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# Attachement au partenaire et développement de symptômes traumatiques et anxieux-dépressifs chez les étudiants

Partner attachment and the development of traumatic and anxiousdepressive symptoms among University students

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#### Résumé:

Contexte : Une large littérature a démontré en quoi le style d'attachement pouvait impacter la survenue d'une symptomatologie telle que des symptômes anxieux, dépressifs et post-traumatiques. L'âge étudiant, en tant que période de transition entre l'adolescence et l'âge adulte, constituant une population à risque en termes de santé, peut être intéressant à étudier considérant l'attachement au partenaire et l'anxiété, la dépression et le trauma. L'objectif de cette étude était d'évaluer auprès d'une population d'étudiants français (1) la présence de symptômes anxieux, dépressifs et post-traumatiques ; et (2) la relation entre ces symptômes et le style d'attachement au partenaire.

<u>Méthode</u>: Auprès d'étudiants français volontaires, nous avons conduit une étude basée sur des questionnaires en ligne (PCLS, HADS, ECR).

<u>Résultats</u>: Les deux dimensions d'attachement (anxiété d'abandon et évitement de l'intimité) ont impacté les symptômes post-traumatiques (score à la PCLS). Plus le score d'attachement anxieux était élevé, plus les scores d'anxiété et de dépression à l'HADS étaient élevés. A contrario, une diminution du score à l'attachement évitant était associée à une diminution des scores d'anxiété et de dépression à l'HADS.

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<u>Discussion</u>: D'un point de vue psychothérapeutique, il apparaît important de considérer le style

d'attachement en tant que facteur de risque, voire peut-être en tant que vulnérabilité

psychopathologique. D'un point de vue clinique, nous devons prendre ce paramètre en compte

pour expliquer la situation clinique des patients.

**Mots-clés:** attachement ; étudiants ; anxiété ; dépression ; post-traumatique

Abstract:

<u>Context:</u> A wide literature has demonstrated how attachment style can impact symptomatology,

for instance anxious, depressive, and post-traumatic symptoms. Life as a student, as a transition

period between adolescence and adulthood, constituting a at-risk population in terms of health

measures, may be particularly interesting to study regarding attachment to a partner and

anxiety, depression, and trauma. The aims of this study were to evaluate in a French University

student population (1) the presence of anxious, depressive, and post-traumatic symptoms; and

(2) the relationship between those symptoms and the attachment style with the partner.

<u>Method:</u> Based on volunteer French students, we conducted an internet-based data collection

procedure with online questionnaires (PCLS, HADS, ECR).

<u>Results:</u> Both attachment dimensions (i.e., abandonment anxiety and intimacy avoidance)

impacted post-traumatic symptoms (PCLS score). The higher the attachment anxiety score, the

higher the HAD scores of anxiety and depression. In contrast, a decrease in the attachment

avoidance score was associated with an increase in the anxiety and depression HAD score.

Discussion: From a psychotherapeutic perspective, consideration might be given to attachment

style as a risk factor, maybe even a psychopathological vulnerability. From a clinical point of

view, we must take that parameter into account to explain the clinical situation of patients.

**Keywords:** attachment; students; anxiety; depression; post-traumatic.

# Partner attachment and the development of traumatic and anxiousdepressive symptoms among University students

### **Introduction:**

Trauma is defined by the American Psychological Association (APA) as the emotional response to an extreme negative event; nonetheless, it is the subjective perception of such experiences that influence the impact of trauma and its outcome. For this reason, it is crucial to understand the individual's vulnerability or resilience to traumatic exposure. Those skills are highly influenced by the individuals' past experiences, feelings, and memories (Hauck, Schestatsky, Terra, Kruel, & Ceitlin, 2007).

In such a perspective, the individual attachment history seems highly relevant. Attachment style is a term that defines interactions between an infant and his/her primary caregiver during childhood, which determines how a child emotionally responds to stress and emotion regulation; through the internalization of such experiences, the feelings, thoughts, perceptions and behaviors will be influenced throughout life (Bowlby, 1982).

There are important differences between individuals with insecure patterns of attachment. Preoccupied individuals anxiously seek to gain acceptance and validation from others, as if they hope to build a sense of safety through the gaze of others. Fearful individuals, like preoccupied ones, are highly dependent on feeling accepted by others However, because of their negative expectations, they avoid intimacy to prevent the pain of losing their loved one or of being rejected. Dismissive individuals also avoid closeness because of their negative expectations; however, they maintain a sense of self-worth by defensively denying the value of close relationships (Bartholomew & Horowitz, 1991; Bartholomew & Shaver, 1998).

Although the attachment theory mainly deals with developmental and interpersonal issues, the association between attachment style and affect regulation is one of the basic pillars of this theoretical framework. Compared with persons with insecure attachment styles, securely attached individuals are more tolerant of stressful events and can access unpleasant emotions, without being overwhelmed by the resulting distress (Kobak & Sceery, 1988)

Therefore, in the field of psychopathology, it may be stated that an insecure attachment style may be a risk factor for the onset of symptoms, such as depression (Hankin, Kassel, & Abela, 2005) and anxiety (Safford, Alloy, Crossfield, Morocco, & Wang, 2004).

A meta-analysis indicates that adult attachment style has a modest association with PTSD symptoms. Those results validate other previous studies, which highlight the important

relationship between anxious attachment and PTSD symptoms (Woodhouse, Ayers, & Field, 2015). Other results suggest that a secure attachment is associated with low PTSD symptoms (Ortigo, Westen, DeFife, & Bradley, 2013), and that an insecure attachment is associated with high PTSD symptoms (Clark & Owens, 2012; Scheidt et al., 2012; Solomon, Dekel, & Mikulincer, 2008).

In the present study, we wished to investigate the presence of traumatic experiences and their consequences on mental health among non-clinical university students. In fact, we consider this developmental stage to be crucial to the understanding of mental health trajectories, since it represents the passage from adolescence to adulthood. Indeed, becoming an adult, leaving the parents' home, managing a budget, and carrying other responsibilities, may constitute anxiety-generating factors for some youth. Doubt and fear about the future may also arise (Boudoukha, Bonnaud-Antignac, Acier, & Chaillou, 2011). Thus, such sudden changes can be very stressful. Indeed, according to the theory of early maladaptive schemas (Young, Klosko, & Weishaar, 2005), patterns of actions and thinking develop during childhood to finally stabilize. They allow a person to interpret environment stimuli, like a filter. That point could attest to the vulnerability of first-year university students (Walburg, Paez, Henini, & Leroux, 2008). Considering these data, it may be interesting to study this population from an attachment perspective.

Attachment has already been studied among university students; some research has focused on sexuality and body image (Brink, Smeets, Hessen, & Woertman, 2016; Dang & Gorzalka, 2015); others on network use and internet addiction (Aydın, Volkan Sarı, & Şahin, 2014; Eroglu, 2016). In Turkey, one study highlighted a relationship between attachment styles and social anxiety among university students (Erozkan, 2009). In Japan, other authors showed high correlations between secure attachment and resilience scores, whereas insecure attachment was correlated with low resilience scores (Shibue & Kasai, 2014). In France, a review demonstrated that 53% of students (N=1455) reported depressive feelings since the beginning of the academic year (Boujut, Koleck, Bruchon-Schweitzer, & Bourgeois, 2009). Other studies confirmed similar depressive symptomatology among French University students, respectively 35% (Réveillère, Nandrino, Sailly, Mercier, & Moreel, 2001), and 30,8% with 5,9% who have shown an major depressive episode (N=1521) (Lafay, Manzanera, Papet, Marcelli, & Senon, 2003). Finally, a study showed that 14% of the French University students (N=935) obtained a score >31 on the *General Health Questionnaire* (GHQ) (Goldberg et al., 1997).

In view of these data and the number of registered students: 1 600 000 for the academic year 2016–2017, we believe that French University students form a population that deserves to be

studied for mental health screening. We also think that attachment theory may give a valid framework to understand the development and course of mental functioning and adaptation. Within such considerations, the aims of this study were to evaluate in a French University student population:

- 1) the presence of anxious, depressive, and post-traumatic symptoms;
- 2) the relationship between anxious, depressive, and post-traumatic symptoms, and the attachment style with the partner.

Specifically, we hypothesized that an insecure attachment tends to increase the risk for anxious, depressive, and post-traumatic symptoms, whereas a secure attachment tends to decrease those same symptoms, defining a secure attachment as a protective factor. This study also explores the role of other sociodemographic factors (gender, age) and the perception of a traumatic life event, which may influence experiencing anxious, depressive, or post-traumatic symptoms among students.

## **Patients and methods**

Anonymous and voluntary questionnaires were completed by 364 students (78 males and 286 females), aged between 17 and 25 years old (mean=20,11; SD=1,72). The majority of students reported having one to three siblings (N=301); 192 were still living with their parents, 105 were living alone, 42 with a partner, and 28 with a roommate. University students were either in a romantic relationship (N=185), single (N=179), married (N=4), or in a civil union (N=1). Among them, 183 were in their first-year at university, 100 were in their second year, 58 were in their third year, 17 were in their fourth year, and 11 were in their fifth year. Most of these students were studying psychology (N=213), 32 were studying information and communication, 24 history, 20 economy, 17 sociology, 17 plastic arts, and 15 computer science.

University students were recruited from their first to fifth year of studies in different lecture halls. Three experimenters delivered online questionnaires to volunteer students. The data collection procedure took place between March 2016 and April 2017.

Questionnaires were distributed to students via an internet-based data collection procedure with an online questionnaire on the website Survey Monkey. Students could use their own computer or use available computers in a University office. The questionnaire completion took about 20 minutes. The following instruments were used:

The Posttraumatic Stress Disorder Checklist Scale (PCLS) (Weathers, Litz, Herman, Huska,

& Keane, 1993) is a 17-item self-rating questionnaire measuring the intensity of PTSD symptoms on a 5-point scale (1 = "not at all", 2 = "a little", 3 = "sometimes", 4 = "often", 5 = "very often"). A total score is computed by adding the 17 items, so that possible scores range from 17 to 85. 3 subscores are also possible: re-experiencing (items 1–5), avoidance (items 6–12) and hyperarousal (items 13–17). Used as a continuous measure, the PCLS has good diagnostic utility. It showed a high diagnostic efficacy in the population of traumatic event victims or in individuals reporting "stressful experiences". The PCLS has a good test-retest reliability (0.96), and a good homogeneity with internal consistency amongst the three subscores, Cronbach's  $\alpha$  = 0.82 to 0.94. In our study, a validated French version of the PCLS was administered to the student (Yao, Cottraux, De Mey-Guillard, Mollard, & Ventureyra, 2003).

The Experiences in Close Relationships (ECR) questionnaire (Brennan, Clark, & Shaver, 1998) is a 36-item self-report measure of adult attachment security containing two 18-item subscales that assess two dimensions (anxiety and avoidance) underlying adult attachment organization. This instrument treats anxiety and avoidance as continuous measures on the grounds that attachment is not a categorical concept. Respondents rate each item on a 7-point scale (from 1 "disagree strongly" to 7 "agree strongly") in terms of how well it describes their typical feelings in romantic relationships. The anxiety subscale assesses fear of abandonment and rejection (e.g., "I worry about being alone"), while the avoidance subscale assesses discomfort with dependence and intimate self-disclosure (e.g., "I prefer not to show a partner how I feel deep down"). Low scores on both dimensions characterize secure attachment, whereas insecure attachment is defined by high scores in one or both dimensions. High scores on the anxiety versus the avoidance dimension have been explained as expressing different strategies in the attempt to cope with insecurity. Brennan et al. (1998) reported high internal consistency, Cronbach's  $\alpha$ =0.91 and 0.94, on the anxiety and avoidance scales, respectively. (Lafontaine & Lussier, 2003)) reported a similar result to the original American version, with a Cronbach's  $\alpha$ =0,88 for both.

The Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith, 1983) is a valid and reliable self-rating scale that measures anxiety and depression in both hospital and community settings. It assesses the symptom severity and the presence of anxiety and depression in patients with illness and in the general population. It is composed of 14 questions, 7 questions for anxiety and 7 for depression. Each item is rated on a 4-point scale, from 0 to 3. It gives a

maximum subscale score of 21 for anxiety and depression, respectively. The total score can be ranged as follows: 0–7 no symptomatology, 8–10 moderate symptomatology, greater than 11 severe symptomatology. The HADS original English version has a test-retest reliability greater than 0.80, and a Cronbach's  $\alpha = 0.79$  to 0.90 for the two subscales. In this study, we use a validated French version of the HADS (Bocéréan & Dupret, 2014). The French version also has a good internal consistency, with a Cronbach's  $\alpha$ =0.78 for the depression scale and  $\alpha$ =0,81 for the anxiety scale.

## **Statistical study**

Descriptive analyses were conducted on the study sample, by using proportions, means and standard deviation. To study linear relationship between questionnaire scores, Pearson's correlation analyses were used. First, bivariate analyses were conducted for each variable. All variables statistically significant (p<.2) were entered in a multivariate linear regression. Analyses were conducted using IBM SPSS 21.0. A threshold of p<.005 was considered statistically significant.

#### **Results**

In our sample (N=364), the mean score of attachment avoidance was 4.06 (SD=.50). Admitting a threshold of 2.5, 360 students got high score on attachment avoidance. The mean score of attachment anxiety was 4.14 (SD=1.00). Admitting a threshold of 3.5, 280 students had a high score on attachment anxiety. In total, 361 students presented an insecure attachment (i.e., a high score on attachment avoidance and/or anxiety). By contrast, 3 students presented a secure attachment (both dimensions' scores were low).

Descriptive data and correlations between variables of interest are presented in Table 1. In our sample, anxious symptoms were positively significantly correlated with gender (.238, p<.001) and negatively significantly correlated with a difficult perceived event (-0.242, p<.001). Depressive symptoms were significantly correlated with age (.145, p<.05) and with an event perceived as difficult (.226, p<.001). Post-traumatic symptoms are significantly correlated with gender (.212, p<.05).

Linear regressions between the variables and the two dimensions of attachment style are presented in Table 2. Linear regressions were performed to show the impact of both attachment style dimensions on anxiety, depression and post-traumatic symptoms. Results confirm that the

higher the attachment anxiety score, the higher the HADS score of anxiety. In our sample, 13.7% of anxiety can be explained by the attachment anxiety ( $R^2$ =.137,  $\beta$ =.373, p<.001). The same relation is observed in depression: the higher the attachment anxiety score, the higher the HADS score of depression. In our sample, 6,8% of depression can be explained by the attachment anxiety ( $R^2$ =.068,  $\beta$ =.266, p<.001). Regarding post-traumatic symptoms, both avoidance and anxiety attachment impact the PCLS score. The higher the attachment avoidance score ( $R^2$ =.020,  $\beta$ =.158, p<.05), the higher the attachment anxiety score ( $R^2$ =.096,  $\beta$ =.316, p<.001), the higher the PCLS score. This means that 2% of post-traumatic symptoms can be explained by attachment avoidance and 9.6% explained by attachment anxiety.

Table 3 shows linear regression analyses for PCLS, anxiety and depression scores adjusted for covariates (gender, age, perceived difficult event, ECR-anxiety, ECR-avoidance). Results showed that higher scores in attachment anxiety were associated with higher scores in the HADS anxiety ( $\beta$ =.370, p<.001), HADS depression ( $\beta$ =.290, p<.001), and PCLS scores ( $\beta$ =.299, p<.001). It also showed that a decreased score in attachment avoidance was associated with increased scores in HADS anxiety ( $\beta$ =-.108, p<.05) and depression ( $\beta$ =-.134, p<.05) and that a lesser perceived difficult life event was associated with increased scores in HADS anxiety ( $\beta$ =-.144, p<.05) and HADS depression ( $\beta$ =-.178, p=.001). Females had higher scores in HADS anxiety ( $\beta$ =-.181, p<.05) and on the PCLS ( $\beta$ =.185, p<.05)

## **Discussion**

Clinical practice reminds us daily that to consider attachment is to consider the fundamental building blocks of any sense of emotional safety in the subject. It particularly underscores that point, as the foundation of an individual's emotional sense of safety. Without it, a person is much more vulnerable and can potentially develop a symptomatology. That symptomatology can particularly develop during a specific period of life, such as being a student, as a transition to adulthood – with all the psychosocial and economic changes which are involved.

Adult attachment style is often measured through romantic and close relationships. Indeed, in adulthood, the romantic relationship is a primary attachment relationship that provides the opportunity for growth and protection (Maltais, Duchesne, Ratelle, & Feng, 2017). This dimensional concept of attachment theory distinguishes *anxiety* and *avoidance*. Attachment anxiety is defined as "involving a fear of interpersonal rejection or abandonment, an excessive

need for approval from others, and distress when one's partner is unavailable or unresponsive". Attachment avoidance is defined as "involving fear of dependence and interpersonal intimacy, an excessive need for self-reliance, and reluctance to self-disclose" (Wei, Russell, Mallinckrodt, & Vogel, 2007). A secure style is defined by low anxiety and low avoidance scores. People with secure attachment feel "security, comfort with closeness and interdependence, and reliance on support seeking and other constructive means of coping with stress" (Mikulincer, Shaver, & Pereg, 2003). By contrast, having high scores on either or both dimensions define an insecure adult attachment orientation. People with insecure attachment tend to present more fatigue, lower perceived social support, and less well-being in their daily life (Sirois, Millings, & Hirsch, 2016). Because of the nature of the history of inconsistent caregiving that characterizes anxious attachment, people with an anxious attachment view themselves as unlovable (Meredith, Ownsworth, & Strong, 2008). On the other hand, because of the history of rejection of caregiving typical of the avoidant attachment, people with an avoidant attachment do not view others as being available for them (Simpson, Rholes, & Nelligan, 1992).

In our study, we hypothesized that an insecure attachment tends to increase anxious, depressive, and post-traumatic symptoms, whereas a secure attachment tends to decrease those same symptoms, defining a secure attachment as a protective factor.

We decided to analyze the associations among these variables in a sample of university students, because of the specificities of this developmental stage. During this period, in fact, dating generally becomes more serious and the characteristics of the attachment style become more salient, more visible (Furman, 2002). Moreover, in early adulthood, romantic partners start to become important attachment figures (Fraley & Shaver, 2000). Indeed, a study showed that the satisfaction with the partner can be a protective factor against loneliness or psychological morbidity, despite an insecure attachment. Thus, a satisfying relationship mediates the relation between avoidance attachment and loneliness. (Graça Pereira, Taysi, Orcan, & Fincham, 2014).

Our results show that the higher the attachment anxiety score, the higher the HADS anxiety score; and the higher the attachment anxiety score, the higher the HADS depression score. Regarding post-traumatic symptoms, both avoidance and anxiety attachment impact the PCLS-score. Moreover, results show that an increase in the attachment anxiety score was associated with an increase in the HADS anxiety score, in the HADS depression score, and in the PCLS

total score. On the contrary, a decrease in the attachment avoidance score was associated with an increase in the HADS anxiety score and depression score.

These results validate our hypotheses, which means that there is a prevalence of depressive, anxious, and traumatic symptoms, as is well documented in the literature. Indeed, there is a relationship between those symptoms and attachment with the partner in our study. Actually, the more the attachment is insecure in the relationship, the more we can observe depressive, anxious, and traumatic symptoms.

It has been shown that the prevalence of depressive and anxious symptoms was some of the highest and most common symptomatology for the university student population (Kim & Yoo, 2013). To our knowledge, this study is the first in France that shows relationships between PTSD symptoms, which also commonly appeared in a university period. Knowing how attachment style can impact traumatic, depressive, and anxious symptomatology in students allow to develop a more complex vision of health, from a multidimensional point of view. This statement gives us an indication of the importance to acknowledge how attachment can impact different dimensions (and not only psychological) in a university period, and how it can be protective or neglectful.

Some limitations of the present study should be observed. Firstly, not all participants completed the PCLS. Indeed, when participants did not perceive a difficult event in their life, they did not have to complete the PCLS. After our statistical analyses, we think that there may have been several false negatives. It would be important to use instruments different from self-reports when asking to describe traumatic experiences, because of the nature itself of such events.

A second limitation of this study was the lack of homogeneity in our sample. In fact, we had too many women compared to men (i.e., 288 vs 81). Moreover, students attending university *psychology courses were more numerous compared to other* ones (i.e., >50%). These features constrain generalizability. In future, it would be interesting to replicate this study considering the type of university course attended to verify if the presence of anxiety, depressive, or traumatic symptoms may be related to the type of chosen university program.

# Conclusion

From a psychotherapeutic perspective, this article may bring some insights for treatment. Indeed, regarding anxious-depressive and traumatic disorders, patients' requests for care from psychotherapists are without any doubt an important one. So, beyond the treatment of symptoms, consideration could be given to the attachment style as a risk factor, maybe even a psychopathological vulnerability. Surely, something seems to be linked with the level of emotional security experienced in the couple, as well as the quality of relationship with the partner. We must take that parameter into account to explain the clinical situation of patients. Therefore, one may wonder how attachment styles, linked to the psychological development, may be considered to explain what happens in the relationship with the partner, and from a wider point of view, what happens with the expression of anxious and depressive disorders. In a certain way, this research invites us to insist that it would be vain to be confined to one consideration of the anxious and depressive disorders only. On the contrary, to be explained, they must be part of a wider position in person's life history.

#### **Disclosure of interest:**

The authors declare that they have no competing interest.

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<u>Table 1:</u> Descriptive statistics and correlations between the examined variables

	Anxiety			Depression			Post-traumatic symptoms		
	N (%)	Mean (SD)	"t" or "r"	N (%)	Mean (SD)	"t" or "r"	N (%)	Mean (SD)	" <i>t</i> " or " <i>r</i> "
<b>Gender (n= 364)</b>									
Men	78 (21.4)	9.42 (4.01)	t = -4.499***	79 (21.6)	10.29 (3.95)	t = .207	36 (16.5)	32.47 (13.98)	t = -2.994**
Women	286 (78.6)	11.71 (3.85)		286 (78.4)	10.43 (3.47)		182 (83.5)	40.02 (13.00)	
Age (n= 364)									
17-25	364 (100.00)	11.22 (3.99)	r = .005	365 (100.00)	10.40 (3.57)	r = .145**	218 (100.00)	38.78 (13.43)	r = .080
Difficult perceived event (n= 364)									
Yes	215 (59.10)	12.02 (4.00)	t = 4.746***	216 (59.20)	11.15 (3.67)	t = 4.410***	218 (59.90)	38.78 (13.43)	
No	149 (40.90)	10.07 (3.70)	1 – 4.740	149 (40.80)	9.31 (3.13)	ι – 4.410	146 (40.10)		

<sup>\*\*</sup> p<.05; \*\*\* p<.00

<u>Table 2:</u> Linear regressions between both dimensions of "Experiences in Close Relationships" and the examined variables

	Anxiety		Depres	sion	Post-traumatic symptoms		
	$R^2$ adjusted	β	$R^2$ adjusted	β	$R^2$ adjusted	β	
ECR-Avoidance	.001	.045	003	.009	.020	.158**	
ECR-Anxiety	.137	.373***	.068	.266***	.096	.316***	

<sup>\*\*</sup> p<.05; \*\*\* p<.001

<u>Table 3:</u> Multivariate linear regressions

		Statistical results		
Reference classes	Retained variables	Standardized Coefficients	Characteristics	
	Constant***	•	$R^2 = .206$	
	ECR Anxiety***	.367	$R^2$ adjusted = .197	
IIADC Anviote	Gender***	.179		
HADS Anxiety Score	Difficult perceived event**	142	F = 4.305**	
Score	ECR Avoidance**	107		
	Eliminated variables	Age		
	Constant**		$R^2 = .144$	
	ECR Anxiety***	0,297	$R^2$ adjusted = .135	
HADS	Difficult perceived event***	-0,180		
	ECR Avoidance**	-0,140	F = 6.755**	
<b>Depression Score</b>	Age**	0,130		
	Eliminated variables	Gender		
	Constant		$R^2 = .138$	
	ECR Anxiety***	.32	$R^2$ adjusted = .130	
PCLS Score	Gender**	.19		
			F = 9.716**	
	Eliminated variables	ECR Avoidance, Age		

<sup>\*\*</sup> p<.05 \*\*\* p<.001