

Study on the Mediating Role of Emotion Regulation in the Relationship of Young Adults' Attachment Security with Parents and Their Anxiety Symptoms Based on SPSS

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Keywords: Attachment, Emotion Reregulation, Mediation, Anxiety Symptom.

Abstract: Attachment theory provided a comprehensive framework to understand anxiety. Researchers suggested that there is theoretical and empirical evidence for the interrelationships between attachment security, emotion regulation (ER) and anxiety of young adults. However, the nature between the two constructs still remains explored. The purpose of this study was to test whether the path from young adults' attachment security with parents to the levels of anxiety symptoms was mediated by their difficulties in ER. 109 participants who were 16 to 26 years old attended the current study by completing relevant questionnaires. Based on mediation model, the author used SPSS to analyze the dataset. According to the results, attachment security was significantly correlated to anxiety without the inclusion of ER ($r=-0.176$, $p<0.05$). When including the difficulties in ER in the model, this direct relationship became insignificant, $b=0.004$, 95% CI $[-0.037, 0.045]$, $t=0.180$, $p=0.857$. Furthermore, the indirect effect was shown as $b=-0.046$, 95% CI $[-0.081, -0.018]$. Accordingly, these results indicated that the relationship between attachment security and anxiety was fully mediated by ER. In conclusion, compared to individuals with insecure attachment, securely attached young adults reported fewer difficulties to regulate their emotions, which further reduced their levels of anxiety symptoms. These outcomes are discussed regarding meanings for both future directions and clinical practices.

1 INTRODUCTION

The shared features of anxiety disorders are characterized by both excessive fear and anxiety and related behavioral disturbances (American Psychiatric Association, 2013). These anxiety symptoms have been regarded as the central to many psychopathological disorders due to their high correlation with the diagnosis of internalizing and externalizing disorders (Crocq, 2017; Cosgrove, 2011; Eaton, 2013). A study has reviewed worldwide empirical results from 1985 to 2012 and indicated that the average prevalence of anxiety disorders for children and young people was 6.5% (Polanczyk, 2015). Therefore, anxiety disorders are considered to be one of the most prevalent mental disorder during childhood, adolescence and even through the lifespan (Albano, 2003; Bittner, 2007; Steel, 2014). At the same time, anxiety symptoms under the threshold of the diagnosis of anxiety disorders were reported to occur 3 times more (Balázs, 2013). These symptoms are highly associated with poor physical health,

ongoing anxiety, more risks of psychopathology and negative development of cognitive and social functioning (Copeland, 2014; Simpson, 2010; Walker, 2015). Therefore, exploring the etiology of anxiety symptoms merits more attention.

The attachment theory has been provided with a comprehensive framework to understand the underlying mechanism of the emergence and development of anxiety symptoms. Infants used attachment as a survival system through interaction with their caregivers to express their needs (e.g., food and safety) (Bowlby, 1969). When these needs are satisfied reliably and consistently by caregivers over time, infants would regard the caregivers as secure bases that they can turn to when experiencing distress. A secure attachment is therefore fostered. However, if caregivers neglect, or respond to infants with inconsistency and maladaptation, it is more likely to foster an insecurely attached relationship (Bowlby, 1982; Nolte, 2011). When having an insecure attachment, individuals are more likely to engage in secondary or 'second-best' strategies to deal

with their distress such as hyper activating (i.e., frantically attempt to draw more attention from the attachment figure) or hypo activating strategies (i.e., suppression and inhibition of feelings, lack of co-regulation) (Cassidy, 1988; Roisman, 2007). Although these secondary strategies are adaptive to the situation of unavailable caregivers, they are maladaptive over time.

After repeating such dyadic attachment experience with caregivers, individuals begin to form representations of interpersonal experience which is called the Internal Working Model (Bowlby, 1973). Individuals with secure attachment tend to use adaptive strategies to effectively regulate their anxiety (Brumariu, 2010). On the contrary, secondary strategies brought by insecure attachment are more likely to cause anticipatory anxiety and hypervigilance (Nolte, 2011). Empirical studies also showed that insecure attachment is moderately related to anxiety from early childhood to adolescence (Colonnesi, 2011). In order to better understand the nature of the relationship between attachment and anxiety symptoms, the mediating role of emotion regulation (ER) is examined.

ER is a dynamic and complicated series of processes, including recognition, evaluation and modification of both one's own and others' emotions during interactions in various situations (Thompson, 1994). Theoretically, individuals' capacity of ER is fostered directly and indirectly through the repeated dyadic interaction during attachment experience with caregivers (Fonagy, 2002). For instance, caregivers provide children with emotional support, comfort as well as guidance on what emotions are, how to use and adjust them (Cassidy, 1994; Thompson, 2001). Additionally, children would model their parents' ways of responding to emotional arousal situations (Denham, 2010). Empirical studies have found that securely attached individuals would have better understandings towards emotions, regulate their emotions by more constructive and effective strategies and express themselves more openly (Crugnola, 2011; Thompson, 2007). On the contrary, individuals with insecure attachment are more likely to concentrate on negative emotions, lack functional abilities to express intensive affections and regulate the distress through an ineffective and stressful approach (e.g., hyperactivation or hypoactivation) (Nolte, 2011; Hershenberg, 2010; Mikulincer, 2003). At the same time, these ER abilities are associated with the development of anxiety symptoms. Several studies have indicated that young adults who scored high on difficulties in ER also reported a higher level of anxiety than those who reported better ER

capacities (Brumariu, 2012; Bender, 2015; Esbjørn, 2012). Having better ER is also related to better social skills such as the development of peer competence and more engagement in adaptive social interactions (Hyung, 2020). These skills would further help them develop more resilience to deal with distress and protect them from psychopathologies which are based on emotional disturbance (e.g., anxiety symptoms and disorders (Nolte, 2011; Brackett, 2011)).

Although many empirical studies have provided evidence for the correlations between attachment security, ER and the development of anxiety symptoms, most of them investigated the relationships between the two among the three constructs but not all three of them (Colonnesi, 2011; Hannesdottir, 2007; Suveg, 2009). Recently, several exceptions suggested that the relation of attachment security and anxiety was partially mediated by ER (Brumariu, 2012; Bender, 2015; Brumariu, 2013). However, the majority of them focused on the sample of children who live in western culture (Brumariu, 2012; Brumariu, 2013; Bosquet, 2006).

In order to not only increase the generalizability of these relationships but also add more empirical evidence of young adults (16 to 26 years old) in Eastern culture, this study was conducted. The author sought to investigate whether individuals' abilities of ER indirectly mediate them to a pathway from attachment security to correspondent levels of anxiety symptoms. Based on the previous theoretical and empirical research, the hypothesis was that ER played a mediating role between attachment and the development of anxiety. The hypothesized mediation model was showed in Figure 1.

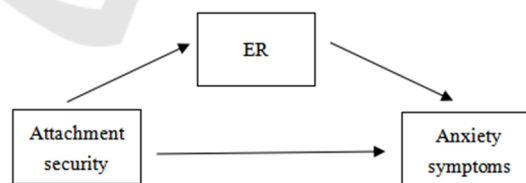


Figure 1: The model of the hypothesis.

2 METHOD

2.1 Design

In the presented study, the independent variable was young adults' attachment security with parents, which was operationalized by the scores measured by the Inventory of Parent and Peer Attachment-Revised (IPPA-R). The dependent variable was anxiety

symptoms, assessed by the Generalized Anxiety Disorder 7-item Scale (GAD-7). In addition, the difficulties in ER as a mediator was measured by the Difficulties in Emotion Regulation Scale-Short Form (DERS-SF). All data were collected online. During the statistical process, the author used SPSS to analyze the dataset. A preliminary t-test was conducted to examine whether there was a significant difference of gender groups which might need to be controlled between these variables. Then simple correlations and mediation were conducted to investigate the hypothesis.

2.2 Participants

Totally 109 participants attended the present study, which consists of 87 females and 22 males. The age of the participants ranges from 16 to 26 (mean=22.796, SD=1.830). All of them were Chinese international students with good English level. They were recruited on the internet through snowball. In addition, 66.1% of them are currently postgraduate students, 32.1% are undergraduate students and 1.8% are high school students. 71.6% of them are currently resident in China and others live in other countries. The additional demographic information about the participants is listed in Table 1.

Table 1: Demographic information of participants (n=109).

	%
Gender	
Female	79.8
Male	20.2
Currently resident in	
China	71.6
Rest of Asian	0.9
United Kingdom	16.5
Rest of Europe	0.9
Australia/New Zealand	7.3
North/South America	2.8
Africa	0
Student type	
High school student	1.8
Undergraduate	32.1
Postgraduate	66.1

2.3 Procedure

The questionnaire was amalgamated on wxj.cn. The link of it was subsequently posted on social media

(mainly on Wechat). Participants clicked on the link and then read through a brief introduction of the study and the consent form. After agreeing to take part in the study, they followed the instructions to finish a fixed serial of scales including some simple demographic questions, the Inventory of Parent and Peer Attachment-Revised (IPPA-R), the Difficulties in Emotion Regulation Scale-Short Form (DERS-SF) and Generalized Anxiety Disorder 7-item Scale (GAD-7). It took participants approximately 10 to 15 minutes to complete the scales. All participants were voluntarily engaged in the study. Those who were no longer willing to engage could quit the website at any time during their participation. Participants who have finished the test and successfully upload their data had a chance to get a small reward.

2.4 Measure

2.4.1 Inventory of Parent and Peer Attachment-Revised (IPPA-R)

As a self-reported scale, IPPA-R (Gullone, 2005) aims to measure how children, adolescents or young people perceive their attachment relationships with parents and peers. The instrument contains 28 items on the parent scale and 25 items on the peer scale. Only the parent scale items were used because the study aims to focus on attachment with parents. Participants were required to rate to which extent the item is consistent with their situation. A five-point Likert scale is used, where 1 represents 'almost never or never true' and 5 represents 'almost always or always true'. According to the scoring instruction (Armsden, 1989), the scale yielded a total score and 3 scores for subscales which consists of Trust (e.g., 'I trust my parents'), Communication (e.g., 'My parents help me to understand myself better.'), and Alienation (e.g., 'My parents expect too much from me.'). Also, the IPPA-R has shown good reliabilities (Cronbach's alpha ranging from 0.72 to 0.91) and convergent validity (Gullone, 2005; Armsden, 1989).

2.4.2 Difficulties in Emotion Regulation Scale-Short Form (DERS-SF)

The DERS-SF (Kaufman, 2016) is a shortened version of the Difficulties in Emotion Regulation Scale (DERS) (Gratz, 2004) which is widely used to examine possible emotion regulation deficits. This self-reported instrument consists of 18 items. The respondents were required to rate how frequently the items are consistent with their situations. This is a five-point Likert scale with response ranging from 1

Table 2: Descriptive statistical results for the main variables.

	M	SD	Minimum	Maximum
Attachment with parents	103.81	17.685	55	139
ER	43.07	10.079	23	67
Anxiety level	7.07	4.244	0	19

to 5 (1 represents almost never, 5 represents almost always). A total score was yielded as well as scores for 6 subscales (i.e., Strategies, Non-acceptance, Impulse, Goals, Awareness and Clarity). The DERS-SF has been shown sound psychometric properties across both adolescents and adult samples when comparing with the original version (Cronbach's alpha for total scale is 0.7 and for all subscales are between 0.78 and 0.91) (Kaufman, 2016).

2.4.3 The Generalized Anxiety Disorder 7-Item Scale (GAD-7)

The GAD-7 (Spitzer, 2006) is a 7-item self-reported instrument. It aims to assess potential clinical cases as well as the severity levels of the anxiety symptoms. The participants need to rate how frequently they have experienced the symptoms described by the items over the last 2 weeks. The scale uses 0 to represent 'not at all', 1 represents 'several days', 2 represents 'more than half the days' and 3 represents 'nearly every day'. A total score should be yielded by summing the scores of 7 items, which ranges from 0 to 21. Additionally, scores of 5, 10 and 15 represent mild, moderate and severe anxiety respectively. The GAD-7 has shown high reliabilities (e.g., high test-retest reliability) (Spitzer, 2006) and good convergent validity (Kroenke, 2007).

3 RESULT

3.1 Preliminary Analyses

All collected data were imported and analyzed by IBM SPSS Statistics Version 24. The descriptive results including means, standard deviations, the minimum and maximum of the scores of attachments with parents, ER as well as anxiety symptoms are listed in Table 2.

The preliminary analyses investigated whether there was any difference in the three main variables of males and females. These were conducted to examine whether gender should be controlled during the main statistical tests. Presented in Table 3, the results showed that gender had no influence on attachment, ER and the level of anxiety symptoms,

which means that this variable did not need to be controlled.

Table 3: The group differences of males and females in the main variables.

	t	df	Sig
Attachment with parents	0.717	107	0.475
ER	-0.937	107	0.351
Anxiety level	-0.708	107	0.481

3.2 Correlation

The results of correlation analyses were presented in Table 4. The scores of attachments showed a significant negative correlation with participants scores of ERs ($r=-0.345$, $p<0.01$). This indicated that individuals who had a more secure attachment with their parents tend to have fewer difficulties with ER than those with insecure attachment. Moreover, the difficulties in ER were positively related to the levels of anxiety ($r=0.55$, $p<0.01$), indicating that individuals who had more difficulties in ER were more likely to have more anxiety symptoms than those with better ER abilities. Also, there was a significant correlation between attachment security and anxiety level. Given that the coefficient was negative, more securely attached individuals would have lower level of anxiety symptoms ($r=-0.176$, $p<0.05$). However, individuals with insecure attachment tended to report more anxiety symptoms.

Table 4: The results of correlation between attachment security, ER and anxiety symptoms.

	Attachment with parents	ER	Anxiety level
Attachment with parents	-	-0.345**	-0.176*
ER	-	-	0.55**
Anxiety level	-	-	-

* $p<0.05$, ** $p<0.01$

3.3 Mediation

In order to investigate the mediating role of ER in the relationship between attachment and anxiety, the

PROCESS tool in SPSS was used. In accordance with Hayes (Hayes, 2009), 5000 resamples were generated. The main results of the mediation are presented in Figure 2. The attachment security with parents was a significant predictor of young adults' ER difficulties, $b=-0.196$, 95% CI [-0.299, -0.094], $t=-3.796$, $p<0.01$. It explained 11.9% variance in the difficulties in ER. Given that the coefficient was negative, more security during the attachment relationship indicated fewer difficulties in ER and vice versa. In the meanwhile, the difficulties in ER significantly predicted the levels of anxiety symptoms, $b=0.234$, 95% CI [0.162, 0.306], $t=6.426$, $p<0.01$. That is to say, individuals who reported more difficulties in ER tend to report higher levels of anxiety symptoms. After including ER as the mediator in the relationship model, the attachment was not a significant predictor of anxiety level, $b=0.004$, 95% CI [-0.037, 0.045], $t=0.180$, $p=0.857$. At this time, 30.3% variance in anxiety symptoms was explained by attachment security, which was larger than the model without ER as a mediator (3.1%). To sum up, there was a significant indirect effect of attachment security with parents on anxiety symptoms through the difficulties in ER, $b=-0.046$, 95% CI [-0.081, -0.018].

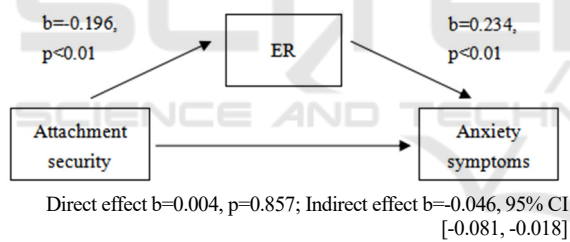


Figure 2: The result of mediation model.

4 DISCUSSION

The current study aimed to use the mediation model to investigate the mediating role of Chinese young adults' ER in the indirect pathway from attachment security with parents to the development of anxiety symptoms. Consistent with previous studies, the results showed that attachment security was negatively and directly related to anxiety; Further, this direct relationship turned to an indirect one when including ER as a mediator. At the same time, these results revealed how ER abilities would be significant for young adults' anxiety development and intervention, which could trace back to attachment relationships.

Previous studies have hypothesized that the difficulties in ER of individuals theoretically root in the attachment experience with parents (Cassidy, 1988; Fonagy, 2002; Thompson, 2001; Denham, 2010). Many empirical studies also proved that attachment security linked to ER abilities (Nolte, 2011; Crugnola, 2011; Thompson, 2007). Consistent with the evidence, the current model indicated that young adults with secure attachment reported themselves to be less difficult to regulate their emotions than those who were insecurely attached. Additionally, individuals who scored high on difficulties in ER also reported high levels of anxiety symptoms. This was in line with many other cross-sectional studies (Brumariu, 2012; Bender, 2015) that found such relation. Apart from these direct effects, results revealed that attachment security was indirectly related to anxiety and ER difficulties acted as a mediator within the indirect effect. Also, similar relationships were reported by some longitudinal studies, suggesting that children with insecure attachment had more difficulties in ER, which in turn led to more anxiety symptoms later in life (Brumariu, 2013; Bosquet, 2006).

However, some limitations need merit attention. Firstly, similar to many previous studies (Brumariu, 2012; Bender, 2015; Brumariu, 2013), this study relied on a self-reported scale to measure individuals' ER difficulties. Only a few studies employed other measurements rather than self-reported scales (i.e., physiological measures) (Bosquet, 2006; Hannesdottir, 2010; Sroufe, 2005). Researchers have argued that individual differences may influence the construct of ER to be complex, and such differences would be incapable for self-reported measurements to detect (Brumariu, 2013; Amstadter, 2008; Cole, 2004). Therefore, using multiple instruments to assess ER may be necessary and crucial for future studies to make the results more reliable, such as employing both physiological measures and self-reported ones (Esbjörn, 2012; Cole, 2004). Second, this study relied on cross-sectional data but not longitudinal data, which means that the interpretation of causal pathways between these variables should be cautious (Brumariu, 2012; Bender, 2015). Second, this study relied on cross-sectional data but not longitudinal data, which means that the interpretation of causal pathways between these variables should be cautious (Brumariu, 2012; Bender, 2015). Cross-sectional outcomes were not chronological, so it is unable to make sure the serial sequence or bi-direction of different variables (e.g., ER difficulties and the emergence of anxiety symptoms) (Brumariu, 2012). Moreover, changes occurred in ER and anxiety

followed by age (Bender, 2015), which were difficult to capture using cross-sectional data. Future studies can concentrate more on longitudinal studies to monitor possible changes in individuals' quality of attachment and ER abilities during various life stages, which would further explain the emergence and development of anxiety changing with age (Bender, 2015; Esbjørn, 2012; Cole, 2004).

In the meanwhile, some other questions remained to be studied. The present study only divided the attachment as secure/insecure dimensions. Several studies focused on specific classifications of insecure attachment in the interrelations, finding the pathway from different insecure attachment to anxiety were different. Brumariu and his colleagues (Brumariu, 2012) suggested that disorganized attachment was associated with some ER processes including a lack of active coping and increased catastrophizing interpretations. However, there was no significant correlation between ambivalent/avoidant attachment, ER and anxiety symptoms (Brumariu, 2012; Brumariu, 2013). Thus, the relationships of specific insecure attachment types, ER processes and anxiety deserve further study and more empirical replications. Additionally, while different gender groups showed no significant statistical differences in ER difficulties, this might be due to the small size of male participants (n=22) included in the study. That is to say, the study might lack enough statistical power to detect the gender differences between groups. The study conducted by Bender et al. (Bender, 2015) stated that compared to boys, girls reported more difficulties in ER and anxiety symptoms. However, when including gender within the structural equation model of the interrelationships between attachment security, ER and anxiety, gender did not have any impact. It is notable that another study investigated the sub-sample of the former research and found gender played a role in the relationship between specific processes of ER and anxiety levels (Bender, 2012). These give rise to the importance of further investigation into gender differences and specific subconstructs within the interrelationships between the three variables.

5 CONCLUSION

In summary, this study is a promising start for studying the relationship between young adults' attachment security with parents and anxiety levels that mediated by difficulties in ER. It extended the literature by testing an intact mediation model by including all three variables rather than just two. The

results showed that young adults who were securely attached to their parents tended to have fewer anxiety symptoms. And one possible explanation for this was they were better at regulating their emotions. On the contrary, insecurely attached individuals tended to report more anxiety due to more difficulties in ER. In addition, the sample in the present study was different from the majority of previous studies, which increased the generalizability of the relationships. At the same time, these findings are meaningful for clinical practices of young adults' anxiety symptoms. Effective attachment- and emotion-focused interventions may accordingly become important components of anxiety interventions to help young adults with different types of problems, such as emotion-focused cognitive behavioural therapy (ECBT) (Suveg, 2018), attachment-based family therapy (ABFT) (Siqueland, 2005) and emotion-focused couple therapy (Read, 2018). The author believes that future explorations of attachment security, ER and anxiety in more details would benefit our understandings of the development of anxiety symptoms and clinical practices.

REFERENCES

- American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th edition, 2013. doi: 10.1176/appi.books.9780890425596
- A. M. Albano, B. F. Chorpita, D. H. Barlow. Anxiety disorders. E. J. Mash, R. A. Barkley: Child psychopathology, 2nd edition, 2003, 270–329.
- A. Bittner, H. L. Egger, A. Erkanli, E. J. Costello, D. L. Foley, A. Angold. What do childhood anxiety disorders predict? *Journal of Child Psychology and Psychiatry*, 2007, 48(12), 1174–1183. doi: 10.1111/j.1469-7610.2007.01812.x
- A. F. Hayes. Beyond Baron and Kenny: Statistical mediation in the new millennium. *Communication Monographs*, 2009, 76, 408–420.
- A. Amstadter. Emotion regulation and anxiety disorders. *Anxiety Disorders*, 2008, 22, 211–221. doi: 10.1016/j.janxdis.2007.02.004
- B. H. Esbjørn, P. K. Bender, M. L. Reinholdt-Dunne, L. A. Munck, T. H. Ollendick. The Development of Anxiety Disorders: Considering the Contributions of Attachment and Emotion Regulation. *Clinical child and family psychology review*, 2012, 15(2), 129-143. doi: 10.1007/s10567-011-0105-4
- C. Colonnese, E. M. Draijer, G. J. J. M. Stams, C. Van der Bruggen, S. Bögels, M. J. Noom. The relation between insecure attachment and child anxiety: A meta-analytic review. *Journal of Clinical Child and Adolescent Psychology*, 2011, 40(4), 630–645. doi: 10.1080/15374416.2011.581623

- C. R. Crugnola, R. Tambelli, M. Spinelli, S. Gazzotti, C. Caprin, A. Albizzati. Attachment patterns and emotion regulation strategies in the second year. *Infant behavior & development*, 2011, 34(1), 136-151. doi: 10.1016/j.infbeh.2010.11.002
- C. Suveg, E. Sood, J. S. Comer, P. C. Kendall. Changes in emotion regulation following cognitive-behavioral therapy for anxious youth. *Journal of Clinical Child and Adolescent Psychology*, 2009, 38(3), 390-401. doi: 10.1080/15374410902851721
- C. Suveg, A. Jones, M. Davis, M. L. Jacob, D. Morelen, K. Thomassin, M. Whitehead. Emotion-Focused Cognitive-Behavioral Therapy for Youth with Anxiety Disorders: A Randomized Trial. *Journal of abnormal child psychology*, 2018, 46(3), 569-580. doi: 10.1007/s10802-017-0319-0
- D. K. Hannesdottir, & T. H. Ollendick. The role of emotion regulation in the treatment of child anxiety disorders. *Clinical Child and Family Psychology Review*, 2007, 10(3), 275-293. <https://doi.org/10.1007/s10567-007-0024-6>
- D. K. Hannesdottir, J. Doxie, M. A. Bell, T. H. Ollendick, C. D. Wolfe. A longitudinal study of emotion regulation and anxiety in middle childhood: Associations with frontal EEG asymmetry in early childhood. *Developmental Psychobiology*, 2010, 52(2), 197-204. doi: 10.1002/dev.20425
- D. L. Read, G. I. Clark, A. J. Rock, W. L. Coventry, J. M. Trombello. Adult attachment and social anxiety: The mediating role of emotion regulation strategies. *PLoS one*, 2018, 13(12), p.e0207514-e0207514. doi: 10.1371/journal.pone.0207514
- E. R. Walker, R. E. McGee, B. G. Druss. Mortality in mental disorders and global disease burden implications: A systematic review and meta-analysis. *JAMA Psychiatry*, 2015, 72, 334-341.
- E. Gullone, K. Robinson. The Inventory of Parent and Peer Attachment-Revised (IPPA-R) for children: a psychometric investigation. *Clinical psychology and psychotherapy*, 2005, 12(1), 67-79. doi: 10.1002/cpp.433
- E. A. Kaufman, M. Xia, G. Fosco, M. Yaptangco, C. R. Skidmore, S. E. Crowell. The Difficulties in Emotion Regulation Scale Short Form (DERS-SF): Validation and Replication in Adolescent and Adult Samples. *Journal of psychopathology and behavioral assessment*, 2016, 38(3), 443-455. doi: 10.1007/s10862-015-9529-3
- G. V. Polanczyk, G. A. Salum, L. S. Sugaya, A. Cay, L. A. Rohde. Annual research review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents. *Journal of Child Psychology and Psychiatry*, 2015, 56(3), 345-365. doi: 10.1111/jcpp.12381
- G. I. Roisman. The psychophysiology of adult attachment relationships: autonomic reactivity in marital and premarital interactions. *Developmental psychology*, 2007, 43, 39-53. doi: 10.1037/0012-1649.43.1.39
- G. Armsden, M. T. Greenberg. University of Washington: The Inventory of Parent and Peer Attachment (IPPA), Unpublished manuscript, 1989.
- H. B. Simpson, Y. Neria, R. Lewis-Fernandez, F. Schneier. Cambridge University Press: Anxiety disorders, theory, research, and clinical perspectives, 2010.
- J. Balázs, M. Miklósi, Á. Keresztény, C. W. Hoven, V. Carli, C. Wasserman, D. Cosman. Adolescent subthreshold-depression and anxiety: Psychopathology, functional impairment and increased suicide risk. *Journal of Child Psychology & Psychiatry*, 2013, 54, 670-677.
- J. Bowlby. Attachment. Basic Books: Attachment and Loss (Vol. 1), 1969.
- J. Bowlby. Attachment. Basic Books: Attachment and Loss (2nd ed., Vol. 2), 1982.
- J. Cassidy, R. R. Kobak. Avoidance and its relationship with other defensive processes. J. Belsky, T. Nezworski: *Clinical Implications of Attachment*, 1988, pp. 300-323.
- J. Bowlby. Separation, anxiety and danger. Basic Books: Attachment and Loss (Vol. 2), 1973.
- J. Cassidy. Emotion regulation: Influences on attachment relationships. *Monographs of the Society for Research in Child Development*, 1994, 59(2/3), 228-249. doi: 10.1111/j.1540-5834.1994.tb01287.x
- K. L. Gratz, L. Roemer. Multidimensional Assessment of Emotion Regulation and Dysregulation: Development, Factor Structure, and Initial Validation of the Difficulties in Emotion Regulation Scale. *Journal of psychopathology and behavioral assessment*, 2004, 26, 41-54. doi: 10.1023/B:JOBA.0000007455.08539.94
- K. Kroenke, R. L. Spitzer, J. B. W. Williams, P. O. Monahan, B. Löwe. Anxiety Disorders in Primary Care: Prevalence, Impairment, Comorbidity, and Detection. *Annals of internal medicine*, 2007, 146(5), 317-325. doi: 10.7326/0003-4819-146-5-200703060-00004
- L. E. Brumariu, K. A. Kerns. Parent-child attachment and internalizing symptoms in childhood and adolescence: A review of empirical findings and future directions. *Development and psychopathology*, 2010, 22(1), 177-203. doi: 10.1017/S0954579409990344
- L. E. Brumariu, K. A. Kerns, A. Seibert. Mother-child attachment, emotion regulation, and anxiety symptoms in middle childhood. *Personal relationships*, 2012, 19(3), 569-585. doi: 10.1111/j.1475-6811.2011.01379.x
- L. E. Brumariu, I. Obsuth, K. Lyons-Ruth. Quality of attachment relationships and peer relationship dysfunction among late adolescents with and without anxiety disorders. *Journal of Anxiety Disorders*, 2013, 27(1), 116-124. doi: 10.1016/j.janxdis.2012.09.002
- L. A. Sroufe. Attachment and development: A prospective, longitudinal study from birth to adulthood. *Attachment & Human Development*, 2005, 7(4), 349-367. doi: 10.1080/14616730500365928
- L. Siqueland, M. Rynn, G. S. Diamond. Cognitive behavioral and attachment based family therapy for anxious adolescents: Phase I and II studies. *Journal of anxiety disorders*, 2005, 19(4), 361-381. doi: 10.1016/j.janxdis.2004.04.006

- M. A. Crocq. (2017). The history of generalized anxiety disorder as a diagnostic category. *Dialogues in Clinical Neuroscience*, 2017, 19, 107–116.
- M. Mikulincer, P. R. Shaver, D. Pereg, D. Attachment theory and affect regulation: The dynamics, development and cognitive consequences of attachment-related strategies. *Motivation and Emotion*, 2003, 27(2), 77–102. doi:10.1023/A:1024515519160
- M. A. Brackett, S. E. Rivers, P. Salovey. Emotional intelligence: implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass*, 2011, 5(1), 88–103. doi: 10.1111/j.1751-9004.2010.00334.x
- M. Bosquet, B. Egeland. The development and maintenance of anxiety symptoms from infancy through adolescence in a longitudinal sample. *Development and Psychopathology*, 2006, 18(2), 517–550. doi: 10.1017/S0954579406060275
- N. R. Eaton, R. F. Krueger, K. E. Markon, K. M. Keyes, A. E. Skodol, M. Wall, D. S. Hasin, B. F. Grant, S. Goodman. The structure and predictive validity of the internalizing disorders. *Journal of Abnormal Psychology*, 2013, 122, 86–92. doi: 10.1037/a0029598
- P. Fonagy, M. Target. Early intervention and the development of self-regulation. *Psychoanalytic Inquiry*, 2002, 22(3), 307–335. doi: 10.1080/07351692209348990
- P. K. Bender, M. Sømhøvd, F. Pons, M. L. Reinholdt-Dunne, B. H. Esbjørn. The impact of attachment security and emotion dysregulation on anxiety in children and adolescents. *Emotional and behavioural difficulties*, 2015, 20(2), 189–204. doi: 10.1080/13632752.2014.933510
- P. M. Cole, S. E. Martin, T. A. Dennis. Emotion regulation as a scientific construct: Methodological challenges and directions for child development research. *Child Development*, 2004, 75(2), 317–333. doi: 10.1111/j.1467-8624.2004.00673.x
- P. K. Bender, M. L. Reinholdt-Dunne, B. H. Esbjørn, F. Pons. Emotion Dysregulation and Anxiety in Children and Adolescents: Gender Differences. *Personality and Individual Differences*, 2012, 53(3), 284–288. doi: 10.1016/j.paid.2012.03.027
- R. A. Thompson. Emotion Regulation: A Theme in Search of Definition. *Monographs of the Society for Research in Child Development*, 1994, 59(2–3), 25–52. doi: 10.2307/1166137
- R. A. Thompson. Childhood Anxiety Disorders from the Perspective of Emotion Regulation and Attachment. M. W. Vaseym, M. R. Dadds (Eds.): *The developmental psychopathology of anxiety*, 2001.
- R. A. Thompson, S. Meyer. Socialization of emotion regulation in the family. J. J. Gross (Ed.): *Handbook of emotion regulation* (pp. 249–268), 2007.
- R. Hershenberg, J. Davila, A. Yoneda, L. R. Starr, M. R. Miller, C. B. Stroud, B. A. Feinstein. What I like about you: The association between adolescent attachment security and emotional behavior in a relationship promoting context. *Journal of adolescence* (London, England.), 2010, 34 (5), 1017–1024. doi: 10.1016/j.adolescence.2010.11.006
- R. L. Spitzer, K. Kroenke, J. B., W. Williams, B. Löwe. A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Archives of internal medicine* (1960), 2006, 166(10), 1092–1097. doi: 10.1001/archinte.166.10.1092
- S. A. Denham, H. H. Bassett, T. M. Wyatt. Gender differences in the socialization of preschoolers' emotional competence. *New directions for child and adolescent development*, 2010, 128, 29–49. doi: 10.1002/cd.267
- T. Nolte, J. Guiney, P. Fonagy, L. C. Maye, P. Luyten. Interpersonal stress regulation and the development of anxiety disorders: An attachment-based developmental framework. *Frontiers in behavioral neuroscience*, 2011, 5, 55. doi:10.3389/fnbeh.2011.00055
- V. E. Cosgrove, S. H. Rhee, H. L. Gelhorn, D. Boeldt, R. C. Corley, M. A. Ehringer, S. E. Young, J. K. Hewitt. Structure and etiology of co-occurring internalizing and externalizing disorders in adolescents. *Journal of Abnormal Child Psychology*, 2011, 39, 109–123. doi: 10.1007/s10802-010-9444-8
- W. E. Copeland, A. Angold, L. Shanahan, E. J. Costello. Longitudinal patterns of anxiety from childhood to adulthood: The Great Smoky Mountains Study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 2014, 53, 21–33. doi: 10.1016/j.jaac.2013.09.017
- Y. O. Hyung. A Structural Relationship among Parental Attachment, Emotional Intelligence, Social Skill and Peer Relations of Early Adolescents. *The Korean Society for Child Education*, 2020, 29(2), 67–90. doi: 10.17643/KJCE.2020.29.2.04
- Z. Steel, C. Marnane, C. Iranpour, T. Chey, J. W. Jackson, V. Patel, D. Silove. The global prevalence of common mental disorders: A systematic review and meta-analysis 1980–2013. *International Journal of Epidemiology*, 2014, 43, 476–493. doi: 10.1093/ije/dyu038