A comparative study of adolescents living in long term residential care and adolescents living with parents: Differences in cognitive and behavioural strategies, internalizing and social problems

ZUKAUSKIENE, R.

Abstract

The present study aims to explore the extent to which cognitive and behavioural strategies and internalizing and social problems of orphaned and abandoned adolescents placed to institutions for long term residential care, differ from those of adolescents living with parents. Measures of anxiety-depression, withdrawal, and social problems, and measures of cognitive and behavioural strategies of 127 Lithuanian adolescents living in long term residential care were compared with those of 204 adolescents living with their parents. Higher levels of anxiety/depression, withdrawal and social problems were found among adolescents living in long term residential care. Adolescents living in long term residential care seemed to apply the most dysfunctional achievement strategies and did not use self-enhancing attributions. They used more task-irrelevant behaviour, were less seeking social support, used less reflective thinking and were less mastery – orientated in achievement context than adolescents living with parents. Next, in an affiliative context adolescents living in long term residential care were much more pessimistic than the adolescents, living with parents. Separation or loss of parents, followed by institutionalization is likely to have a negative impact on the cognitive and behavioural strategies adolescents use in various situations.

Key words: cognitive and behavioural strategies, internalizing problems, social problems, residential care

Introduction

During the past two decades studies have highlighted the adverse consequences associated with the unfavorable changes and transitions that disturb the lives of children and adolescents (Compas, 1987; Johnson, 1982; Hukkanen et al., 1998). This line of investigation reflects an effort to examine the outcomes of stressful life events, in their various forms, for instance anxiety, depression, withdrawal, aggression, hostility, and even physical illness. Another line of

study is concerned with attributional styles in relation to depression and other internalized and social problems. Although a substantial amount of research has been carried out on these strategies in the school context (Aunola et al., 2000; Nurmi et al., 1995), only a few studies have focused on the role that other life-domains such as child abuse and neglect, loss or death of parents and long term residential care may play in the development of adolescents' cognitive and behavioural strategies, and to their internalized and social problems. Consequently, this study focuses on investigating the extent to which institutionalized adolescents' cognitive and behavioural strategies and internalizing and social problems differ from those of adolescents living at home, with one or two parents.

Psychosocial functioning

Arguably, no event is more traumatizing and more threatening to the social and emotional development of a child than the death or loss of a parent(s) (Furman, 1974; Furman, 1964; Siegel et al., 1990), especially when children can not be adopted and are placed in residential care. The need for placement of such children and adolescents fluctuates over time and between societies. In Western countries, an estimated 0.2 to 1% of all children live in foster families or in residential centres (Colton & Hellinckx, 1993). Similarly, about 0.7% of all orphaned, abandoned, and destitute children and adolescents live in long term residential care in Lithuania (Niit, 1999). Although it is difficult to compare rates of institutional placement among countries in different regions, some broad comparisons are possible. In the United States, for example, 0.7% of children are in out-of-home care. But, only 4% of the U.S. children are in institutions, 13% are in group homes, and 81% are in foster care, whereas in Lithuania more than 40% of children placed out-of-home live in long-term residential care, mainly in children's homes (Tobis, 2000).

Historically, the institutional environment has been found to be a main source of delays in socioemotional and cognitive development (Pringle & Tanner, 1958; Tizard et al., 1972; Tizard & Tizard, 1974). The age of child and duration of placement are critical factors to all aspects of the child's development (Casler, 1965; Hukkanen et al., 1998; Vorria et al., 1998). The characteristics of the institutions vary somewhat across communities, but the national agenda ensures that commonalities exist in the institutions' goals and activities. The traditional idea of children's home simply providing an alternative living environment for children from an early age through to adulthood has almost disappeared, and children's homes are increasingly dealing with children and adolescents who have a range of complex social, emotional and behavioural problems (Hukkanen et al., 1998). This is due to the fact that the life of the majority of children who end up in long term residential care has contained cumulative risk factors for psychosocial development, such as abandonment of the child alone at home, physical and/or sexual abuse of the child, substance abuse by parents, open sexuality between adults in the presence of the child. For most of the children the admission for residential care is only one facet of a life marked by other traumatic events.

Findings across studies generally indicate that childhood is a period of greater vulnerability, the risk of childhood depression is severalfold higher for bereaved children than for children not exposed to parental loss or death (Gersten et al., 1991; Rutter et al., 1986). Depression in adolescence is associated with early childhood loss or with extreme deprivation in infancy (Krupnick, 1984; Lloyd, 1989). Bowlby (1969, 1980) claimed that children who have lost their parents as a result of death or separation are more likely than others to show psychiatric symptoms. Studies have demonstrated also that victimized children report more depressive symptomatology than their nonabused counterparts (Beitchman et al., 1992; Pelcovitz et al., 1994). Specific concomitants of depression, such as helplessness, hopelessness, and self-destructive behaviours, are also associated with victimization, particularly child sexual abuse (Morrow & Sorell, 1989). Beyond these areas of convergence across studies, where emotional and behavioural disturbancies of a child after the loss of parents or separation were examined

(Beitchman et al., 1992; Krupnick, 1984; Rutter et al., 1986), there is little agreement about how child abuse and neglect, separation and loss of in childhood combined with long term residential care affect later development of children and adolescents. It seems reasonable to assume, however, that adolescents placed in residential care as children had experienced more severe emotional and behavioural problems in comparison to adolescents, living with their parents.

Cognitive and behavioural strategies

One further set of variables that may play an important role in the development of more severe internalizing problems is the way in which adolescents think and act in various contexts, in particular their attributional strategies. Abramson et al. (1978) argued that the causes that each person selects to account for his/her successes or failures are relatively stable. The cognitive and attributional strategies differ according to a number of psychological components, such as expectations of failure, amount of effort and level of goals, task planning, and task-irrelevant behaviour (Nurmi et al., 1994). Mastery-oriented individuals believe in their ability to manage situations, they focus on the task by setting themselves clear goals and constructing task-related plans. Helpless individuals lack a belief in personal control, which leads to passivity and task-avoidance (Dweck, 1990). Another type of maladaptive strategy is self-handicapping (Jones & Berglas, 1978, Nurmi, 1992), that is when a person does not trust his or her competence to handle the situation and, consequently, anticipates a failure. In order to create an excuse for failing to cope, a self-handicapper concentrates on task-irrelevant behaviour and task-avoidance instead of formulating task-relevant plans (Nurmi, 1992). Based on Seligman's (1990) description of attributional style as a developmentally acquired personality characteristic, it might be assumed that some of the cognitive and behavioural strategies adolescents apply in various achievement and affiliative contexts are shaped by separation and loss of in childhood and by current living circumstances (institutionalization). Holahan and Moos (1987) provide evidence of an independent effect of social support to master, tolerate, reduce, or minimize stressful events. They found that perceptions of social support predicted more active and less avoidant behavioural and psychological strategies. Therefore, certain types of social strategies (task-irrelevant behaviour, learned helplessness, pessimism) might be assumed to be more common among institutionalized adolescents in comparison with adolescents, living in families.

With regard to the research on the correlates of attributional style in adolescence, most cross-sectional and longitudinal studies have examined the relation between attributions and depression. In the reformulated theory of depression as the product of learned helplessness (Abramson et al., 1978; Peterson & Seligman, 1984), depression was seen as the result of individuals' internal, stable, and global attributions for the outcomes of events. Abramson et al. (1978) hypothesized that negative life events and the possession of a maladaptive attributional style, characterized by internal, stable, and global attributions for negative events and external, unstable, and situational attributions for positive events, interact to increase one's risk for depression. However, Parry and Brewin (1988) argued that potential risk factors such as a maladaptive attributional style or life stress are actually symptoms of depression and have no causal impact in increasing depression. The person with increasing depressive symptoms perceives the world in a more maladaptive manner (i.e., possesses an increasingly maladaptive attributional style) and encounters increased life stress (Swearingen & Cohen, 1985).

Despite the abundance of data on the depression-attributional style link, there is virtually no information regarding the association between attributions and withdrawal, nor between attributions and social problems. This is a noteworthy gap in the literature that deserves attention, especially in such less-advantaged groups, as orphaned or abandoned adolescents placed in long term residential care. It might be assumed further (Hokoda & Fincham, 1995; Holahan & Moos, 1987a, 1987b) that the associations of cognitive and behavioural strategies with inter-

nalizing and social problems will be different for institutionalized adolescents' compared to adolescents living with parents.

Aims of the study

This study aimed at investigating the differences in anxiety/depression, withdrawal and social problems between institutionalized adolescents, and adolescents living with parents, and in their cognitive and behavioural strategies. The following research questions were examined:

(1) To what extent institutionalized adolescents show higher level of problems, in particular anxiety, withdrawal and social problems, than the adolescents living with parents? We expected that the level of problems of orphaned and abandoned adolescents would be higher in comparison with the adolescents living with parents. This is based on earlier research on childhood deprivation showing that experience of separation and loss has an impact on the direction as well as the severity of internalizing problems.

(2) To what extent institutionalized adolescents deploy more dysfunctional achievement and cognitive-behavioural strategies than the adolescents living with parent(s)? We expected that institutionalized adolescents will use more dysfunctional achievement and social strategies (pessimism, task-irrelevant behaviour, and avoidance) and will be less mastery-oriented than adolescents living with their parents.

(3) To what extent the use of maladaptive cognitive and behavioural strategies in achievement and affiliative contexts would explain the higher levels of withdrawal, anxiety/depression, and social problems among institutionalized children? The major reason for including this research question is that because earlier research (Abramson, Seligman & Teasdale, 1978) shows that negative life events and the possession of a maladaptive attributional style increase one's risk for depression. It might be assumed, however, that the effects of negative life events and institutionalization on internalizing and social problems are stronger than the effects of maladaptive attributional style.

Method

Participants and settings

Two groups of participants were selected for the present study. *The first group* (adolescents in residential care) consisted of adolescents living in long term residential care (n = 107), 61 boys and 46 girls, ranging from 14 to 18 years-of-age. The common feature of them is the loss of ties with their biological parents or other close relatives and permanent institutional residence. Only adolescents, who spent more than five years in the institution, have been selected to participate in the study. In Lithuania, most of the residential institutions (children's homes) are divided into home units, with 12-15 children and adolescents living in each unit and attending nearby schools. The number of staff per day time shift was 1-3 in a unit. A great majority of the staff was qualified in child care and had also had some later in-job training. Each child had a member of the staff, a key worker, who took a special interest in the child's life and, for example, made efforts to keep in contact with the family (siblings, parents, other close relatives) of the child. The primary care workers had a 4-5 year education in institutes of social studies. *The second group* (adolescents, living with parents) consisted of 204 adolescents (100 boys and 104 girls), 14-18 years old, randomly selected from secondary schools. The common feature of them is living at home, with their biological parents on the day of the data collection. Eight secondary schools were contacted at the same locations as are residential units located. At each school, from the list of 14-18 year-old students living with both biologi-

cal parents we selected from 24 to 30 students, using random sampling procedures. There were no differences in the mean ages of the group residential care and family care children (14.9 vs. 15.2 years), respectively. Most of the group residential care children (89 percent) came from parents with low socioeconomic status (no regular paid employment, no more than compulsory '8 to 9 years' of education), whereas 78 percent of children living in families came from families in which both parents had a job or at least secondary school education (11 or 12 years of schooling). Forty-six percent of the parent care group had university education, compared with none of the group residential care children.

Measures and instruments

Internalizing and social problems

The Youth Self-Report (YSR 11/18, Achenbach, 1991) was used to collect the data on internalizing (anxiety/depression and withdrawal) and social problems. The YSR 11/18 is one instrument of a family of instruments designed to obtain data on adolescents' behavioural/ emotional problems and competencies. In the present study, we used three scales of YSR: *Anxious/depressed* (e.g., lonely, cries a lot), *Withdrawn* (e.g., would rather be alone, refuses to talk, shy, sad), and *Social problems* (e.g., doesn't get along with peers, gets teased, not liked by peers). The problems were assessed by having the informants rate items on three-point scales (0 = *"Not true"*, 1 = *"Sometimes true"*, 2 = *"Very true"*). The Cronbach alpha reliabilities of the Lithuanian version of YSR for anxiety/depression, withdrawal, and social problems scales were 0.80, 0.61, and 0.78, respectively (Zukauskiene et al., in press).

Cognitive and behavioural strategies

Adolescents' achievement and affiliative strategies were assessed using the Lithuanian version of the Strategy and Attribution Questionnaire (SAQ; Nurmi et al., 1995). The SAQ consists of 60 statements rated on a four-point scale (4 = *"Strongly agree"*, 1 = *"Strongly disagree"*) and ten subscales. The SAQ included the following five subscales for the achievement context: (1) The Success Expectation subscale, (2) The Task-Irrelevant behaviour subscale, (3) The Seeking Social Support subscale, (4) The Reflective Thinking subscale, (5) The Master-Orientation subscale. The SAQ also includes the following five subscales for affiliative situations, in social context: (6) The Success Expectation subscale, (7) The Task-Irrelevant Behaviour subscale, (8) The Avoidance subscale, (9) The Master-Orientation subscale, (10) The Pessimism subscale.

The reliability analysis of the Lithuanian version of the SAQ (Zukauskiene & Sondaite, 2004) has demonstrated satisfactory reliability. Cronbach's alphas ranged from 0.52 to 0.69, except for the Success Expectation sale, where Cronbach alpha in an achievement context was very low ($\alpha = 0.28$).

Assessment of each child was carried out by the primary investigator. Adolescents were provided with information about the research and asked if they would agree to participate. The primary investigator administered the questionnaire, explaining that all responses were anonymous and that participation was completely voluntary. All adolescents in attendance completed questionnaires and returned it directly to the investigator.

Sociodemographic information

Sociodemographic information on the child was collected by means of a questionnaire filled in by the child's key worker who answered according to her/his knowledge of the child's past history and also used all information available in the residential unit. The list included physical abuse of the child, sexual abuse at home, domestic violence witnessed by the child, open sexuality between parents or parents substitutes witnessed by the child, and abandonment of the young child alone at home without adult supervision. There was also an open question about other possible traumatic events in the child's life before entering residential care.

Results

Sociodemographic background and traumatic life events

The analysis of background characteristics of the adolescents living in long term residential care showed that in most cases there were several reasons for the child's placement for residential care. The main reasons for the placement were serious abuse of alcohol of the parent/parents (in 93.5% of the cases), and an abandonment of the young child alone at home (in 97.8% of the cases). Domestic violence between parents or parent substitutes witnessed by the child was present in 80.4% of the cases, and open sexuality between adults, witnessed by the child was reported in 45.6% of the cases. Physical abuse of the child was present in 67.4% of the cases, sexual abuse at home was reported in 13.1% of the cases, sexual abuse outside the home was reported in 15.2% of cases.

Most of the sample (86%) had been living in the same residential unit (children's home) for more than 5 years, the child's key worker had not changed during the placement for 54% of the children. Contact at least once a month with either of the parents had been maintained by 24.2% of the children. However, in 54.2% of the cases the contact with either of parents had been maintained only once or twice a year.

Difficulties at school were frequent: of the total sample of adolescents living in long term residential care, 67.4% had repeated the grade, and most of them still had difficulties at school. Forty-seven percent of adolescents were in special education due to learning difficulties or behavioural problems.

Anxiety/depression, withdrawal, and social problems

To investigate the extent to which adolescents living in long term residential care show higher level of internalizing and social problems, than the adolescents living with parents, the participants from the two groups were compared according to their self-reported anxiety/depression, withdrawal and social problems. Analysis of variance (ANOVA) revealed main effects both for the group and for gender, but not for the Group x Gender interaction. Consequently, several univariate ANOVAs were carried out separately for each variable.

Univariate analysis displayed significant gender differences ($p < 0.001$) with respect to anxiety/depression for adolescents living with parents (F (1, 202) = 12.75, $p < 0.001$), with girls obtaining higher scores (M = 7.83, SD = 4.30) than boys (M = 5.81, SD = 3.75). This was not the case for the group of adolescents in care, in which the levels of anxiety/depression were similar for boys (M = 9.72, SD = 3.42) and girls (M = 10.72, SD = 4.49). The interaction between group and gender was not significant. No significant effects of gender on withdrawal and social problems were found, not in the group of adolescents in care and not in the group of adolescents living with their parents.

The level of anxiety/depression, withdrawal and social problems was analyzed using a factorial analysis of variance with between-participants factors of living circumstances (living with parents vs. institutionalization). As shown in Table 1, univariate analysis displayed significant group differences ($p < 0.001$) with respect to Anxiety/depression ((F (1, 304) = 49.36, $p < 0.001$), Social problems (F (1, 304) = 68.53, $p < 0.001$), and Withdrawal (F (1, 304) = 33.96, $p < 0.001$). These effects were due to the fact that adolescents living in long term residential care showed higher levels of anxiety/depression, withdrawal and social problems than the adolescents living with parents. Table 1 contains the results of mean-level comparisons on anxiety/depression, withdrawal and social problems by institutionalization/living with parents. However, when controlled for gender, all these three interactions were also significant ($p < 0.001$), what means that the differences in the level of withdrawal, anxiety/depression, and social problems for institutionalized vs. adolescents living with parents are due only to disad-

vantages experienced before the placement and current living circumstances but not to gender.

Table 1
Means (M) and standard deviations (SD) for the levels of anxiety/depression, withdrawal and social problems by two participants groups

	Adolescents living in long term residential care		Adolescents living with parents		
	M	*SD*	*M*	*SD*	*F*
Anxiety/depression	10.09	4.12	6.82	4.16	49.36***
Withdrawal	7.29	2.28	5.81	2.21	33.96***
Social problems	4.58	2.13	2.66	1.99	68.53***

Achievement and social strategies

First, one-way ANOVAs have been used to explore the gender differences in the achievement and affiliative strategies. Univariate analysis displayed significant group differences ($p < 0.001$) with respect to seeking social support (F (1, 337) = 10.203, $p < 0.001$) and for reflective thinking (F (1, 337) = 12.11, $p < 0.001$) in achievement context. Statistically significant differences were also found for success expectation in affiliative context (F (1, 337) = 14.73, $p < 0.001$). This was due to the fact that girls scored higher (M = 17.48, SD = 2.43) than boys (M = 16.58, SD = 2.03) for seeking social support, and girls scored higher (M = 18.11, SD = 1.94) than boys (M = 17.20, SD = 2.19) for reflective thinking in achievement context. Girls also scored higher (M = 12.88, SD = 3.03) than boys (M = 11.71, SD = 1.55) for success expectation in an affiliative context.
Next, we wanted to assess whether adolescents living in long term residential care used more dysfunctional achievement and social strategies (pessimism, task-irrelevant behaviour, and avoidance), and were less mastery-oriented than adolescents living with their parents. Mean level differences between institutionalized adolescents, and adolescents living with parents of cognitive and behavioural strategies in achievement and affiliative context are presented in Table 2. As shown in the table, no statistically significant differences were found between two groups with regard to success expectation (in the achievement and the affiliative context). Similarly, no significant differences between both groups were found with regard to avoidance, master-orientation, and task-irrelevant behaviour in the affiliative context.

Univariate analysis (ANOVA) displayed significant group differences on task-irrelevant behaviour (F (1, 337) = 16.65, $p < 0.001$), seeking social support (F (1, 337 = 13.11, $p < 0.001$), reflective thinking (F (1, 337) = 4.21, $p < 0.01$), and master-orientation (F (1, 337) = 93.78, $p < 0.001$) in the achievement context. As shown in Table 2, this was due to the fact that adolescents in residential care scored higher on task-irrelevant behaviour than adolescents, living with parents. Adolescents in residential care scored lower on seeking social support, reflective thinking and master-orientation in achievement context than adolescents living with parents.
However, in the affiliative context statistically significant differences between two groups were found only for pessimism (F (1, 337) = 7.62, $p < 0.001$), where institutionalized adolescents scored higher than adolescents, living with parents.

Table 2
Means and standard deviations of the different strategy variables for the two participants groups

	Adolescents living with parents	Adolescents living in long term residential care	F
Achievement			
1. Success expectations	17.40 (2.77)	17.26 (1.72)	.12
2. Task-irrelevant behavior	11.51 (2.17)	12.75 (2.27)	16.65**
3. Seeking social support	17.38 (2.32)	16.25 (2.13)	13.11**
4. Reflective thinking	17.91 (2.17)	17.31 (2.29)	4.21*
5. Master-orientation	22.36 (2.80)	18.58 (3.04)	93.78**
Affiliative			
6. Success expectations	12.36 (2.65)	12.13 (1.56)	.43
7. Pessimism	10.01 (2.03)	10.76 (1.53)	7.62**
8. Avoidance	10.54 (3.58)	10.81 (2.43)	1.93
9. Task-irrelevant behavior	15.93 (2.52)	15.57 (2.54)	.97
10. Master-orientation	26.28 (4.64)	25.26 (2.62)	3.16

Standard deviations are given in parentheses. * $p < .01$, ** $p < .001$

Controlling for the impact of cognitive and behavioural strategies

We wanted to examine also whether controlling for the effect of cognitive and behavioural strategies would have an impact on the association between groups (adolescents in RC, and adolescents living with parents) and the adolescents' anxiety/depression, withdrawal and social problems. Consequently, 2 (Group) X 2 (Gender) univariate covariate analysis (ANCOVAs) for the adolescents' self-reported anxiety/depression, withdrawal and social problems were carried out using (1) achievement strategies; (2) social strategies in the affiliative context as covariates. The first ANCOVAs revealed, however, that after controlling for the effect of strategies in the achievement context, the group main effects for self-reported anxiety/depression (F (2, 337) = 4.01, $p < 0.01$), withdrawal F (2, 337) = 5.92, $p < 0.01$) and social problems F (2, 337) = 6.18, $p < 0.001$) remained significant. The second ANCOVAs revealed that after controlling for the effect of social strategies in the affiliative context, the group main effects for self-reported anxiety/depression (F (2, 337) = 7.28, $p < 0.001$), withdrawal (F (2, 337) = 5.92, $p < 0.01$) and social problems (F (2, 337) = 8.39, $p < 0.001$) also remained significant. These findings indicated that the impact of placement on problems is not significantly mediated by cognitive and behavioural strategies.

Discussion

Most children admitted to long term residential care have been severely traumatized and have various psychosocial problems which children's homes are not designed to address. For most of the children, the admission to the children's home is only one facet of a life marked by many other disadvantages. These groups of children are different, the length of stay, and the

reasons for placement might differ. However, the present study suggested that disadvantages experienced by children and adolescents before the placement combined with living in long term residential care were associated with higher levels of anxiety/depression, withdrawal and social problems as compared to a control group. Adolescents in residential care were more depressed and withdrawn, and experienced more social problems than adolescents, living at home, with their biological parents. When controlled for gender, these differences still remained significant. This is consistent with earlier findings showing that separation and loss in childhood have negative effects on subsequent mental health (Critelli, 1983; Krupnick, 1984) and increase the risk of childhood depression. According to this study, child abuse and neglect, separation and loss of parents combined with long term residential care have negative effects on other domains as well, for instance they increase the risk of withdrawal and social problems in adolescence.
Adolescents coming from very different environments (from institutions and from family surroundings) differed in several ways in their achievement and social strategies. First, adolescents living in long term residential care seemed to apply the most dysfunctional achievement strategies. Moreover, they did not use self-enhancing attributions. They used more task-irrelevant behaviour, were less often seeking social support, used less often reflective thinking and were less mastery-orientated in the achievement context than adolescents living with parents. Next, in the affiliative context adolescents living in long term residential care were much more pessimistic, than adolescents, living with parents. Separation or loss of parents, followed by institutionalization is likely to have a negative impact on the cognitive and behavioural strategies adolescents use in various situations. These findings corroborated with previous findings (Seligman, 1990), showing that the achievement and social strategies adolescents apply in various contexts are developmentally acquired personality characteristics.
After controlling for the effect of cognitive and behavioural strategies in the achievement in the affiliative context, the group main effects for self-reported anxiety/depression, withdrawal and social problems remained significant, for instance placement on problems was not significantly mediated by cognitive and behavioural strategies. There are several ways in which institutionalization might be assumed to influence adolescents' abilities. For example, a lack of optimal challenges and regulatory types of communication may lead to pessimism, and task-irrelevant behaviour and doesn't foster adolescents' self-regulation and control beliefs. The excess control typical for adolescents' everyday life in institutions may undermine the motivation to engage in interesting tasks. This may lead to lower levels of master-orientation.
Although it would be appealing to generalize some of the results to other environments and populations, were orphaned/abandoned adolescents are considered, there is an evident need to replicate the findings with different samples of adolescents, who are placed in long-term residential care. In this study, it was not possible to evaluate the role of living in long-term residential care on the psychological disturbances. There is no matching control group to show how the development for children would have been without the placement in the children's home. Thus, there is a clear need for a longitudinal study to examine changes in the psychosocial functioning and cognitive and behavioural strategies after the children are placed for residential care. Second, our study did not include any measurement of the adolescents' actual possibility to control the situation in the institution or at home. Future research on adolescents' actual possibility to control the situation at home and in institutional settings is required.

The present study suggested that children with a history of traumatic experience in childhood combined with long-term placements in residential care experienced high levels of anxiety/depression, withdrawal and social problems. They also used more pessimism, social avoidance, and task-irrelevant behavior than their counterparts who live with parents. Therefore, there is a clear need for routine and systematic evaluation for psychosocial and cognitive functioning of children in long term residential care in order to provide psychotherapy and other methods of treatment. At the same time, the task of residential units (children's homes) is to provide a

homely and safe living environment. However, if possible, community-based services should be provided.

Overall, the results of the present study showed that there are significant differences in anxiety/depression, withdrawal and social problems, as well as in cognitive and behavioural strategies among adolescents living in long term residential care compared to adolescents living with their biological parents. Adolescents living in long term residential care seemed to apply more dysfunctional achievement strategies and did not use self-enhancing attributions. They used more task-irrelevant behaviour, were less often seeking social support, used less often reflective thinking and were less mastery-oriented in the achievement context than adolescents living with parents. In the affiliative context adolescents living in long term residential care were much more pessimistic than adolescents, living with parents. Separation or loss of parents, followed by institutionalization was likely to have a negative impact on the cognitive and behavioural strategies adolescents used in various situations.

Acknowledgements

The author is grateful to Jari – Erik Nurmi and to W. Peter Robinson for their helpful comments on earlier drafts of the manuscript.
The study was supported by funds granted from the Lithuanian Science and Studies Foundation.

References

ABRAMSON, L.Y., SELIGMAN, M.E.P., & TEASDALE, J.D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87*, 49-74.

ACHENBACH, T.M. (1991b). *Manual for the Youth Self Report Form and 1991 profile.* Burlington: University of Vermont, Department of Psychiatry.

AUNOLA, K., STATTIN, H., & NURMI, J.E., (2000). Adolescents' achievement strategies, school adjustment, and externalizing and internalizing problem behaviors. *Journal of Youth and Adolescence, 29*(3), 289-306.

BEITCHMAN, J.H., ZUCKER, K.J., HOOD, J.E., DACOSTA, G.A., AKMAN, D., & CASSAVIA, E. (1992). A review of the long-term effects of child sexual abuse. *Child Abuse & Neglect, 16*, 101-118.

BOWLBY, J. (1969). *Attachment and loss: Vol. 1. Attachment.* New York: Basic Books.

BOWLBY, J. (1980). *Attachment and loss: Vol. 3. Loss: Sadness and depression.* New York: Basic Books.

CASLER, L. (1965). The effects of supplementary verbal stimulation on a group of institutionalised infants. *Journal of Child Psychology and Psychiatry, 6*, 19-27.

COLTON, M., & HELLINCKX, W. (1993). *Child care in European community.* London: Arena.

COMPAS, B.E. (1987). Coping with stress during childhood and adolescence. *Psychological Bulletin, 101*, 393-403.

DWECK, C.S. (1990). Self-theories and goals: Their role in motivation, personality, and development. In R. DIENSTBIER (Ed.), *Nebraska Symposium on Motivation. Vol. 36* (pp. 199-235). Lincoln: University of Nebraska Press.

FURMAN, E. (1974). *A child's parent dies.* New Haven, CT: Yale University Press.

FURMAN, R.A. (1964). Death and the young child: Some preliminary considerations. *Psychoanalytic Study of the Child, 19*, 321-333.

GERSTEN, J.C., BEALS, C., & KALLGREN, C.A. (1991). Epidemiology and preventive interventions: Parental death in childhood as a case example. *American Journal of Community Psychology, 19*, 481-500.
HUKKANEN, R., SOURANDER, A., PIHA, J., & BERGHOT, L. (1999). Psychosocial factors and adequacy of services of children in children's homes. *European Child and Adolescent Psychiatry, 8*, 268-275.
HOKODA, A., & FINCHAM, F.D. (1995). Origins of children's helplessness and mastery achievement patterns in the family. *Journal of Educational Psychology, 87*, 375-385.
HOLAHAN, C.J., & MOOS, R.H. (1987a). Personal and contextual determinants of coping strategies. *Journal of Personality and Social Psychology, 52*, 946-955.
HOLAHAN, C.J., & MOOS, R.H. (1987b). Risk, resistance, and psychological distress: A longitudinal analysis with adults and children. *Journal of Abnormal Psychology, 96*, 3-13.
JOHNSON, J. (1982). Life events and stressors in childhood and adolescence. In B. LAHEY, & A. KAZDIN (Eds.), *Advances in Clinical Child Psychology (Vol. 2)*. Plenum Press, New York.
JONES, E.E., & BERGLAS, S. (1978). Control of attributions about the self through self-handicapping: The appeal of alcohol and the rate of underachievement. *Personality and Social Psychology Bulletin, 4*, 200-206.
KRUPNICK, J.L. (1984). Bereavement during childhood and adolescence (pp. 99-141). In M. OSTERWEIS, G. SOLOMON, & M. GREEN (Eds.), *Bereavement: Reactions, consequences and care*. Washington, DC: National Academy Press.
LLOYD, C. (1980). Life events and depressive events reviewed: Events of predisposing factors. *Archives of General Psychiatry, 37*, 529-535.
MORROW, K.B., & SORELL, G.T. (1989). Factors affecting self-esteem, depression, and negative behaviors in sexually abused female adolescents. *Journal of Marriage and the Family, 51*, 677-686.
NIIT, H. (1999) Children and residential care-a Baltic perspective. *Children at Risk, 2*, 7-8.
NURMI, J.E. (1992). Cross-cultural differences in self-serving bias: response to the attributional style questionnaire by American and Finnish students. *The Journal of Social Psychology, 20*, 188-200.
NURMI, J.E., SALMELA-ARO, K., & HAAVISTO, T. (1995). The Strategy and Attribution Questionnaire: Psychometric properties. *European Journal of Psychological Assessment, 11*(2), 108-121.
NURMI, J.E., SALMELA-ARO, K., & RUOTSALAINEN, H. (1994). Cognitive and attributional strategies among unemployed young adults-A case of failure-trap strategy. *European Journal of Personality, 8*, 135-148.
PARRY, G., & BREWIN, C.R. (1988). Cognitive style and depression: Symptom-related, event-related or independent provoking factor? *British Journal of Clinical Psychology, 27*, 23-35.
PELCKOVITZ, D., KAPLAN, S.J., GOLDENBERG, B., MANDEL, F.S., LEHANE, J., & GUARRERA, J. (1994). Post-traumatic stress disorder in physically abused children. *Journal of American Academy of Child and Adolescent Psychiatry, 33*, 305-312.
PETERSON, C., & SELIGMAN, M.E.P. (1984). Causal explanations as a risk factor for depression: Theory and evidence. *Psychological Review, 91*, 347-374.
PRINGLE, M.L.K., & TANNER, M. (1958). The effects of early deprivation on speech development: A comparative study of 4-year-olds in a nursery school and in residential nurseries. *Language and Speech, 4*, 269-287.
RUTTER, M., IZARD, C.E., & READ, P.B. (1986). *Depression in young people: Developmental and clinical perspectives*. New York: Guilford.
SELIGMAN, M.E.P. (1990). *Learned optimism: How to change your mind and your life*. London: Pocket Books.
SELIGMAN, M.E.P., NOLEN-HOEKSEMA, S., THORNTON, N., & THORNTON, K. (1990). Explanatory style as a mechanism of disappointing athletic performance. *Psychological Science, 1*, 143-146.
SELIGMAN, M.E.P., PETERSON, C., KASLOW, N.J., TANENBAUM, R.L., ALLOY, L.B., & ABRAMSON, L.Y. (1984). Explanatory style and depressive symptoms among school children. *Journal of Abnormal Psychology, 93*, 235-238.

SIEGEL, K., MESAGNO, F., & CHRIST, G. (1990). A prevention program for bereaved children. *American Journal of Orthopsychiatry, 60*, 168-175.
SWEARINGEN, E.M., & COHEN, L.H. (1985). Life events and psychological distress: A prospective study of young adolescents. *Developmental Psychology, 21*, 1045-1054.
THOITS, P.A. (1982). Conceptual, methodological and theoretical problems studying social support as a buffer against life stress. *Journal of Health and Social Behavior, 23*, 145-159.
TIZARD, B., & REES, J. (1975). The effect of early institutional rearing on the behaviour problems and affectional relationships of four-year-old children. *Journal of Child Psychology and Psychiatry, 16*, 61-73.
TIZARD, J., & TIZARD, B. (1974). The institution as an environment for development. In M.P.M. RICHARDS (Ed.), *The integration of a child into a social world* (pp. 137-152). Cambridge: Cambridge University Press.
TOBIS, D. (2000). *Moving from residential institutions to community-based social services in Central and Eastern Europe and the former Soviet Union*. The World Bank. Washington, DC.
VORRIA, P., WOLKIND, S., RUTTER, M., PICKLES, A., & HOBSBAUM, A. (1999). A comparative study of Greek children in long-term residential group care and in two-parent families: I. Social, emotional, and behavioral differences. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 39*, 225-236.
ZUKAUSKIENE, R., & SONDAITE, J. (2004). The Strategy and Attribution Questionnaire: Psychometric properties of a Lithuanian translation an adolescent sample. *Scandinavian Journal of psychology, 45*, 155-160.
ZUKAUSKIENE, R., PILKAUSKAITE-VALICKIENE, R., MALINAUSKIENE, O., & KRATAVICIENE, R. (in press). Evaluating behavioral and emotional problems with the CBCL and YSR scales: Cross-informant and longitudinal associations. Manuscript accepted for publication in *Medicina*.

Author note

Requests for reprints should be sent to
Rita Zukauskiene
Department of Psychology
Law University of Lithuania
Valakupiu str. 5
LT-2016 Vilnius
Lithuania
Electronic mail may be sent to laav@is.lt