

EXAMINING THE PREDICTORS OF DEPRESSIVE SYMPTOMS AMONG ADOLESCENTS AT FEDERAL TERRITORY OF PUTRAJAYA, MALAYSIA

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ABSTRACT: *The study aims to determine parental bonding, emotional and behavioral difficulties, and personality traits as predictors of depressive symptoms among adolescents at Federal Territory of Putrajaya. Based on Depression Life Span Model, all the factors are vulnerability that lead to depression. A set of standardized questionnaires were used to measure parental bonding, emotional and behavioral difficulties, personality traits and depressive symptoms. Around 236 adolescents from two secondary schools of Federal Territory of Putrajaya have been chosen as participants in this study. Results showed that depressive symptoms were significantly correlated with mother and father care, neuroticism, conscientiousness, emotional symptoms, conduct problems, and hyperactivity-inattention. Two factors emerged as predictors of depressive symptoms were emotional symptoms and mother care. Implications of this study in terms of situational and contextual were also discussed.*

Key Words: Adolescents; SDQ; parental bonding; personality; mental health; Malaysia

INTRODUCTION

Depression studies are popular since 30 years ago and it is related to the social and the psychological factors [1]. Based on the World Health Organization [2], depression is the mental disorder that today is generally and globally happened with 350 million people experienced on it. In Malaysia itself, the prevalence of the depression reported 15.6% higher than previous year with the 400,227 of the mental health patients and the number is increasing over the year (Ministry of Health Malaysia, 2010). It becomes the most serious mental health problem that can be negatively affected to the individual life and difficulties include the working habits and school performance but also affected the family institution. Nevertheless, the assessment of the depression among adolescent were more challenging and it called masked depression or depressive equivalents [3]. These concepts explained that the depression among adolescents concealed of the hyperactivity-inattention, educational problems, truancy [4, 5], fatigue, problem to focus, health problems, and other psychosomatic problems [3, 6].

The psychological control and aggressiveness of adolescents are related to the depression [7]. The study found that the aggressiveness of adolescents was related to the feeling of anger and revolt in them. Besides, the overprotection of parents and the lack of communication also effect the emotional among child especially for adolescents. The changing trend of parents going out to work and the lack of time spending together was effected the relation of child. Though the adolescents seem to be independent but they need more attention and close relationship to the parents as guidance and supportive [8]. Other researchers also found that the parental bonding is the most important over the lifetime [9].

Besides the parental bonding, the interest in personality variables have arisen that might contribute to the vulnerability of depression [10]. The finding of the longitudinal research of personality traits as mediator of depressive symptoms provided the evidence that there were correlated to each other [11]. There are other researchers found that some of the five dimensions of personality traits (neuroticism, extraversion, conscientiousness, agreeableness, openness) were correlated to the depressive symptoms [12–14].

Another research had examined the other factors of

depression among adolescence. Researcher [15] have studied that the risk of depression among adolescence, the behaviour problems, antisocial, the alcohol addicted and the prevention. The results showed the risk of depression has the relationship with the internal and the external psychopathology that received. That means that the adolescence not faced the depression symptoms if the higher psychopathology behaviour were reported. Hence, the stability of the mental health of adolescence predicted the lower negative impact.

Researchers [16] suggested the emphasized of the mental health study. The mental health study for 2863 family with the 7-17 years children found the new phenomena which reported 10% to 20% of the emotional symptoms and conduct problems. Using the Strength and Difficulties Questionnaire (SDQ), the result proved the huge impact of the problems to the family institution, school functioning and peers. Researchers [17] found the similar result in their studies to the 1407 children from Klang Valley, Malaysia. The result was higher than the Western sample as United Kingdom [18] with the 5% reported the 'abnormal' emotional symptoms and conduct problems and the other 10% in 'borderline' abnormal. Although the research of the parental bonding and the depressive symptoms are popular among the sample of adolescents of western countries, but in Malaysia, it was quite new especially in this population. This is because, the earlier research seems most interested in the behaviour problems rather than the internal difficulties of the adolescents [19]–[21]. Additionally, this study also measures the emotional symptoms and difficulties among adolescents using the Strength and Difficulties Questionnaire (SDQ). Thus, the present study aimed to fill a gap by this research on identifying the possible links between the different types of bonding, personality traits, emotional symptoms and difficulties to the depressive symptoms in the normal population.

METHOD

Participants

The participants in this study were aged 16 years who were form four students of secondary school from the Federal Territory of Putrajaya, Malaysia. 236 adolescents of two schools were chosen and completed a set of questionnaire. Of this total, 39.4% (n = 93) were male students and the rest 60.6% (n = 143) were female. Among the participants, there

were 99.6% (n = 235) Malays and only 0.04% (n = 1) participants are Indian. Based on that, the Malay language was the primary language for the participants and all the instruments were translated to their spoken language. Participants were confirmed as respondents based on the responses of the parents' consent form given before the day of assessment. The numbers of participants were 83.2% out of the all populations of form four students in the two schools.

Measures

The questionnaire utilized assessed the demographic particulars, personality traits, parental bonding, strengths and difficulties, and depression. The questionnaires were translated into Malay version as the first language of the participants. All of the questionnaires used in this study were tested in a pilot study to assess the internal consistency of items.

The Big Five Inventory (BFI) [22] was used to measure personality traits. The 10 items rated on a five-step scale from 1 = "disagree strongly" to 5 = "agree strongly" that measure the five domains of personality traits that are extraversion, agreeableness, openness, neuroticism, and conscientiousness. Participants were asked to identify the number of disagreements over each statement in the questionnaires and start answer the questions with the statement: "I see myself as someone who... is reserved; is generally trusting or tends to be lazy". BFI-10 is the short version of BFI-44 and reported the slightly different of the 6-weeks mean retest stability coefficient .75 compared to BFI-44 that was .85 [23].

The Parental Bonding Instrument (PBI) [24] is a self-report judgment on measuring the parenting behaviour of parents. The terms used in this measure are 'care' (showing affection, warmth, and nurturance) and 'overprotection' (being intrusive). The PBI consists of 25 items includes 12 items referred as care (items 1, 2, 4-6, 11, 12, 14, 16-18, 24) and 13 items referred as overprotection (items, 3,7-9, 10, 13, 15, 19-23, 25). The PBI has well to excellent internal consistency, with split half reliability coefficients of .88 for care and .74 for overprotection, as well as good stability, with 3-weeks test-retest correlations of .76 for care and .63 for overprotection. It is scored on a Likert-type scale ranging from 1 (very unlike) to 4 (very like). Items 2-4, 7, 14-16, 18, 21-25 are reversed-scored. The 12 items of the care subscales allow a maximum score of 48 and the 13 items of the overprotection subscale allow a maximum score of 52 [24].

The Strength and Difficulties Questionnaire (SDQ) is a brief questionnaire developed by Goodman et al. [18] to assess psychological adjustment of children and adolescents. There are three versions of the SDQ: a parent, a child self-report and adolescent self-report version. This version can be completed independently by 11 - 16 years old. SDQ is very short instrument with 25 items that comprise 5 scales of 5 items each: emotional symptoms, conduct problems, hyperactivity, peer problems and prosocial behaviour. Examples of some items in use include 'often complains of headaches and many worries' for emotional symptoms scale, 'often has temper tantrums or hot tempers and generally obedient' for conduct problems scale, 'restless, overactive and constantly fidgeting or squirming' for hyperactivity scale,

'rather solitary, tends to play alone and has at least one good friend' for peer problems scale and 'considerate of people's feelings and shares readily with other children' for prosocial scale. Each item uses a 3-point ordinal Likert scales (0 = not true, 1 = quite true, 2 = true). The higher scores indicate more problematic attributes for all the 25 items. The sum of SDQ scores that computed by adding scores of impact can be presented by categories the scores with the initial bandings were 'normal', 'borderline' and 'abnormal'. The previous user of SDQ has reported the good reliability .60 for the total difficulties [25].

The Malay Version of General Health Questionnaire (GHQ) [26] was used in this study. The instrument has been validated in the local population of Malaysia that using English and Malays versions. It is a self-reporting questionnaire that was widely used internationally and locally to detect those likely to have or to be risk of developing psychiatric disorder and measure of mental health status especially in detection of emotional disorders such as distress. The GHQ-30 items are consists of broad symptoms of psychiatric disorders in the general population. It takes less than 5 minutes to complete. Examples of some items in use include 'Have you found at times you couldn't do anything because your nerves were too bad?', 'Have you been getting scared or panicky for no good reason?', and 'Have you been losing confidence in yourself?' Each item is accompanied by four possible responses that using the binary method: Not at all score, and no more than usual score as 0, and rather more than usual, and much more than usual score 1. The GHQ-30 has good test-retest reliability of Malay version with the reported the Cronbach's alpha was .93 [27].

Procedures

The investigators requested for all form four students to fill the questionnaires initially, but 48 participants were absent for the session was held in a hall. All participants were explained about the confidentiality of the information in the questionnaires. No information about the names and addresses needed in the questionnaires. Data was collected by guided self-administered questionnaire. The participants were given 30 minutes to complete the questionnaire with five sections included the demographic particulars. The completed questionnaire submitted on the same day of the assessment. The investigators obtained permission and clearance from the School of Psychology and Human Development, University Kebangsaan Malaysia (the National University of Malaysia) and Ministry of Higher Education of Malaysia.

Ethics Permission

The ethical permission had approved by the formal research ethics committee for social scientist researchers at University Kebangsaan Malaysia (the National University of Malaysia) that was granted by the Research Committee of Faculty of Social Sciences and Humanities. We followed the standard guidelines for conducting empirical research. All the parents of participants filled up the inform consent with the guaranteed of confidentiality and anonymity.

RESULTS**Correlation of parental bonding and depressive symptoms****Table 1. Correlation of parental bonding and depressive symptoms**

Variables	Depressive symptoms	p < 0.05
Mother care	-.30*	.00
Overprotection mother	.01	.89
Father care	-.26*	.00
Overprotection father	.06	.38

*. Correlation is significant at the 0.05 level (2-tailed)

As shown in Table 1, the correlation of the mother and father care in the sample was positive but both presented the different level of correlation where for the mother care the correlation was moderate whereas the father care correlation was low. According to the results of the mother and father care indicated that both care were positively related to depressive symptoms.

However, no significant correlation was found between overprotection mother and father and subsequent depression (Table 1). The result of the parental bonding shows that an adolescent appears to be greater risk for developing depression when the mother or father shows the lack of care.

Correlation of personality traits and depressive symptoms**Table 2. Correlations of personality traits and depressive symptoms**

Variables	Depressive symptoms	p < 0.05
Extraversion	-.10	.11
Agreeableness	-.13*	.05
Conscientiousness	-.28*	.00
Neuroticism	.29*	.00
Openness	.00	.97

*. Correlation is significant at the 0.05 level (2-tailed)

Further analysis was carried out to find out if personality trait of adolescent has correlation to depressive symptoms. According to the personality dimensions, agreeableness, conscientiousness and neuroticism were positively related to depressive symptoms (Table 2). These results indicated that adolescents with the three personality traits would be in greater risk for the depression. No significant correlation was found between personality trait extraversion and openness to depressive symptoms.

Correlation of emotional symptoms and difficulties to depressive symptoms**Table 3. Correlations of emotional and behavioral difficulties to depressive symptoms**

*. Correlation is significant at the 0.05 level (2-tailed)

Variables	Depressive symptom	P < 0.05
Emotional symptoms	.47*	.00
Conduct problems	.23*	.00
Hyperactivity	.24*	.00
Peer problems	.08	.23
Prosocial behavior	-.05	.49

Table 3 presents results of correlation between emotional symptoms and difficulties to depressive symptoms. The results showed that emotional symptoms, conduct problems and hyperactivity were positively correlated to depressive symptoms. The result indicated that if an adolescent reported

the higher score of each of the three symptoms, would be the higher depressive symptoms occurred. Results of contrast for peer problems and prosocial behaviour where no significant correlations to the depressive symptoms were showed in the Table 3.

Regressions of the parental bonding, personality traits, emotional symptoms and difficulties over depressive symptoms**Table 4. Regressions of parental bonding, personality traits, emotional and behavioural difficulties**

Model	B	Beta	t	Sig.
(constant)	2.779		4.010	.000
Emotional symptoms	.986	.474	8.226	.000
(constant)	8.397		4.466	.000
Emotional symptoms	.881	.423	7.220	.000
Mother care	-.185	-.188	-3.204	.002

Further analysis was carried out to determine the predictors of depressive symptoms of adolescents. In table 4 the regression results of the parental bonding, personality traits, emotional symptoms and difficulties over depressive symptoms can be observed. The analysis found two predictors of depressive symptoms to the sample that are emotional symptoms and mother care. The proportion of explained variance was 25.7% (Table 4).

DISCUSSION

The present study aimed to identify the possible links between different types of bonding, and personality traits of depressive symptoms. We also examined the relations of emotional symptoms and difficulties to the depressive symptoms in normal population. Our results showed that two aspects of parental bonding reflected to the depressive symptoms (mother care and father care). The findings were in line with that previous research which agreed that parental bonding as predisposing factors for future depression or other forms of psychopathology [28]. The other researcher suggested that the important of cognitive adjustment to the social development and the cognitive of adolescent [29]. Based on the finding of the present study, mother care seems to be more important to the father care where the result reported the moderate correlation to depressive symptoms rather than the low correlation of the father. That means that the father behaviour seems to be the low impacts to the depressive and the mother care is more impressed to the depressive symptoms. However, the mother and father were important to the development of adolescent. Based on the Working Models theory, Bowlby [30] suggested that the parents must play the important role in the emotional development of their child to make sure their need are not threatened. Therefore, if the parents failed to show the love by care of their child, it will impact the conflict and psychological stress of the child.

On the other hand, both mother and father overprotection were found unrelated to the depressive symptoms based on the no significant correlation reported in the present study. That means that parental overprotection does not seem to increase or decrease the chances of adolescents to get the depressive symptoms. In accordance with previous research studies, parental overprotection was no correlation to the psychological cognitive of adolescents and their emotional distress [31], [32].

Moreover, in the present study also examined the relation between personality traits and the depressive symptoms. The results showed that the personality dimensions agreeableness, neuroticism and conscientiousness were correlated to the depressive symptoms. The finding was confirmed the previous research studies that the neuroticism and conscientiousness were related to the major depressive risk and neuroticism was the predictor of depression [12], [33]. There were many research findings with the same results where the neuroticism was the factor to the individual internal disorder [26], [34]–[38]. Neuroticism was found as predictors to the mental health problems and the impact was high to the individual life [39]. Beside, this study also found that the lower score for the conscientiousness also correlated to the mental health but the correlation was lower than the neuroticism. The result coincide to the present study that there was a significant negative correlation between conscientiousness and depressive symptoms. That means the lower conscientiousness will be the higher depressive symptoms occurred.

These findings are in accordance with the other previous research that found the correlation between agreeableness and depressive symptoms [40]. The research study examined the psychotic adolescents and also found that no significant correlation of the personality traits extraversion and openness to the depressive symptoms among them.

In the present study also used the SDQ to measure the emotional symptoms and the difficulties of adolescents. Based on the five scales were examined, the findings showed the correlations between three scales there are emotional symptoms, conducts problems and hyperactivity to the depressive symptoms. Conversely, the other two scales were unrelated to the depressive symptoms. The findings were consistent to the previous research that the increasing of the emotional symptoms is defected by the conduct problems, hyperactivity and the peer problems [41]. The other earlier research also found that the conduct problems were highly correlated to the problems occurred in adolescents and also the predictors of emotional distress. Conduct problems and the emotional symptoms reported will be increasing the negative risk of adolescents. The finding of this research also found that the interaction problems with the peers seems no relation to the increasing of the emotional distress to the adolescents within age 11 to 18 years.

An important strength of this study is the examined of predictors of depressive symptoms of adolescents. The result found the emotional symptoms and the mother care as the factors of depressive symptoms. Most studies also agreed that the mother care are important and give the higher effect to the development of adolescents [42–44].

Implications of the study

The study of parental bonding was important on strengthening the relation among the parents and the child. That would also can prevent the other problems ahead such the emotional symptoms, conduct, peer, and hyperactivity problems while to increase the prosocial behaviour of adolescents. The emotional support makes the child with the higher adjustments of the stressful life events rather than the

others perceived the lack of attention from their support systems.

This present study was evidence to support and suggest the best parenting with the prosperous emotional outcome. The finding gave the positive implications to the professionals such as psychologist and school counsellors to assess the relationship of the parents and the students for further attentions.

Limitations

This study was subject to certain limitations. The limitations must be taken into consideration in the future studies. First, only two schools of the Federal Territory of Putrajaya were involves in this study out of ten. The finding regarding the sample size in this study was only can be representing the population of the Federal Territory of Putrajaya and the generalization for this study is restricted. Second, the life events of the adolescents were not measure in this study to further the assessment of the depressive symptoms and the parental bonding that they perceived. Third, the samples of this study were the adolescents of the normal daily school and faced the same routine among others. Future studies may concentrate to the big size of sample, and recommended to differentiate the investigation among the normal daily school student with the boarding school students who were separated from their parents and also include the life events assessment.

CONCLUSION

This study is the first examine to the population and it seems give the impact to the individual comprehensively. This study provides the evidence for the relation between parental bonding, personality traits and the strength and difficulties to depressive symptoms. We conclude that this study have support the suggestions and the findings of the other previous research. The findings of this study were meaningful for the interventions for the parents and adolescents for further insight.

REFERENCES

- [1]. Harris, T. (2003). Depression in women and its sequelae. *Journal of Psychosomatic Research*, 54, 103–112.
- [2]. WHO. (n.d.).
- [3]. Dacey, J., & Kenny, M. (1997). *Adolescent development. USA: Brown & Benchmark Publishers.*
- [4]. Kauffman, J. M. (2001). *Characteristics of Emotional and Behavioral Disorders of Children and Youth.* Englewood Cliffs, NJ: Merrill Prentice-Hall.
- [5]. Erickson, M. T. (1992). *Behavior Disorders of Children and Adolescents: Assessment, Etiology and Intervention.* Englewood Cliffs, NJ: Prentice-Hall Inc.
- [6]. Ingersoll, G. M. (1989). *Adolescence* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall, Inc.
- [7]. Morris, A.S., Cui, L., & Steinberg, L. (2013). *Parenting research and themes: What have learned and where to go next. In Larzere RE, Morris A, Harrist AW, editors. Authoritative parenting: Synthesizing nurturance and discipline for optimal child development.* American Psychological Association; Washington, DC US.

- [8]. Ungar, M. (2004). The importance of parents and other caregivers to the resilience of high risk adolescents. *Family Process*, 43(1), 23–41.
- [9]. Rice, K.G., & Whaley, T. J. (1994). A short-term longitudinal study of within-semester stability and change in attachment and college student adjustment. *Journal of College Student Development*, 35, 324–328.
- [10]. Parker, G. (1993). Parenting rearing style: examining for links with vulnerability factors for depression. *Social Psychiatry Epidemiology*, 28, 97–100.
- [11]. Chow, P. I., & Roberts, B. W. (2014). Examining the relationship between changes in personality and changes in depression. *Journal of Research in Personality*, 51, 38–46.
- [12]. Kendler, K. S, Gatz M, Gardner C, & P. N. (2006). A Swedish National Twin Study of Lifetime Major Depression. *Am J Psychiatry*, 163, 109– 114.
- [13]. Kendler, K.S., Myers, J. (2010). The genetic and environmental relationship between major depression and the five-factor model of personality. *Psychological Medicine*, 40, 801–806.
- [14]. Kotov, R., Gamez, W., Frank Schmidt, F., & Watson, D. (2010). Linking “Big” Personality Traits to Anxiety, Depressive, and Substance Use Disorders: A Meta-Analysis. *Psychological Bulletin*, 136(5), 768–821.
- [15]. Monahan, K. C., Oesterle, S., Rhew, I. & Hawkins, J. D. (2014). The Relation between Risk and Protective Factors for Problem Behaviors and Depressive Symptoms, Antisocial Behavior, and Alcohol Use in Adolescence. *J. Community Psychol*, 42, 621–638.
- [16]. Ravens, S. U, Kurth, B-M, KiGGS study group, & B. study group. (2008). The mental health module (BELLA study) within the German Health Interview and Examination Survey of Children and Adolescents (KiGGS): study design and methods. *European Child Adolescent Psychiatry*, 17, 10–21.
- [17]. Gomez, R., & Suhaimi, A. F. (2013). Incidence rates of emotional and behavioral problems in Malaysian children as measured by parent ratings of the Strengths and Difficulties Questionnaire. *Asian J. Psychiatry*, 6(6), 528–531.
- [18]. Goodman, R., Meltzer H., & Bailey, V. (1998). The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version. *European Child and Adolescent Psychiatry*, 7, 125–130.
- [19]. Andrade, B. F., & Tannock, R. (2014). Sustained Impact of Inattention and Hyperactivity-Impulsivity on Peer Problems: Mediating Roles of Prosocial Skills and Conduct Problems in a Community Sample of Children. *Child Psychiatry Hum*, 45, 318–328. <http://doi.org/10.1177/1087054712437580>
- [20]. Wolke, D., Woods, S, Bloomfield, L., & Karstadt, L. (2000). The Association between Direct and Relational Bullying and Behavior Problems among Primary School Children. *J. Child Psychol. Psychiatry*, 41(8), 989–1002.
- [21]. Cao, F., & Su, L. (2007). Internet addiction among Chinese adolescents: prevalence and psychological features. *Child: Care, Health and Development*, 33(3), 275–281.
- [22]. Gosling, S. D., Rentfrow, P. J., & Swann, W. B., J. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37, 504–528.
- [23]. Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, 41, 203–212.
- [24]. Parker, G., Tupling, H., & Brown, L. B. (1979). A parental bonding instrument. *British Journal of Medical Psychology*, 52, 1–10.
- [25]. Riso, D. D., Salcuni, S., Chessa, D., Raudino, A., Lis, A., & Altoe, G. (2010). The Strengths and Difficulties Questionnaire (SDQ). Early evidence of its reliability and validity in a community sample of Italian children. *Personality and Individual Differences*, 49, 570–575.
- [26]. Goldberg, D. P., Krueger, R. F., Andrews, G., & Hobbs, M. J. (2011). Emotional disorders: cluster 4 of the proposed meta-structure for DSM-V and ICD-11. *Psychology Med*, 39, 2043–2059.
- [27]. Y., M. S. B. (2010). The sensitivity, specificity and reliability of the Malay version 30-item General Health Questionnaire (GHQ-30) in detecting distressed medical students. *Education in Medicine Journal*, 2(1), 12–21.
- [28]. Avagianou, P-A, & Zafiropoulou, M. (2008). Parental bonding and depression: Personality as a mediating factor. *International Journal Adolescent Med Health*, 20(3), 261–269.
- [29]. Kraaij, V., Garnefski, N., de Wilde, E. J., Dijkstra, A., Gebhardt, W., Maes, S., & ter Doest, L. (2003). Negative life events and depressive symptoms in late adolescents: bonding and cognitive coping as vulnerability factors? *Journal Longitudinal Study. Aging and Mental Health*, 6, 275–281.
- [30]. Bowlby, J. (1969). *Attachment and loss*. New York: Basic Books.
- [31]. Sideridis, G. D., & Kafetsios, K. (2008). Perceived parental bonding, fear of failure and stress during class presentations. *International Journal of Behavioral Development*, 32(2), 119–130.
- [32]. Bourne, K., Berry, K., & Jones, K. (2014). The relationship between psychological mindedness, parental bonding and adult attachment. *Psychology Psychotherapy*, 87(2), 77–167.
- [33]. Tully, P. J., Wardenaar, K. J., & Penninx, B. W. J. H. (2015). Operating characteristics of depression and anxiety disorder phenotype dimensions and trait neuroticism: A theoretical examination of the fear and distress disorders from the Netherlands study of depression and anxiety. *Journal of Affective Disorders*, 174, 611–618.
- [34]. Brown, T.A., & Barlow, D. H. (2009). Proposal for a dimensional classification system based on the shared features of the DSM-IV anxiety and mood disorders:

- implications for assessment and treatment. *Psychol. Assess*, 21(3), 256–271.
- [35]. Eaton, N.R., Krueger, R.F., Markon, K.E., Keyes, K.M., Skodol, A.E., Wall, M., Hasin, D.S., & Grant, B. F. (2013). The structure and predictive validity of the internalizing disorders. *Journal Abnormal Psychology*, 122(1), 86–92.
- [36]. Karsten, J., Penninx, B.W.J.H., Riese, H., Ormel, J., Nolen, W.A., & Hartman, C. A. (2012). The state effect of depressive and anxiety disorders on big five personality traits. *Journal Psychiatry Res*, 46(5), 644–650.
- [37]. Watson, D. (2009). Differentiating the mood and anxiety disorders: a quadripartite model. *Annual Rev.Clin.Psychol*, 5, 221–247.
- [38]. Wright, A.G., Krueger, R.F., Hobbs, M.J., Markon, K.E., Eaton, N.R., & Slade, T. (2013). The structure of psychopathology: toward an expanded quantitative empirical model. *J. Abnormal Psychology*, 122(1), 281–294.
- [39]. Ormel, J., Jeronimus, B. F., Kotov, R., Riese, H., Bos, E. H., Hankin, B., Rosmalen, J. G. M., & Oldehinkel, A. J. (2013). Neuroticism and common mental disorders: Meaning and utility of a complex relationship. *Clinical Psychology Review*, 33, 686–697.
- [40]. Wiltink, S., Nelson, B., Velthorst, E., Wigman, J. T. W., Lin, A., Baksheev, G., ... & Yung, A. R. (2015). The relationship between personality traits and psychotic like experiences in a large non-clinical adolescent sample. *Personality and Individual Differences*, 73, 92–97.
- [41]. Dean, J. G., & Stain, H. J. (2010). Mental health impact for adolescents living with prolonged drought. *Australian Journal of Rural Health*, 18, 32–37.
- [42]. Aviezer, O., Sagi, A., Resnick, G., & Gini, M. (2002). School competence in young adolescence: Links to early attachment relationships beyond concurrent self-perceived competence and representations of relationships. *International Journal of Behavioral Development*, 26, 397–409.
- [43]. Freudenstein, O., Zohar, A., Apter, A, Shoval, G., Weizman, A., & Zalsman, G. (2011). Parental bonding in severely suicidal adolescent inpatients. *European Psychiatry*, 26(8), 504–507.
- [44]. Meites, T. M., Ingram, R. E., & Siegle, G. J. (2012). Unique and Shared Aspects of Affective Symptomatology: The Role of Parental Bonding in Depression and Anxiety Symptom Profile. *Cognitive Therapy Res*, 36, 173–181.