (57%), avoidant (15%), and ambivalent (28%). Based on SAAS-C cut point with regard to separation anxiety symptoms, the children were classified into two groups. Results indicated that 35% of the children displayed symptoms of separation anxiety. More so, the findings revealed that 59.5% of the children who showed separation anxiety symptom were ambivalent, 26.5% were avoidant, and 14 % were securely attached.

Pearson Product correlation was conducted to test this relationship. As depicted in Table 1 there was a negative correlation between children separation anxiety and securely attached children (r=-0.66, p<.01), positive correlation with avoidant (r=0.61, p<.01) and ambivalently attached children (r=0.57, p<.01).

The t-test analysis was run to compare children with and without SAD symptom in regard to the three child attachment types depicted in Table 2. The results indicated significant differences between the two groups of children. The children without SAD symptoms represented secure attachment [t (117)=8.65, p<.001], less avoidant attachment [t (117)=5.37, p<.001], and less ambivalent attachment [t (73)=7.49, p<.001]. The calculated effect size for the groups were medium for avoidant (r=.4) to large for others (r=.7).

To determine the contributions of both avoidant and ambivalent attachment factors to the two dimensions of separation anxiety, multiple regression analysis was conducted with SAAS-C score as dependent variable and attachment patterns (avoidant and ambivalent) as predictors. Both P-P plots (expected cumulative probability by observed cumulative probability) show no significant deviation from the fitted line, this indicated that the relationship between the dependent variable and the predictors was linear and the residual variances are about equal or constant.

Findings on regression analysis for the Fear of Being Alone (FBA) symptom and the two predictor models were able to account for 43% of the variance in FAB symptom,  $R^2$ =.43,  $F_{(2,117)}$ = 44.3, p<.001. More so, the results revealed that avoidant attachment ( $\beta$ =.48, p<.01) and ambivalent attachment ( $\beta$ =.25, p<.05) explained modest but significant and separate proportions of the variance of FBA symptom. In terms of Fear of Abandonment (FAB) symptom, findings indicated that the model accounted for 30% of the variance in FAB symptom,  $R^2$ =.30,  $F_{(2,117)}$ = 25.51, p<.001. Both avoidant attachment ( $\beta$ =.24, p<.05) and ambivalent attachment ( $\beta$ =.37, p<.01) explained significant and separate proportions of the variance of FAB symptom. The results presented in Table 3 revealed that the unique predictor for FBA was avoidant attachment, while that for FAB was ambivalent attachment.

## 6. Discussion

Conceivably, the most interesting result of this study was the relationship between attachment classification and separation anxiety symptoms in children. Secure, avoidant and ambivalently attached children all reported significant separation anxiety symptoms. The findings is in line with the hypothesis that children classified as insecurely attached reported more separation anxiety symptoms when compared with those classified as secure (Brown & Whiteside, 2008). This result was expected based on attachment theory, with securely attached children

exhibiting less anxious behavior, while insecurely attached children displayed more symptoms of separation anxiety. Furthermore, a link between insecure attachment and separation anxiety revealed that insecure attachment constituted a general risk factor in the development of anxiety (Bowlby, 1973). The present findings extends previous findings by distinguishing types of insecure attachment (avoidant and ambivalent) and anxiety in children. The relationship between insecure attachment and separation anxiety symptoms was consistent with previous findings that suggested that secure attachment was negatively associated with childhood anxiety (Brown & Whiteside, 2008; Muris, Meesters, & Brakel, 2003; Muris et al., 2001).

The findings indicated differences among secure, avoidant, and ambivalent groups with regard to separation anxiety symptoms. The pattern of children's separation anxiety score was different among the three groups of attachment type. The children with ambivalent attachment reported the highest level of anxiety, when compared with those with secure or avoidant attachment. The study therefore indicated differences among secure, avoidant, and ambivalent groups with regards to levels of separation anxiety. The results of this study support the theoretically based expectations that children with separation anxiety symptoms differed from others on attachment experiences and current state of mind with respect to attachment. These findings converge with previous work which demonstrated a link between insecure attachment and anxiety in children (Van-Emmichoven et al., 2003). In general, people with ambivalent attachment type were more likely to experience inconsistent and unpredictable caregivers as children, leading to underlying feelings of helplessness, fear, and insecurity in their relationships (Bowlby, 1969, 1973). In the present study, it was revealed that insecurely attached children reported separation anxiety, more than the securely attached.

The results revealed that the unique predictor for the fear of abandonment was ambivalent attachment and for the fear of being alone was avoidant attachment. According to attachment theory, ambivalently attached infants are particularly prone to develop chronic levels of anxiety later in life. Because ambivalent attachment has been associated with patterns of unpredictable and irregular responsiveness to the caregiver, it is believed that ambivalently attached infants live with the constant fear of being left vulnerable and alone. This fear of separation or abandonment is thought to give rise to a coping strategy centered on chronic vigilance, which may continue throughout childhood and adulthood and lead to the development of anxiety disorders (Bowlby, 1973). This finding supported current theoretical conceptualizations that a child with ambivalent attachment may be more relevant when examining outcomes linked to types of insecurity. Studies have shown that infants classified as ambivalent were more susceptible to later problems than those in other categories, and were more likely to suffer from internalizing behavior (Brown & Whiteside, 2008; Hudson & Rapee, 2001). According to Van-Emmichoven et al. (2003), insecure individuals may be more prone to anxious feelings because they attend to anxiety-provoking cues in the environment.

This finding also, revealed that avoidant children showed greater distress in term of the fear of being alone. In the case of avoidant attachment, Manassis (2001) proposed that children feel rejected by their parent at times of distress, resulting in excessive self-reliance, and a decreased desire for social contact. Avoidance of social contacts impairs the development of coping strategies for effective arousal in social situations (e.g. entering school) and prevents the exposure to perceived threats, which, together with temperamental vulnerability to sympathetic arousal, increases the risk for anxiety, especially for social phobia (Manassis & Bradley, 1994). Similarly, Goldberg (1997) proposed that avoidant children, who learn to repress their feelings and needs, appear to display internalizing problems in which they experience pain and distress but rarely disturbs others (e.g. depression, anxiety, social withdrawal).

The overall findings of this research highlighted the importance of examining children's anxiety disorders within the context of their attachment relationships. Anxiety symptoms were highest among ambivalent than avoidant children. According to Cassidy (1999) infants are completely dependent on their caregivers, and they frequently signal their distress. Research indicated that close relationships serve as a defense against existential anxiety for people with secure attachment styles. Developmentally and functionally, insecure attachment keeps the child physically and psychologically close to the parents, however hyper anxiousness and throwing of tantrums separates the child from the caregivers.

## 7. Conclusion

Findings from this study revealed that secure attachment relationship is protective being that it was associated with lower separation anxiety score. The more responsive a mother is to the child's needs, the more likely the child is to develop secure attachment. Responsive parenting behavior continues to influence children's development in positive ways beyond childhood. Securely attached children don't often worry about being abandoned or about

someone getting too close to them. Low acceptance or lack of security may enforce children's feelings of insecurity and anxiety through a negative reaction to his/her feelings and activities.

The results should be interpreted cautiously due to some limitations. The age of the children assessed in the current study was 6 to 8 years, which is the most common age of onset for separation anxiety (APA, 2000). It was assumed that these children are able to get or bring back information about the behavior of their parents. In that case, it may not be true, this may lead to prejudgment. A further limitation for this research was the size of the sample. Although, a total sample completed the questionnaires, the overall sample size for the factor analysis was less than ideal. More so, respondents in any study come with their opinions, attitudes or perceptions. Furthermore, this study relied exclusively on self-report. Although, the use of children self-report is considered an important source of information on parent-child relationship, and on children separation anxiety symptoms. This study is also limited by the bias of the respondent's attitudes or perceptions. It is possible that the wording of the scales may be confusing to the respondents and therefore they may interpret questions in ways not intended. The study consequently advocates for responsive and supportive parenting to ensure a brighter tomorrow for children.

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Table 1. Correlations among the variables

Variables	M	SD	1	2	3	4	5	6	7	8
		1.2.1		**	**	**	**	**	**	**
1.SAASc	75.57	12.64	1.000	.894**	.850**	.459**	.904**	658**	.528**	.566**
2.FBA	12.56	3.27		1.000	.779**	.229*	.788**	643**	.626**	.535**
3.FAB	11.46	2.99			1.000	.237**	.653**	527**	.466**	.516**
4.FPI	10.19	1.51				1.000	.425**	150	.068	.200*
5.WCE	12.00	2.97					1.000	637**	.611**	.596**
6.Secure	1.46	.14						1.000	855**	839**
7.Avoidant	1.19	.25							1.000	.604**
8.Ambivalent	1.24	.29								1.000

Note: FBA, fear of being alone; FAB, fear of abandonment; FPI, fear of physical illness;

WCE; worry about calamitous events.

Table 2. Result of t-test between the children with/without Separation Anxiety (SA) symptom in regard to three child attachment types

Child attachment		n	M	SD	t	p
Secure					8.19	.000
	With CA common tom	42	2.7	1.0		
	With SA symptom Without SA symptom	78	4.5	1.2		
Avoidant					5.37	.000
	With SA symptom		3.0	1.4		
	Without SA symptom		1.7	1.2		
Ambivalent					7.87	.000
	With SA symptom		3.9	1.6		
	With SA symptom Without SA symptom		1.8	1.3		

Table 3. Results of the regression analysis with two dimensions of separation anxiety as the dependent variable and attachment patterns as predictors

Dependent	Predictors	R	$R^2$	F	р	B (SE)	β	р
FBA	-Avoidant -Ambivalent	.66	.43	44.30	.000	6.22(1.14) 2.69(.96)	.477 .247	.000
FAB	-Avoidant -Ambivalent	.55	.30	25.51	.000	2.89(1.15) 3.69(.97)	.242 .370	.014 .000

Note: FBA, fear of being alone; FAB, fear of abandonment

<sup>\*\*.</sup> Correlation is significant at the 0.01 level

<sup>\*.</sup> Correlation is significant at the 0.05 level.