

Depression in Adolescence:  
The Role of Emotional Stability and Parental Behavioral Control.

Kara, L. E. Jessen

<sup>a</sup>Utrecht University

Utrecht, the Netherlands

University Utrecht

Master Psychology, Child and Adolescent Psychology

THESIS

Depression in Adolescence:

The Role of Emotional Stability and Parental Behavioral Control.

Kara, L. E. Jessen, 3412679

21 - 06 - 2012

First assessor: R. R. Chhangur

Second assessor: J. Weeland

### **Abstract**

*Depression is a serious and widespread problem. It is important to examine depression, because relapse rates are high and depression is a risk factor for suicide. In this five wave longitudinal study we studied to what extent emotional stability moderates the relationship between parental behavioral control and depression. In addition, we examined the influence of parental behavioral control and emotional stability on depression over the course of adolescence. There were 281 adolescents who participated in all five waves. The statistical analyses showed that emotional stability and depression has a negative relationship. No relation was found between parental behavioral control and depression. Furthermore, the results have shown that emotional stability did not moderate the relationship between parental behavioral control and depression. Future research could examine if there are differences of influence of parental behavioral control on adolescents with a depression disorder and adolescents with only depressive symptoms.*

*Depressie is een serieus en wereldwijd probleem. Het is belangrijk om depressie te onderzoeken, omdat de kans op terugval groot is en depressie een risicofactor voor zelfmoord is. In deze longitudinale studie van vijf waves hebben we onderzocht in welke mate emotionele stabiliteit de relatie tussen ouderlijke gedragscontrole en depressie modereert. Bovendien hebben we de invloed van ouderlijke gedragscontrole en emotionele stabiliteit op depressie onderzocht in de loop van de adolescentie. Er hebben 281 adolescenten aan alle vijf de waves deelgenomen. Statistische analyses lieten zien dat emotionele stabiliteit en depressie een negatieve relatie hebben. Er is geen relatie gevonden tussen ouderlijke gedragscontrole en depressie. Verder lieten de resultaten zien dat emotionele stabiliteit de relatie tussen ouderlijke*

*gedragscontrole en depressie niet modereert. Toekomstig onderzoek kan onderzoeken of er een verschil is in de invloed van ouderlijke gedragscontrole op adolescenten met een depressieve stoornis en adolescenten met alleen depressieve symptomen.*

**Keywords:** *Adolescence, Depression, Parental Behavioral Control, Emotional Stability*

### Depression in Adolescence:

#### The Role of Emotional Stability and Parental Behavioral Control.

Depression is a serious and widespread problem (Hamza & Willoughby, 2011). People who suffer a depression, feel down and worthless, have loss of energy, and diminished interest and pleasure in almost all daily activities (American Psychiatric Association, 2000; Wenar & Kerig, 2005). It is important to examine depression, because relapse rates are high and depression is a risk factor for suicide (Wenar & Kerig, 2005). Depression can be present in all phases of life, particularly in adolescence (Rutter, 1986; Wenar & Kerig, 2005). Approximately, 11%-14% of those adolescents lie in the clinical range of depression (Wenar & Kerig, 2005). However, research found significant differences between boys and girls. On average, boys showed 20%-46% of the symptoms related to depression, whereas girls showed 25%-59% of the symptoms (Wenar & Kerig, 2005). The increase of depression during adolescence is due to many changes during this period (Diclemente et al., 2001; Wenar & Kerig, 2005). Because depression is accompanied by a lot of additional problems as lower levels of self-esteem, lower levels of self-efficacy, relationship functioning, physical well-being, school performance, risk for suicide (Wenar & Kerig, 2005), it is important to know which factors will cause depression and which factors can decrease depressive symptoms.

Currently, risk factors for depression in adolescents have been studied extensively (e.g., Liber, Faber, Treffers & van Loey, 2008; Pettit, Laird, Dodge, Bates & Criss, 2001; Sagrestano, Paikoff, Holmbeck & Fendrich; Vaszonyi & Belliston, 2006; Wenar & Kerig, 2005; Yu et al., 2006). One important predictor of adolescent depression is the family environment of the adolescent (Sagrestano et al., 2005; Vaszonyi & Belliston, 2006). A lot of factors within the family environment can lead

to depressive symptoms. There is evidence that parental warmth and acceptance, closeness, support, and communication are negatively related to depression (Vaszonyi & Belliston, 2006), whereas a lack of these factors are related to an increase in the development of depressive symptoms (Vaszonyi & Belliston, 2006). Furthermore, a positive relation was found between conflicts with parents and depressed mood, in that a lot of conflicts with parents leads to more depressive symptoms (Formoso, Gonzales & Aiken, 2000; Vaszonyi & Belliston, 2006).

Parental behavioral control, also called parental monitoring, consists of parental behaviors that attempt to structure or control children's behavior (Barber, 1996; Bean, Barber & Crane, 2006; Pettit et al., 2001; Stattin & Kerr, 2000). Parents regulate the behavior of their child, set up rules and restrictions and have knowledge of their child's day-to-day behavior (Barber, 1996; Barber, Olsen & Shagle, 1994; Jacobson & Crockett, 2000; Pettit et al., 2001; Smetana, 2008). Behavioral control by parents plays an important role in the lives of children and adolescents (Lamborn & Felbab, 2003; Smetana, 2008). Several studies found that behavioral control is related to internalizing behavioral problems (Barber et al., 1994; Fröjd, Kaltiala-Heino & Rimpelä, 2007; Hamza & Willoughby, 2011), such as depression (Formoso et al., 2000; Hamza & Willoughby, 2011) and anxiety (Pettit et al., 2001; Yu et al., 2006). However, there are no consistent results regarding the relation between behavioral control and depression. While several studies found a significant negative relation between both variables, other studies did not (Muris, Schmidt, Lambrichs & Meesters, 2001; Vaszonyi & Belliston, 2006). Hence, there is little unanimity about the impact of behavioral control on internalized problems of adolescents (Bean et al., 2006).

Emotional stability is a personality trait that refers to the extent that people's moods and emotions change (Gazzaniga & Heatherton, 2006). A high emotional

stability can be seen as the ability to deal with negative emotions in an effective manner (Barbaranelli, Caprara, Rabasca, & Pastorelli, 2003; Klimstra, Crocetti, Hale, Fermani, & Meeus, 2011). These people are often calm, relaxed and stable, while people with low emotional stability (i.e., neuroticism) are moody, anxious and insecure (Gazzaniga & Heatherton, 2006; Larsen & Buss, 2008). It has been found that emotional stability is related to depression (Liber et al., 2008), in that low emotional stability predicted higher levels of internalizing problems (Barbaranelli et al., 2003; Gazzaniga & Heatherton, 2006; Klimstra et al., 2011; Liber et al., 2008).

As mentioned above, there is an inconsistent picture of the relation between behavioral control by parents and depression in adolescents' (Barber et al., 1994; Bean et al., 2006; Formoso et al., 2000; Fröjd et al., 2007; Hamza & Willoughby, 2011; Liber et al., 2008; Muris et al., 2001; Pettit et al., 2001; Vaszonyi & Belliston, 2006; Yu et al., 2006). In order to fill this gap, we investigated the relationship between parental behavioral control and depressive mood in adolescents.

Furthermore, we investigated to what extent emotional stability moderated the assumed relation between parental behavioral control and depressive mood. This because emotional stability is a personality factor that is related to depression (Liber et al., 2008). Our main research question is: Does emotional stability moderate the relation between parental behavioral control and depression? Beside this main question we designed two sub questions, which are:

1. What is the long term effect of behavioral control by parents on depression?
2. What is the long term effect of emotional stability on depression?

We hypothesize that emotional stability functions a moderator in the relationship between parental behavioral control and depression, that is, we expect

that adolescents with a low emotional stability are more vulnerable to parental behavioral control and thus show more depression, compared with the group with a high emotional stability. In addition, we hypothesize that lower behavioral control by parents would result in more depression/more depressive symptoms over time. Finally, we hypothesize that lower emotional stability would result in more depression/more depressive symptoms over time.

## Methods

### Participants

In this study, 423 adolescents from different school levels participated in the study at wave 1. In the second wave, 413 adolescents participated. During wave three, 401 adolescents participated in the study. In the fourth wave, 334 adolescents participated. Finally, during wave five, 303 adolescents participated. From these 303 adolescents, there were 281 adolescents who eventually participated in all five waves. The other 22 participants are not enrolled because they did not participate on all five waves, but only on a few of them. Of these 281 adolescents, there were 150 girls (53.4%) and 131 boys (46.6%). The mean age at wave 1 was 13.36 ( $SD = .49$ ). In total, 96.8% were Dutch, whereas the other 3.2% came from different countries. With regard to school level, 82 adolescents (29.2%) had a low education level (LWOO/VMBO/MBO), 104 adolescents (37%) had an average education level (HAVO/HBO), and 90 adolescents (32%) had a high education level (VWO/WO). To examine whether there were mean differences for sex and school level, we used a  $t$ -test. We found that girls ( $M = 10.29$ ,  $SE = .18$ ) get significantly more depressed than boys ( $M = 9.09$ ,  $SE = .18$ ),  $F(1, 279) = 21.3$ ,  $p < .01$ . Also we found that boys ( $M = 22.46$ ,  $SE = .44$ ) were significantly more emotionally stable than girls ( $M = 20.58$ ,  $SE = .43$ ),  $F(1, 271) = 9.43$ ,  $p < .01$ .

## **Procedure**

For this study, data were derived from the longitudinal Dutch survey study called 'Family and Health'. This study examined different family processes in relation to various health behaviors in adolescence (Harakeh, Scholte, de Vries, & Engels, 2005). The families approached for the study were spread over 22 municipalities. In a letter they received, they were asked to participate. There were 885 families who met the criteria: parents were living together or married, all family members were biologically related to each other, and siblings who participated were neither twin nor mentally or physically disabled. Of these 885 families, 428 were selected to obtain an equal distribution of sibling dyads (girl-girl, boy-boy, girl-boy) and an equal division of educational levels. From the families, only data of the youngest adolescent were used because these adolescents were entering adolescence at wave one. Of those 428 adolescents, 281 participated in the present longitudinal study spanning 5 waves. Approval for data collection was obtained from the central committee on research involving human subjects in The Netherlands. For data collection, a trained interviewer went to the participant's home.

## **Measurements**

**Depression.** Six items from the Depressive Mood List (DML; Kandel & Davies, 1982) were used to measure the degree of depression of adolescents. Adolescents were asked how often certain feelings of depression kept them busy in the past year. Examples of items were: "How often did you feel too tired to do things", "How often did you feel unhappy, sad or depressed", and "How often did you worry too much about things". Depression was measured on a 3-point scale ranging from 1 (never/almost never) to 3 (often/always). When a score of 1 was received, the

adolescent was not depressive. A score of 3 meant that the adolescent had depressive feelings. Cronbach's alpha ranged between .78 and .85 on the five waves.

**Parental behavioral control.** Perceived behavioral control of both parents was measured with ten items at wave one (Beyers & Goossens, 1999) which the adolescents filled out separately for both their father and mother. As results showed that paternal and maternal behavioral control were highly correlated ( $r = .58, p < .01$ ) mean scores of both parents were taken together. Examples of items which measured parental behavioral control are: "Before you go away from home on a Saturday night, your mother/father wants to know who and where you are?", "Do you have your mother's/father's permission for a Saturday night with friends/ girlfriends to spend?", and "Do you need permission from your mother/father one evening during the week to be gone?". On all items a 5-point scale was used with answer alternatives varying from 1 (never) to 5 (always). A score of 5 indicated that the adolescent experienced high behavioral control of their father/mother. The Cronbach's alpha was .86.

**Emotional stability.** To assess the personality trait emotional stability, the Quick Big Five (Gerris, Houtmans, Kwaaitaal-Roosen, de Schipper, Vermulst & Janssens, 1998) was used at wave one. The adolescents had to answer to what extent they felt emotional stable on a 7-point scale, ranging from 1 (absolutely agree) to 7 (absolutely disagree). Examples of items are "nervous", "irritable" or "anxious". Cronbach's alpha for emotional stability was .75.

### **Statistical analysis**

First, we excluded missings on the outcome variable depression at all five waves, that is only the adolescents who participated in all the five waves ( $n = 281$ ) were included in the statistical analysis. In addition, we investigated whether the variables should be recoded. Only the variable emotional stability was recoded.

Finally, we looked if there were outliers and whether the variables were normally distributed. In this study, there were no outliers and the variables were normally distributed.

To test whether there is a relation between behavioral control and depression, we used SPSS 20.0 (IBM Company, 2011). First of all, we performed a correlation analysis (Pearson R) to investigate whether there are significant associations between the three variables (i.e., depression, parental behavioral control and emotional stability). Secondly, we used an independent *t*-test to examine whether there were differences between boys and girls, and between the school levels on the variables depression, parental behavioral control and emotional stability. We controlled for significant difference between boys and girls in the regression analyses. Thirdly, regression analyses have been conducted on each wave to investigate whether parental behavioral control and emotional stability can predict adolescent depression at each wave. To avoid multicollinearity, variables were centered before computing interaction terms.

## **Results**

Descriptive statistics show that, on average, adolescents have depressive feelings. Mean of parental behavioral control was 36.101 ( $SD = 6.161$ ), which shows that adolescents see their parental behavioral control as moderate to high (see Table 1). Parental behavioral control was not significantly related to depression, whereas emotional stability was negatively significantly correlated with depression on all the waves. These correlations have a medium effect (Field, 2009).

Table 1

*Pearson Correlations between Parental Behavioral Control, Emotional Stability and Depression*

| Variable                        | 1     | 2       | 3      | 4      | 5      | 6      | <i>M</i> | <i>SD</i> |
|---------------------------------|-------|---------|--------|--------|--------|--------|----------|-----------|
| 1. Parental Behavioral Control  |       |         |        |        |        |        | 36.101   | 6.161     |
| 2. Emotional Stability          | .068  |         |        |        |        |        | 21.465   | 5.122     |
| 3. Depression (T <sub>1</sub> ) | -.084 | -.472** |        |        |        |        | 9.964    | 2.740     |
| 4. Depression (T <sub>2</sub> ) | -.051 | -.373** | .567** |        |        |        | 10.167   | 3.026     |
| 5. Depression (T <sub>3</sub> ) | -.084 | -.314** | .515** | .641** |        |        | 10.160   | 3.024     |
| 6. Depression (T <sub>4</sub> ) | -.002 | -.286** | .358** | .444** | .488** |        | 9.206    | 2.891     |
| 7. Depression (T <sub>5</sub> ) | -.041 | -.240** | .339** | .414** | .479** | .615** | 9.135    | 2.951     |

*Note.* \*  $p < .05$  \*\*  $p < .01$

First, we included sex in our model to examine whether boys and girls scored significant on depression over all the waves (see Table 2). Results showed that sex is a significant predictor of depression on all waves (e.g., T1  $\beta = .218$ , SE = .330,  $p < .001$ ). Second, parental behavioral control and emotional stability were included in the model, while controlling for sex. For this model, emotional stability is a significant predictor of depression on all five waves (e.g., T1  $\beta = -.442$ , SE = .029,  $p < .001$ ), indicating that adolescents who are less emotional stable show higher levels of depression in early, mid, and late adolescents. We found no main effect for parental behavioral control on all the waves, indicating that adolescents who experienced a lot of parental behavioral control does not show higher levels of depressions than adolescents who experienced less parental behavioral control. Third, to tested whether the relationship between parental behavioral control and depression was moderated by

emotional stability, we included the interaction term between parental behavioral control and emotional stability in the model along with the other variables. Results showed no interaction effect between parental behavioral control and emotional stability. This means that adolescents who are less emotional stable are not more vulnerable for parental behavioral control than those who are relatively emotional stable.

Table 2

*Linear Regression Analyses of Parental Behavioral Control and Emotional Stability on Depression.*

| Parameter                     | B     | SE   | $\beta$ | $R^2_{\text{model}}$ | $R^2_{\text{change}}$ |
|-------------------------------|-------|------|---------|----------------------|-----------------------|
| <b>Depression T1</b>          |       |      |         |                      |                       |
| Step 1                        |       |      |         |                      |                       |
| Sex                           | 1.198 | .330 | .218**  | .048                 |                       |
| Step 2                        |       |      |         |                      |                       |
| Parental Behavioral Control   | -.035 | .024 | -.078   | .248                 | .201                  |
| Emotional Stability           | -.236 | .029 | -.442** |                      |                       |
| Step 3                        |       |      |         |                      |                       |
| Parental Behavioral Control * | -.003 | .004 | -.037   | .250                 | .001                  |
| Emotional Stability           |       |      |         |                      |                       |
| <b>Depression T2</b>          |       |      |         |                      |                       |
| Step 1                        |       |      |         |                      |                       |
| Sex                           | 1.468 | .360 | .243**  | .059                 |                       |
| Step 2                        |       |      |         |                      |                       |
| Parental Behavioral Control   | -.024 | .028 | -.049   | .173                 | .114                  |
| Emotional Stability           | -.197 | .034 | -.336** |                      |                       |
| Step 3                        |       |      |         |                      |                       |
| Parental Behavioral Control * | -.001 | .005 | -.013   | .173                 | .000                  |
| Emotional Stability           |       |      |         |                      |                       |

**Depression T3**

## Step 1

|     |       |      |        |      |
|-----|-------|------|--------|------|
| Sex | 1.327 | .365 | .218** | .048 |
|-----|-------|------|--------|------|

## Step 2

|                             |       |      |       |      |      |
|-----------------------------|-------|------|-------|------|------|
| Parental Behavioral Control | -.040 | .029 | -.081 | .129 | .081 |
|-----------------------------|-------|------|-------|------|------|

|                     |       |      |         |  |  |
|---------------------|-------|------|---------|--|--|
| Emotional Stability | -.160 | .035 | -.271** |  |  |
|---------------------|-------|------|---------|--|--|

## Step 3

|                               |       |      |       |      |      |
|-------------------------------|-------|------|-------|------|------|
| Parental Behavioral Control * | -.004 | .005 | -.043 | .131 | .002 |
|-------------------------------|-------|------|-------|------|------|

|                     |  |  |  |  |  |
|---------------------|--|--|--|--|--|
| Emotional Stability |  |  |  |  |  |
|---------------------|--|--|--|--|--|

**Depression T4**

## Step 1

|     |      |      |        |      |
|-----|------|------|--------|------|
| Sex | .998 | .353 | .172** | .029 |
|-----|------|------|--------|------|

## Step 2

|                             |      |      |      |      |      |
|-----------------------------|------|------|------|------|------|
| Parental Behavioral Control | .003 | .028 | .006 | .092 | .062 |
|-----------------------------|------|------|------|------|------|

|                     |       |      |         |  |  |
|---------------------|-------|------|---------|--|--|
| Emotional Stability | -.144 | .034 | -.254** |  |  |
|---------------------|-------|------|---------|--|--|

## Step 3

|                               |       |      |      |      |      |
|-------------------------------|-------|------|------|------|------|
| Parental Behavioral Control * | -.005 | .005 | -.60 | .095 | .004 |
|-------------------------------|-------|------|------|------|------|

|                     |  |  |  |  |  |
|---------------------|--|--|--|--|--|
| Emotional Stability |  |  |  |  |  |
|---------------------|--|--|--|--|--|

**Depression T5**

## Step 1

|     |       |      |        |      |
|-----|-------|------|--------|------|
| Sex | 1.232 | .361 | .206** | .042 |
|-----|-------|------|--------|------|

## Step 2

|                             |       |      |       |      |      |
|-----------------------------|-------|------|-------|------|------|
| Parental Behavioral Control | -.020 | .029 | -.041 | .083 | .041 |
|-----------------------------|-------|------|-------|------|------|

|                     |       |      |         |  |  |
|---------------------|-------|------|---------|--|--|
| Emotional Stability | -.115 | .035 | -.198** |  |  |
|---------------------|-------|------|---------|--|--|

## Step 3

|                               |      |      |      |      |      |
|-------------------------------|------|------|------|------|------|
| Parental Behavioral Control * | .002 | .005 | .023 | .084 | .001 |
|-------------------------------|------|------|------|------|------|

|                     |  |  |  |  |  |
|---------------------|--|--|--|--|--|
| Emotional Stability |  |  |  |  |  |
|---------------------|--|--|--|--|--|

---

*Note.* \*\*  $p < .001$

**Discussion**

In this study we used five waves of a longitudinal study to examine the effect of parental behavioral control and emotional stability on depression among adolescents. The results showed that parental behavioral control does not predict

depression on the five waves. Because parental behavioral control does not predict depression, there is no effect of parental behavioral control on adolescents' depression. Furthermore, the results showed that emotional stability predict depression on all waves, as expected. In addition, we found no significant interaction between parental behavioral control and depression; therefore, we can say that emotional stability does not moderate the relation between parental behavioral control and adolescent depression.

The finding that parental behavioral control not predicts depression among adolescents, is inconsistent with findings from Formoso et al. (2000) and Hamza & Willoughby (2011). They found that parental behavioral control is related with depression. However, there are some methodological differences between the study of Formosa et al. and our study. First of all, we did not made a distinction between maternal and paternal behavioral control, while Formoso et al. did. Also, in this study we took only a family composition of living together with a father and a mother, while Formoso et al. also took other family compositions, such as only living with a mother, a father or with a stepparent. In contrast to this study, they have looked also at the influence of other variables that may play a role, such as socioeconomic status, family conflict and parental education.

Another explanation may be that parents do not play a prominent role in adolescence as they do in (early) childhood; the closeness and warmth between them declines (Arnett, 2010). Adolescents increasingly spend more time with their friends and peers, both in school as in their leisure time. The influence of friends in adolescence will play a greater role than that of the parents (Arnett, 2010). This is in line with other studies that did not find a main effect of parental behavioral control on depression in adolescents (Muris et al., 2001; Vaszonyi & Belliston, 2006). It may be

that we would have found a main effect of parental behavioral control on depression, when we would have started our study earlier. More research and replications are needed to investigate the specific roll parental behavioral control has on adolescent depression.

Furthermore, we found a relationship between emotional stability and depression among adolescents; emotional stability was significantly related to depression at all time points. This finding is consistent with the finding from Liber et al. (2008), who also found that emotional stability is significantly related to depression. This result has a strong addition to the finding from Liber et al., since we used a normative sample, whereas Liber et al. used a sample with only adolescents who had been hospitalized with burns. Another strong addition to the existing literature conclude the fact that we found a relation between emotional stability and depression on all five waves. Emotional stability in early adolescence does not only predict depression in early adolescence, but also in middle and late adolescence.

Because this study is a 5-wave longitudinal study, we could investigate how depression unfolded over time, as well as how parental behavioral control and emotional stability were related to depression across adolescence. Another strong point about this study is, that not the parents but the adolescents reported on parental behavioral control. As the parents had filled in these questions, it could lead to social desirable answers of the parents.

The findings of this study should be generalized with caution, because of some methodological shortcomings. First, this study is a self-report study. This means that only the questionnaires completed by the students themselves. A disadvantage of a self-report study is that there is an opportunity that the adolescents gave social desirable answers. The results could have given a distorted picture of the actual levels

of depression and emotional stability. However, it is difficult to measure some sensitive themes, such as depression, in another way.

Secondly, in this sample we used depressive symptoms among adolescents of a normal population, which can cause a shortage of depression in comparison with a sample of adolescents with a depressive disorder. This also connects the fact that in the normal population about 11% - 14% of adolescents lies in the clinical range of depression (Wenar & Kerig, 2005), reducing the likelihood that there are many adolescents in this sample with depression.

Future research could look to the relation of behavioral control by parents on adolescents with a depression disorder. It is very interesting to examine if there are differences of the influence of parental behavioral control between adolescents with a depression disorder and adolescents with only depressive symptoms.

## **Conclusion**

It is important to remember that emotional stability is stable over the course of adolescence. Emotional stability in early adolescence does not only predict depression in early adolescence, but also in middle and late adolescence.

## **References**

- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders, 4<sup>th</sup> ed.- Text Revision*. Washington, DC: Author.
- Arnett, J. J. (2010). *Adolescence and emerging adulthood*. Boston, MA USA: Pearson.
- Barbaranelli, C., Caprara, G. V., Rabasca, A., & Pastorelli, C. (2003). A questionnaire for measuring the Big Five in late childhood. *Personality and Individual Differences, 34*, 645-664.

- Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development, 67*, 3296-3319.
- Barber, B. K., Olsen, J. E., & Shagle, S. C. (1994). Associations between parental psychological and behavioral control and youth internalized and externalized behaviors. *Child Development, 65*, 1120-1136.
- Bean, R. A., Barber, B. K., & Crane, D. R. (2006). Parental support, behavioral control, and psychological control among African American youth: The relationships to academic grades, delinquency, and depression. *Journal of Family Issues, 27*, 1335-1355.
- Beyers, W., & Goossens, L. (1999). Emotional autonomy, psychosocial adjustment, and parenting: Interactions, moderating and mediating effects. *Journal of Adolescence, 22*, 753-769.
- DiClemente, R. J., Wingood, G. M., Crosby, R., Sionean, C., Cobb, B. K., Harrington, ... Kim Oh, M. (2001). Parental monitoring: Association with adolescents' risk behaviors. *Pediatrics, 107*, 1363-1368.
- Field, A. (2009). *Discovering statistics using SPSS* (3th edition). London: Sage Publications.
- Formoso, D., Gonzales, N. A., & Aiken, L. S. (2000). Family conflict and children's internalizing and externalizing behavior: Protective factors. *American Journal of Community Psychology, 28*, 175-199.
- Fröjd, S., Kaltiala-Heino, R., & Rimpelä, M. (2007). The association of parental monitoring and family structure with diverse maladjustment outcomes in middle adolescent boys and girls. *Nord Journal Psychiatry, 61*, 296-303.
- Gazzaniga, M. S., & Heatherton, T. F. (2006). *Psychological Science*. London: Norton & Company.

- Gerris, J. R. M., Houtmans, M. J. M., Kwaaitaal-Roosen, E. M. G., Schipper, J. C., de, Vermulst, A. A., & Janssens, J. M. A. M. (1998). *Parents, adolescents and young adults in Dutch families: A longitudinal study*. Nijmegen: Institute of Family Studies.
- Hamza, C. A., & Willoughby, T. (2011). Perceived parental monitoring, adolescent disclosure, and adolescent depressive symptoms: A longitudinal examination. *Journal of Youth and Adolescence, 40*, 902-915.
- Harakeh, Z., Scholte, R. H. J., Vries, H., de, & Engels, R. C. M. E. (2005). Parental rules and communication: Their association with adolescent smoking. *Addiction, 100*, 862-870.
- IBM Company (2011). *Statistical Package for the Social Sciences*, version 20.0.
- Jacobson, K. C., & Crockett, L. J. (2000). Parental monitoring and adolescent adjustment: An ecological perspective. *Journal of Research on Adolescence, 10*, 65-97.
- Kandel, D., & Davies, M. (1982). Epidemiology of depressive mood in adolescent. *Archives of General Psychiatry, 39*, 2105-2112.
- Klimstra, T. A., Crocetti, E., Hale, W. W., Fermani, A., & Meeus, W. H. J. (2011). Big five personality dimensions in Italian and Dutch adolescents: A cross-cultural comparison of mean-levels, sex differences, and associations with internalizing symptoms. *Journal of Research in Personality, 45*, 285-296.
- Lamborn, S. D., & Felbab, A. J. (2003). Applying ethnic equivalence and cultural values models to African-American teens' perceptions of parents. *Journal of Adolescence, 26*, 601-618.
- Larsen, R. J., & Buss, D. M. (2008). *Personality Psychology*. New York: McGraw-Hill.

- Liber, J. M., Faber, A. W., Treffers, D. A., & Loey, N. E. E., van. (2008). Coping style, personality and adolescent adjustment 10 years post-burn. *Burns*, *34*, 775-782.
- Muris, P., Schmidt, H., Lambrichs, R., & Meesters, C. (2001). Protective and vulnerability factors of depression in normal adolescents. *Behaviour Research and Therapy*, *39*, 555-565.
- Pettit, G. S., Laird, R. D., Dodge, K. A., Bates, J. E., & Criss, M. M. (2001). Antecedents and behavior-problem outcomes of parental monitoring and psychological control in early adolescence. *Child Development*, *72*, 583-598.
- Rutter, M. (1986). The developmental psychopathology of depression: Issues and perspectives. In M. Rutter, C. E. Izard, & P. B. Read (Eds.), *Depression in young people: Developmental and clinical perspectives* (pp. 3-32). New York: Guilford Press.
- Sagrestano, L. M., Paikoff, R. L., Holmbeck, G. N., & Fendrich, M. (2003). A longitudinal examination of familial risk factors for depression among inner-city African American adolescents. *Journal of Family Psychology*, *17*, 108-120.
- Smetana, J. G. (2008). "It's 10 o'clock: Do you know where your children are?" Recent advances in understanding parental monitoring and adolescents' information management. *Child Development Perspectives*, *2*, 19-25.
- Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, *71*, 1072-1085.
- Vaszonyi, A. T., & Belliston, L. M. (2006). The cultural and developmental significance of parenting processes in adolescent anxiety and depression symptoms. *Journal of Youth and Adolescence*, *35*, 491-505.

Wenar, C., & Kerig, P., (2005). *Developmental Psychopathology*. London: McGraw-Hill.

Yu, S., Clemens, R., Yang, H., Li, X., Stanton, B., Deveaux, L., Lunn, S., ... Harris, C. (2006). Youth and parental perceptions of parental monitoring and parent-adolescent communication, youth depression, and youth risk behaviors. *Social Behavior and Personality*, *34*, 1297-1310.