

Attachment Styles and PTSD in Adolescents in three Nordic Countries

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Background

Posttraumatic stress disorder

Since posttraumatic stress disorder (PTSD) was included in the Diagnostic and Statistical Manual-III (DSM) in 1980 the number of studies focusing on adolescents and PTSD has increased. The high number of studies indicates that this population, like adults, is in risk of developing posttraumatic stress symptoms after exposure to traumatic events. Most research, however, is based on specific trauma populations, as for instance clinical or convenient samples, and studies of broad trauma populations still is sparse. Existing research shows that not all develop PTSD following exposure to potentially traumatic events. Therefore studies contributing to a better understanding of the development of PTSD are of great importance. Studies of influencing variables can elucidate underlying causality, and thereby improve prevention and intervention.

Attachment style

Attachment style is one possible mediating factor that has been found to explain psychopathology in general; and attachment style has been identified to have an impact on the development of PTSD following exposure to a potentially traumatic event. The coping processes after a trauma seem to be disrupted in individuals characterized by anxious or avoidant attachment, and the risk of developing PTSD and other psychological problems therefore is increased.

Attachment theory is the joint work of John Bowlby and Mary Ainsworth, and was originally developed to describe attachment patterns between caregiver and child. Attachment theory focuses on emotional development seen in a life-time perspective. The theory suggests that children, through interactions with a caregiver, develop internal working models of themselves and of others. Adult attachment theory has been further developed by others; Bartholomew and Horowitz have developed a two-dimensional four category model of adult attachment, describing the connection between attachment and models of self and others resulting in four patterns of attachment (secure, preoccupied, dismissive, and fearful, see Figure 1). Although limited, studies of child-mother attachment have shown that the majority of children could be characterized by a secure attachment pattern. Literature on attachment in adolescents is however sparse, and to our knowledge no research exists that studies the distribution of the four attachment styles in adolescent populations.

Aims of the study

The first aim of the present study was to explore the distribution of the attachment patterns in a broad population of adolescents in the three Nordic countries. The second aim was to examine the distribution in attachment style among those adolescents suffering from PTSD. The final aim was to examine the contribution of gender, attachment style, and 19 potentially traumatic events and negative life events to the variance in PTSD.

Method

Subjects

The data was collected from questionnaire surveys of adolescents from two national representative probability samples from Denmark (n=390, mean age 14.5 years), Iceland (n=206, mean age 14.5 years), and from a total population sample from the Faroe Islands (n=687, mean age 14.2 years). The total sample was 1,283 adolescents with a mean age of 14.1 years (SD=1.57). 48% (n=615) of the total sample were males and 51 % (n=648) were females. Twenty adolescents (1.6%) did not report their gender.

Measures

Eventlist

The questionnaire included a list of 19 potentially traumatic events and negative life events. The students were asked to indicate for each event, whether they had been exposed to it. The events were selected from relevant literature and clinical experience, and were as follows: **traffic accident, other serious accidents, physical assault, rape, witnessed other people injured or killed, came close to being injured or killed, threatened to be beaten, near-drowning, robbery/theft, pregnancy/abortion, serious illness, death of someone close, divorce of parents, sexual abuse, severe childhood neglect, humiliation or persecution by others (bullying), and absence of a parent.**

Posttraumatic stress symptoms

The Harvard Trauma Questionnaire-Part IV (HTQ) consists of 31 items and is used to estimate the occurrence of PTSD at the time of the event chosen as the most distressing event by the adolescent. The items were scored on a 4-point Likert scale (1 = not at all present; 4 = present extremely often). The HTQ-Part IV permits an assessment of whether or not a person suffers from PTSD. The HTQ-Part IV measures the intensity of the three core symptom groups of PTSD: Intrusion, Avoidance, and Arousal. Only symptoms scored "quite a bit" or "extremely" counted for a PTSD diagnosis. The subscales were scored separately. Good reliability and validity has been found for the scale. The internal reliability of the scale in the present populations was high (Cronbach's α was .96)

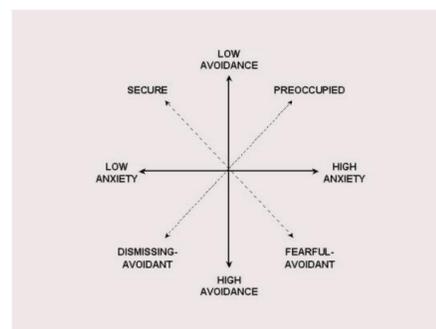


Figure 1: Diagram of the four attachment styles

Attachment style

The revised Adult Attachment Scale (RAAS) is an 18-item self-report scale based on attachment theories. The items are scored on a 5-point Likert scale (1 = not at all characteristic; 5 = very characteristic of me). The closeness and dependency subscales are combined, and two subscales are used in establishing four attachment patterns. The close-dependency subscale consists of 12 items. The internal reliability in the sample was low as the Cronbach's α was .42. Despite the limited reliability, it was decided to continue to use this subscale for constructing attachment patterns. The Anxiety subscale consists of six items, and showed an acceptable internal reliability (Cronbach's α = .75). The four attachment patterns are: secure attachment (close-dependency score above 36, and an anxiety score under 18), preoccupied attachment (close-dependency scores above 36 and an anxiety score above 18, dismissive attachment (close-dependency score under 36, and an anxiety score under 18, and finally the fearful attachment (close-dependency score under 36, and an anxiety score above 18).

Results

Analysis were conducted in each data sample separate and revealed cross cultural differences in all analysis; both in the distribution of the attachment styles in general, in the distribution in the attachment styles among adolescents with PTSD, and in which variables contributed to the variation in PTSD.

Table 1: The cross cultural difference in the distribution of the attachment styles

	Secure attachment (N / % in within the country)	Preoccupied attachment (N / % in within the country)	Dismissive attachment (N / % in within the country)	Fearful attachment (N / % in within the country)
	Pearson Chi Square =218.96 p=0.0005	Pearson Chi Square =8.93 p=0.012	Pearson Chi Square =297.82 p=0.0005	Pearson Chi Square =0.61 p=0.74
Denmark (N=87%*)	53 / 14 %	50 / 13 %	191 / 49 %	44 / 11 %
Iceland (N=87%*)	24 / 12 %	23 / 11 %	107 / 52 %	25 / 12 %
Faroe Islands (N=87 %*)	358 / 52 %	125 / 18 %	49 / 7 %	71 / 10 %

*The remaining % could not be categorized by one distinct attachment style, and were therefore excluded from the analyses.

Only those adolescents who had filled out all the questions the PTSD-measure (HTQ) and in the attachment style-measure (RAAS) were included in further analysis (N reported in second column in Table 2).

Table 2: The distribution of attachment styles among the adolescents with PTSD

Country	New N (% of total N)	Fulfilling the PTSD criteria	Attachment style			
			Secure attachment	Dismissive attachment	Preoccupied attachment	Fearful attachment
Denmark	357 (92%)	30	6.7 % Pearson Chi Square = 0.89 p=0.34	26.7% Pearson Chi Square = 7.22 p= 0.007	43.3% Pearson Chi Square = 28.07 p= 0.0005	16.7% Pearson Chi Square = 0.87 p= 0.35
Iceland	182 (88%)	33	15.2% Pearson Chi Square = 0.52 p=0.47	27.3% Pearson Chi Square = 8.33 p= 0.004	24.2% Pearson Chi Square = 5.60 p=0.018	18.2% Pearson Chi Square = 0.88 p= 0.35
Faroe Islands	618 (90%)	132	34.8% Pearson Chi Square = 11.45 p= 0.001	8.3% Pearson Chi Square = 0.04 p=0.85	25.8% Pearson Chi Square = 3.84 p= 0.050	21.2% Pearson Chi Square = 14.91 p=0.0005

Contribution of the variables (gender, attachment style and the traumatic events) to the variation in PTSD after controlling for inter-variable interaction was examined conducting linear regression analyses for each country. The HTQ total score was used as dependent variable and the mentioned variables could explain about 40 % of the variance in PTSD in all three countries, however also here cross cultural variance was found in which variables had a significant contribution.

Female gender did not come out significant in the Icelandic sample, but in the other two samples. Having a preoccupied attachment style came out significant as a risk factors for PTSD in the Danish sample, but not the other samples. Dismissive attachment had a buffering effect in the Danish sample, but was none significant in the two other samples, and finally fearful attachment was a significant risk factor in the Faroese sample, but not the other two samples. Moreover exposure to humiliation or bullying was the only event that came out significant in all three samples, the other events varied across the countries

Conclusions

Contrary our expectations we found significant cross cultural differences in the distribution of securely attached, preoccupied, and dismissive attached. As expected the majority of the Faroese adolescent sample was securely attached, contrary the majority in the Danish and Icelandic samples was dismissive attached. Further there were significantly more Faroese adolescents characterized by a preoccupied attachment style, compared to the other two countries. To our knowledge epidemiological studies on attachment style among adolescents are non-existent, which hinders a direct comparison.

A possible explanation of the high occurrence of dismissive attached in the Danish and the Icelandic samples may be that the present study is based on younger adolescent samples, and though it is theorized that attachment style is a stable factor through life, adolescents might be characterized by more unstable attachment styles compared to children and younger adults. Adolescence is a period characterized by hormonal, physical, and social changes. The adolescents search for a new identity in order to match the changes, and may be characterized by increased detachment from the parents, and feelings of distress and insecurity may be prominent. The major cross cultural difference in the occurrence of dismissive attached is interesting and could be explained by the variations in the cultures. The Faroese society is still more collectivistic oriented compared to the Danish and Icelandic societies, which could explain, that Faroese adolescents initiate the detachment process from their parents at an older age, compared to adolescents in more individualistic oriented cultures. To examine this, future research ought to replicate the present study in the same countries but in older adolescents or young adults.

Recommendations – in clinic, prevention and research

The present results suggest that more research ought to be done in attachment style and PTSD using prospective design. They also underline the necessity of cross cultural studies. Based on the results from the present study assessment and planning of interventions ought to integrate a standard procedure to obtain information about stressful events from adolescents. Moreover health professionals should assess, and take into consideration, personal factors such as attachment style after exposure to trauma in order to enhance prevention and treatment outcome. Finally, the results underline the importance of taking cultural perspectives into account, when establishing national health recommendations.