



# Mental health of children in counselling institutions: Empirical findings from Flanders (Belgium)

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## Abstract

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We examined the prevalence and correlates of mental health problems in a representative sample of children six years or older living in counselling institutions in Flanders (Belgium), using the Child Behavior Checklist (Achenbach & Rescorla, 2001) and a self-developed questionnaire. Data were gathered from 256 children. The findings showed that seriously deviant problem behaviours and psychopathology were highly prevalent in this group, that children's problems were complex and only marginally to moderately affected by institution, educator, and child characteristics. Further, children's problems tended to increase across time. Most children received professional help for their problems, either inside or outside the institution.

**Key words:** mental health, children, substitute care, residential care, counselling institutions

## Care for children and adolescents with psychosocial problems in Flanders

### *The historical and political context*

During the last three decades the unitary state Belgium gradually has been reformed into a federal state. The consecutive reforms made that the state now is governed by several partners with equal rights and autonomous responsibilities in different fields. Responsibilities that were before held by the state are now held by local authorities. Currently, the state consists of communities and regions. Communities mainly relate to language, cultural matters and personal matters, for instance welfare or education. There are three communities in Belgium: the Flemish Community, the French Community and the German-speaking Community. Regions relate to economic areas. There are three independent regions: the Flemish Region, the Walloon Region and the Brussels Capital Region. Most of the communities and regions have their own government. In Flanders, the responsibilities of the Community and the Region are held by one single government. Next to the community and the regional level, the federal state re-

mains responsible for finance, defence, justice and social security. The consecutive state reforms made Belgium to a quite complex state. Moreover, state reform has not been completed yet and debates about the federalisation of Belgium continue.

The state reforms made that the welfare system became a federal matter for which the Flemish Community is responsible. As such, the Flemish Community is responsible for youth protection (in Flanders), including social and judicial protection, but excluding following matters that still come under federal authority:

- the civil rights rules regarding the status of the under-aged and the family; these rules are laid down in the civil rights code;
- penal rules defining infringements on youth protection (e.g., crimes);
- the organization of juvenile courts, their territorial responsibility and the judicial procedure for these courts;
- deprivation of parental rights and supervision over child allowance or other social benefits;
- enumeration of measures that can be taken for the under-aged who committed crime-like acts.

Although these rules are federal matters, their implementation is a Community matter. For instance, assignment of measures for juvenile delinquents is a federal matter (Ministry of Justice), whereas the implementation of enforceable pedagogical measures for juvenile delinquents is a matter for the Flemish Community.

Flanders has five provinces: Vlaams-Brabant, Antwerpen, Limburg, West-Vlaanderen en Oost-Vlaanderen. On January 1st, 1999, the Flemish Community counted 5.926.838 inhabitants (Ministry of the Flemish Community, 2000). This was about 58% of the total population in Belgium. Nearly a quarter of the Flemish population (23.25%) was under age 20 and about 19% attended school (kindergarten, elementary or secondary school).

## ***The current context***

First, we give an outline of the most important legal and organizational aspects of the care system for children and adolescents with psychosocial problems in Flanders. Next, we present some figures about the target groups. Finally, we discuss recent tendencies in this area of youth care.

### **Legislation and organization**

This system is intended for young people who need special care and protection because of their societal vulnerability. The main aims of the system are to raise social integration and the ability of young people to manage for themselves. These aims are realised by conducting a general prevention policy, this means prevention by eliminating situations that have a negative influence on the development of young people, and by organizing individual assistance for young people living in a problematic educational situation. The current system is based on consecutive special youth assistance Acts (see Hellinckx, Grietens & Geeraert, 2001; Ministry of the Flemish Community, 1995). Following principles underlie the policy of the Flemish Government:

- *An explicit distinction between voluntary and judicial aid.* In order to foster voluntary aid, special committees were set up. These committees are autonomous with regard to the judicial authorities. Their main task is to organize voluntary accepted service and assistance in case of problematic educational situations. Each administrative district has a committee. If voluntary aid threatens to strand, mediation committees act as the last reconciliation authorities. Each judicial district has a mediation committee. These committees maximize the chances for voluntary services, guarantee voluntary service and aid for the youngster, de-

velop solutions for youngsters and parents referred by the office of the public prosecutor and advise the possibility to enforce a pedagogical measure in case no agreement could be reached, although this is strongly advisable in the interest of the youngster. Judicial youth assistance is provided by the juvenile court. It means coercive aid. A distinction is made between judicial youth assistance in a problematic educational situation and judicial youth assistance for young people who have committed crime-like acts (juvenile delinquents).

- *More rights for young people.* In accordance with international treaties (e.g., the Convention of Children's Rights), legislation strives for an approach that stimulates maturity, independence and sense of responsibility of young people. One example is the right to be heard for youngsters under 14 years who are involved in a problematic situation. Further, assistance always has a well-determined duration and well-determined aims. Duration and aims are communicated to the youngster. Extension of the assistance is only possible when the aims are not realized within the determined period of time.
- *Subsidiarity.* This principle implies that judicial measures should be avoided as long as voluntary assistance is still possible and that young people should preferably live in the least restricted environment. For instance: foster care should be preferred to residential care, family support should be preferred to out-of-home placement.
- *The aid that is offered must be as differentiated as possible so that every individual request can be given an adequate response.* In addition to traditional residential care, services for home based care, educative projects, centres for "Living independently under supervision" and day care services were set up. Further, to guarantee the quality of the delivered services, quality standards are formulated and evaluations are held at regular intervals.
- *Family-oriented assistance.* Families are involved as much as possible in the assistance, since they hold the responsibility for the child's education. Problematic situations matter children and parents. This makes a family-oriented approach inevitable. When out-of-home placement is necessary, the facility must be preferably in the region of the youngster. Contacts with the parents must be stimulated and secured.

The facilities of the care system for children and adolescents with psychosocial problems include private facilities as well as community institutions.

Private facilities need to be recognized by the Government before they can be subsidized. They are divided into following categories:

- *Counselling (therapeutic) institutions.* These institutions provide residential care for young people.<sup>1</sup>
- *Foster homes.* These are small insitutions run by families (mostly with own children). They approach a family environment.
- *Admission, orientation and observation centres.* These centres admit young people either for observation purposes or because they are arrested by the police and cannot be returned to the persons who guard them nor to the judicial authorities. In addition, young people living in a crisis situation or young people who cannot be sent to another facility are admitted.
- *Day care centres.* These centres admit young people during certain periods of the day and provide services to the family (e.g., helping the youngster doing his/her homework).
- *Home based care.* These services provide support to families living in problematic educational situations.
- *Centres for "Living independently under supervision".* These services help young people to live independently and manage their own lives.
- *Foster care services.* These services recruit foster families and try to optimise the match between foster families and foster children.

The community institutions have a somewhat specific position in the system. Contrary to the private facilities, they have the duty of admission. They cannot refuse youngsters. Most of the youngsters (about 70%) who are placed in these institutions have committed a crime-like act

(juvenile delinquents). However, some youngsters are placed in a community institution for other reasons (e.g., a problematic educational situation). Placement in a community institution mostly takes no longer than three months and has both a protective and a pedagogical aim. Social integration is promoted by means of educational measures. The youngster can be admitted either to a closed education setting, an open education setting, or a reception and observation setting. Since January 1st, 2002, it is no longer possible to admit young people having committed a crime-like act to adult prisons (until this date, each year about 150 to 200 young offenders were admitted to adult prisons due to the limited capacity of the community institutions). To fill the gap, the Federal Government recently opened a "federal youth prison". This institution is managed by the Flemish and the Walloon Government.

Young people are referred to a facility either by the special committees or by judicial authorities.

### Some figures

In 1999, 4.435 children between zero and eighteen years were admitted to the care system for children and adolescents with psychosocial problems in Flanders. This is approximately 3% of the general population. Table 1 gives an overview of the number and size (= maximum number of children that can be admitted) of the private facilities in the Flemish Community (Ministry of the Flemish Community, 2000).

**Table 1**

Distribution of private facilities of the care system for children and adolescents with psychosocial problems in the Flemish Community (number and size)

Category	Number (%)	Size (%)
Residential facilities (counselling institutions, foster homes, admission, orientation and observation centres)	124 (55.6%)	3182 (61.5%)
Daycare centres	46 (20.6%)	641 (12.4%)
Home based care	39 (17.5%)	996 (19.3%)
Centres for "Living independently under supervision"	14 (6.3%)	352 (6.8%)
Foster care services	16	n.a.

As in many other European countries, residential care in the Flemish Community has reduced during the last decades (fewer institutions, fewer admissions) in favour of foster care (Hellinckx, Grietens & Geeraert, 2001). However, residential care still outweighs foster care (in 1999, the rate was 3:2 with 2.901 youngsters living in a residential facility and 1.974 youngsters living in a foster family). Nevertheless, the number of foster care placements increases every year. In 1999, there were 2.974 foster care placements within the special youth assistance system (in 1998: 2.568, in 1997: 2.662).

There are four community institutions (three for boys and one for girls) with a total capacity of 222. The number of juvenile offenders admitted to community institutions increases from year to year (Hellinckx, Grietens & Geeraert, 2001). In 1995, for instance, 609 young offenders were admitted. In 1996 the total number of admissions was 709. This was an increase of 16.4%. Readmission to these institutions is high (appr. 70%). The federal youth prison has a capacity of 50 places.

Following tendencies in the care system for children and adolescents with psychosocial problems can be identified (Hellinckx, Grietens & Geeraert, 2001):

- The reduction of residential care continues. This is in favour of foster care placements, the number of which grows every year. In addition to foster care, different alternatives for out-of-home placement of children were developed. Parent and family support programmes to prevent out-of-home placement of children living in problematic educational situations often replace residential and foster care. An example of family support is the "Crisis help at home" programme which is based on the Homebuilders' programme and aims at restoring family ties and preventing breakdowns (Beenker, Bijl & Veerman, 2002; ten Brink, & Veerman, 2001).
- Further, the implementation of the Convention of Children's Rights in youth care goes on. Policy makers and staff members can no longer deny the Convention. For children living in residential settings, a protocol has been developed that should guarantee that their rights are respected by all caretakers.
- Another issue is the quality of care provided to young people. General quality standards have been formulated and should be reached by all service providers. If standards are not reached, institutions or centres cannot be recognised (and subsidized) by the Government. Further, treatment should be planned according to certain criteria. Treatment goals and methods have to be fixed in a treatment plan which should be followed by all parties involved.
- With regard to the treatment of juvenile delinquents, restorative justice models (including family group conferences) are tried out in addition to the traditional "punishment" or "pedagogical" models.
- Finally, the care system cannot perform well without contacts with the other areas of youth care (e.g., mental health care, education). To facilitate the co-operation between services from different areas in the interest of youngsters, parents and staff members, new projects are started. The final aim of these projects is to rebuild the current youth care system into an "integrative" system.

## **Mental health of children and adolescents in counselling institutions in Flanders: What do we know?**

Until now, only one study on the mental health of children and adolescents in Flemish counselling institutions has been conducted (Peeters & Wildiers, 1994). These authors studied the prevalence of problem behaviours among children living in counselling institutions and foster homes, using the Dutch version of the Child Behavior Checklist (CBCL) and related materials (Verhulst, van der Ende & Koot, 1996). The sample consisted of 394 children between 6 and 16 years old (209 boys, 185 girls) from 35 settings. Children were placed by special youth assistance committees (56%) or judicial authorities (44%). The sample was stratified according to the distribution of settings in the five Flemish provinces and could be considered as representative. CBCLs were completed by the caregivers (educators). Using the Dutch cut-off points, following prevalences of CBCL syndromes were found: Withdrawn 15%, Somatic Complaints 5%, Anxious/Depressive 13%, Social Problems 16%, Thought Problems 5%, Attention Problems 17%, Aggressive Behavior 22%, Delinquent Behavior 26%. Further, about 48% of all children scored in the clinical range on the Total Problems scale, about 50% on the Externalizing scale and about 33% on the Internalizing scale. It is obvious from this report that children placed in residential settings manifested significantly more problems than children in the general population, with prevalence rates being up to five times higher. Externalizing problems were most prevalent. Differences between boys and girls were found, showing that boys

obtained higher scores than girls on the Externalizing scale and the Aggressive Behavior and Delinquent Behavior syndromes. Older children obtained lower scores than younger children on the Externalizing scale and related syndromes. Further, significantly more problems were reported in children with multiple placements. No differences were found between children placed by judicial authorities and children placed by special committees. Problem behaviour scores did not correlate with the length of stay in the institution. The prevalence rates of problems in this sample were very similar to those of a control sample of same-aged children referred to mental health care services. Unfortunately, neither the utilization of mental health services nor the needs for professional help of children in institutions were studied.

Although the study by Peeters and Wildiers provided a wealth of information on the mental health of children living in counselling institutions, the picture is far from complete. Many questions concerning the mental health of these children still remain and warrant further study. The picture has to be completed and actualized in order to provide relevant information to the local and the European governments. With regard to the Flemish context, following research needs can be formulated:

- The study was conducted more than eight years ago. Since then, however, the youth care system changed considerably. The prevalence rates we presented in this summary report, may have become somewhat obsolete. For instance, during the last decade there was a substantial increase in foster care placements, a decrease in residential care placements, and a rise of the number of very difficult young people in residential care facilities. Did these changes make that at present more children with serious disturbances are referred to residential settings than before?
- The Flemish prevalence rates were never compared with prevalence rates reported in other countries. Notwithstanding the large differences between countries in youth protection and youth care systems, cross-national comparisons will help us develop a common database and increase our knowledge of the mental health problems children placed out-of-home have.
- No information is available on the degree of service utilization or the needs for professional help of these children. We do not know whether young people really have full access to the mental health care facilities, nor are we aware of the possible mechanisms underlying social exclusion. It is our believe that this knowledge will be of great help to continue the fight against social exclusion of children living in residential care facilities.

## **Mental health problems among children in counselling institutions: An empirical study**

### ***Objectives and research questions***

The current study has three basic objectives: 1) to examine prevalence rates and correlates of mental health problems in a representative sample of children six years or older living in counselling institutions in Flanders (including the Brussels region); 2) to examine the needs for mental health care and actual service utilization of these children; 3) to compare Flemish and Greek prevalence rates of mental health problems among children living in residential care (institutions).

Following specific research questions can be formulated:

- What is the prevalence of 1) severe problem behavior and psychopathology, 2) severe internalizing problems (e.g., depression, anxiety), 3) severe externalizing problems, (e.g., aggres-

- sive behavior, delinquent behavior), and 4) key symptoms of psychopathology (e.g. suicidal ideation, suicide attempts, drug abuse) in this group?
- What is the comorbidity between mental health problems in this group? In particular, 1) how many children manifest more than one disorder?, 2) which disorders co-occur?, and 3) how many children manifest no disorder?
  - What are significant correlates of mental health problems in this group? In particular, 1) what is the effect of institutional characteristics on the prevalence rates (in particular size, actual number of children in the institution, number of children in the group of the target child, number of educators in the group of the target child, staff)?, 2) what is the effect of educators' characteristics on the prevalence rates (in particular gender, age, professional experience in the institution or elsewhere, acquaintance with the child)?, and 3) what is the effect of child characteristics on the prevalence rates (in particular gender, age, educational level, placement and care history, contact with mother, father and family, length of stay in the institution)?
  - What is the rate of service utilization in this group? In particular, 1) how many children actually make use of specialized services inside or outside the institution (e.g., child guidance centres, mental health services, private therapists), because of mental health problems?, and 2) how many children in this group are actually diagnosed by a multidisciplinary team as having a psychiatric disorder and how many of them actually make use of specialized services inside or outside the institution?
  - Are prevalence rates of children in Flemish counselling institutions higher or lower than prevalence rates of children living in comparable institutions in Greece?

We believe that this study will contribute to the knowledge on mental health problems of children in counselling institutions in Flanders (Belgium). We will find out what are actual needs and problems and will be able to give recommendations for guided future action. Further, we believe that the focus on the aforementioned research questions will make findings comparable with those of other empirical studies on this issue (e.g., Meltzer et al., 2003).

## Methodology

### Sample selection

In order to draw a representative sample of children living in counselling institutions in Flanders, we used a two-stage sampling design.

*Stage one.* A sample of 45 counselling institutions in Flanders (including the Brussels region) was drawn, this is about 50% of the counselling institutions.<sup>2</sup> The sample was drawn taking into account the distribution of institutions across the five Flemish provinces and the Brussels region. This means that provinces with a high number of counselling institutions were more represented in the sample than provinces with a small number of institutions. Within each province institutions were selected randomly.

*Stage two.* Next, in each selected institution 10 children six years or older were selected using a random procedure. The procedure consisted of three steps: 1) every fourth child on the institution's list (in alphabetical order) had to be selected for the survey, 2) if the fourth child was below six years, the fifth child had to be selected, 3) in case there were less than 10 children in the institution, all children had to be selected. Using this procedure, the maximum sample size could be  $N = 450$ . Based on the figures given by Hellinckx, Grietens and Geeraert (2001), we estimated that this is at least 16% of the total population of children living in this type of residential care facilities in Flanders.

## Instruments

To measure mental health problems of children, use was made of the Dutch version of the Child Behavior Checklist/6-18 (Achenbach & Rescorla, 2001). To measure characteristics of institutions, educators and children, an additional questionnaire was developed in close co-operation with the Greek partners in the project (see Agathonos-Georgopoulou, Sarafidou & Stavrianaki, this issue).

*Child Behavior Checklist/6-18 (CBCL/6-18 new version; Achenbach & Rescorla, 2001).* The CBCL/6-18 is a well-validated and widely used standardized measurement for behavioral problems in children aged 6-18. One part measures problem behavior and consists of 118 items which have to be rated on a three-point scale with 0 = not true, 1 = sometimes true, and 2 = often true. Additional problems that are not mentioned in the questionnaire can be reported in two open-ended questions. In addition to the Total Problems score, two broad-band syndrome scores (Externalizing, Internalizing) and eight narrow-band syndrome scores (Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior, Aggressive Behavior) can be computed. All scores can be classified into a normal, a borderline or a clinical range, using percentiles or standardized T-scores. Further, scores on six DSM-oriented scales (Affective Problems, Anxiety Problems, Somatic Problems, Attention Deficit/Hyperactivity Problems, Oppositional Defiant Problems and Conduct Problems) can be computed. These scales refer to DSM-IV disorders. As for the other syndromes, scores on the DSM-oriented scales can be classified into a normal, a borderline or a clinical range, using percentiles or standardized T-scores. Finally, Achenbach and Rescorla (2001) stress the importance of scores on individual critical items, which may raise particular challenges for management and intervention. They list eight critical items: "Deliberately harms self or attempts suicide", "Hears sound or voices that aren't there", "Physically attacks people", "Runs away from home", "Sees things that aren't there", "Sets fires", "Talks about killing self", and "Uses drugs for nonmedical purposes". In this study, the Dutch version of the CBCL/6-18 was used (Verhulst & van der Ende, in press). The Dutch CBCL is very similar to the American CBCL, with a Total Problems score, two broad-band and eight narrow-band syndrome scores and six DSM-oriented scales. The factorial structure of the new CBCL/6-18 Dutch version still has to be examined. The factorial structure of the previous CBCL found for large clinical samples in The Netherlands was very similar to the one reported by Achenbach (1991). The previous Dutch CBCL has good psychometric properties, with high internal consistency and test-retest reliability, and high external validity (see for reviews Verhulst, 1999; Verhulst, van der Ende & Koot, 1996). As there are no norms yet for the new CBCL, we used the American norms proposed by Achenbach and Rescorla (2001).

*Additional questionnaire.* To measure potential correlates of mental health problems of children in counselling institutions and to estimate the actual rate of service utilization, a questionnaire was developed. The questionnaire consisted of three parts: characteristics of institutions, characteristics of educators, characteristics of children placed in care.

- Characteristics of institutions: size, actual number of children in the institution, number of children in the group of the target child, number of educators in the group of the target child, number of staff members (social worker, pedagogue, psychologist, medical doctor, administration, other staff members).
- Characteristics of educators: age, gender, professional experience (in months) in the institution, professional experience (in months) elsewhere, acquaintance with the child (in months).
- Characteristics of the target children: educational level (regular vs. special school, grade), placement history (Has the child been placed in residential care before? If yes, in what type of institution and for how long?), care history (Has there been any form of family support, family preservation or home visitation before placement? Has the child been placed in a foster family before placement in the institute?), frequency of contacts with mother, father and family, length of stay in the institution (in months).

- Previous to the questions on service utilization, it was asked whether a general concern about the child's mental health was felt and whether the child was diagnosed before as having a (DSM) psychiatric diagnoses. A distinction was made between help inside the institution and help outside (e.g., by a child guidance centre, a private psychotherapist).

## Procedures

Once the institutions were selected, a letter was sent to the head of each selected institution, explaining the aims of the study and the procedures for selection of the target children and data collection. One week later, the institutions were contacted by phone to ask for participation and to make the practical arrangements. If necessary, a second or third phone call was given until it was clear whether or not the head gave permission for participation.

Questionnaires were sent to the institutions by mail. In order to enhance the response, a stamped return envelope was included. In some cases, visits to the institution were arranged to distribute and collect the questionnaires. The target children had to be selected by the head of the institution, using the stepwise random procedure explained (see above).

We insisted that the CBCL had to be completed by an educator (caregiver) who knew the child very well. This was necessary because the CBCL taps problems occurring in daily life now or within the past six months. The additional questionnaire had to be completed by the head of the institute.

CBCL data were entered and scored by means of the Assessment Data Manager, version 3.2 (Achenbach & Rescorla, 1999-2002). The additional questionnaires were entered in Microsoft Excel 2000. All data were analyzed by means of SPSS version 10.0 for Windows.

## Response rate

On the 1st of August 2003, 27 institutions had completed and returned the questionnaires. Excluding one untraceable institute, the response rate was 61.4%. As the participating institutions were rather equally distributed across the five Flemish provinces and the Brussels region and as there were no reasons to believe that there were significant differences between participating and nonparticipating institutions with regard to child mental health problems and service utilization, we concluded that the response was sufficiently high to consider the sample as representative of the population of 6- to 18-year-old children in counselling institutions in Flanders. Data of 256 children were available.

# Results

## Description of the sample

*Institution characteristics.* The size of the participating institutions ranged from 10 to 83, with a mean of 34.75 ( $SD = 23.39$ ). The mean percentage of children staying in the institutions (as compared to the total size of the institution) was 89.2%. The mean number of children in the group of the target children was 9.34 ( $SD = 3.28$ ), the mean number of educators was 5.73 ( $SD = 1.41$ ).<sup>3</sup> The number<sup>4</sup> of social workers (social assistants) in the institutions ranged from 0 to 8, with about one out of three institutions (33.6%) having no social worker. The number of psychologists ranged from 0 to 2. More than half of the institutions (55.1%) did not have a psychologist. The number of pedagogues working in the institutions ranged from 0 to 3. In nearly half of the institutions there was no pedagogue (46.9%). In more than three out of ten institutions there was neither a pedagogue nor a psychologist (31.5%), in about one out of ten institutions (10.5%) there was neither a pedagogue nor a social worker. In two institutions, there was no social worker, pedagogue or psychologist. Only a few institutions (3.1%) had a medical staff in their team. More than four of ten institutions (40.2%) did not have an admin-

istrative staff function. Most of the institutions had other staff members (e.g., a psychotherapist).

*Educator characteristics.* The majority of the educators were female (67.6%). Ages ranged from 21 to 60 ( $M = 31.22$ ,  $SD = 8.06$ ). Professional experiences in the institution ranged from 1 month to 336 months ( $M = 85.15$ ,  $SD = 80.75$ ). Professional experiences elsewhere in the field of residential care ranged from 0 to 204 months ( $M = 17.50$ ,  $SD = 39.71$ ). Acquaintance with the child ranged from 1 month to 168 months ( $M = 23.51$ ,  $SD = 27.31$ ) and was closely linked to the child's length of stay in the institution.

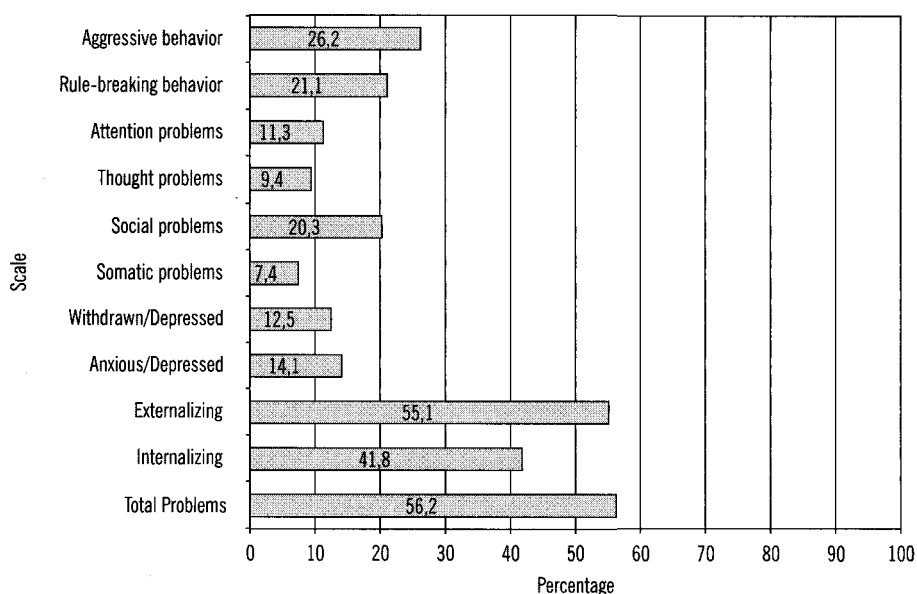
*Child characteristics.* Children were not equally distributed across gender, 55.5% of the children were girls, 44.5% boys. Ages ranged between 6 and 18 years, with a majority of the children being 14 or older ( $M = 13.14$ ,  $SD = 3.64$ ). Length of stay in the institution varied from 1 month to 180 months. The mean length of stay was 28.12 months ( $SD = 31.61$ ). Most children (59.8%) attended the regular school system. Twenty-five percent attended special education and 10.5% part-time education. Four children were out of the educational system, due to problems. A majority of the children still had contacts with relatives, at least once a week (with mother: 82.8%, with father: 64.8%, with other relatives: 76.6%). Very few children (6.8%) had neither contacts with mother nor father. More than six out of ten children (64.1%) were at least once placed in a (semi-)residential facility previous to the current placement, for instance in a day care centre, a counselling institution, an admission, orientation and observation centre, or a psychiatric unit. More than one out of five children (21.5%) had been placed in foster care previous to placement in the institution. Often (37.1% of the cases), placement had been preceded by a form of family support, family preservation or home visitation. In conclusion, the majority of the children had a placement or care history (83.6%).

### **Prevalence of seriously deviant problem behavior and psychopathology**

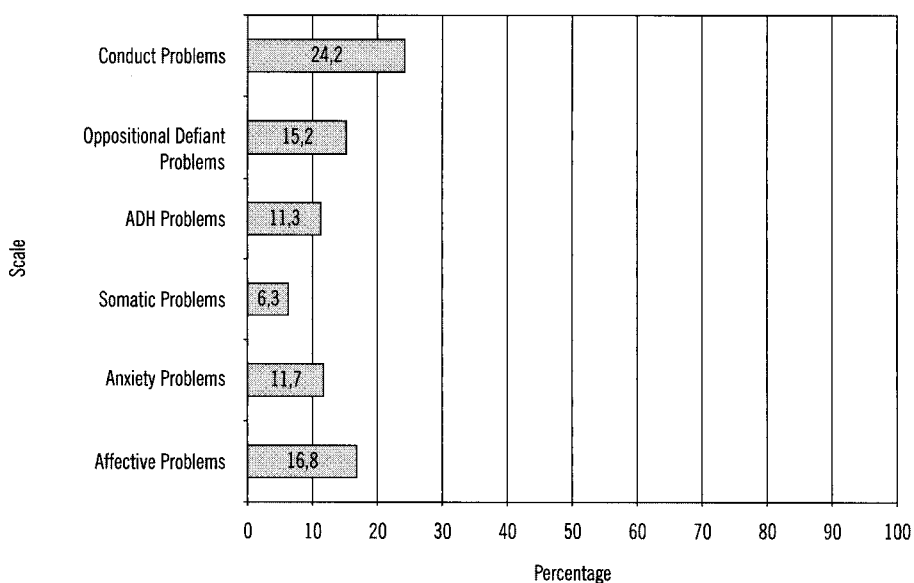
*Child Behavior Checklist total and syndrome scales.* Prevalence rates of seriously deviant problem behavior were computed by taking the percentage of scores in the clinical range on the Total Problems scale, the Internalizing scale, the Externalizing scale and the eight cross-informant syndrome scales. Use was made of percentiles. On the Total Problems, the Internalizing, and the Externalizing scale, a score was considered deviant when it corresponded with  $pc > 90$  of the norm group. On the cross-informant syndromes, a score was considered deviant when it corresponded with  $pc > 98$  of the norm group. Prevalence rates are presented in Figure 1. All prevalence rates in this group were substantially higher than in the general population. Externalizing problems (aggressive and rule-breaking behavior) were more prevalent than internalizing problems. More than half of the children manifested seriously deviant externalizing problems according to their educator, whereas more than four out of ten children manifested seriously deviant internalizing problems.

*Child Behavior Checklist DSM-oriented scales.* Prevalence rates of seriously deviant scores on the DSM-oriented scales were computed by taking the percentage of scores in the clinical range. Again, use was made of percentiles. On the DSM-oriented scales, a score was considered deviant when it corresponded with  $pc > 98$  of the norm group. The prevalence rates are presented in Figure 2. All prevalence rates in this group were substantially higher than in the general population. The highest rates were found for Conduct Problems (24.2%), Affective Problems (16.8%), and Oppositional Defiant Problems (15.2%).

*Child Behavior Checklist key symptoms.* In Table 2, we give an overview of '1' (= sometimes true) and '2' (= often true) scores on eight CBCL items, which are considered by Achenbach and Rescorla (2001) as key symptoms. Scores on these items provide relevant information on the risks children run. For instance, 13.7% of the children sometimes and 2.7% of the children often talk about killing self, according to the educators. Again, all rates tended to be higher



**Figure 1**  
Percentage of children scoring in the clinical range on CBCL total and syndrome scales



**Figure 2**  
Percentage of children scoring in the clinical range on the CBCL DSM-oriented scales

than those in general populations (Achenbach & Rescorla, 2001; Verhulst, van der Ende & Koot, 1996).

**Table 2**

Percentages of '1' and '2' scores on the CBCL key items

Item	Score 1	Score 2
Deliberately harms self or attempts suicide	11.3	2.0
Hears sounds or voices that aren't there	3.9	0.4
Physically attacks people	28.5	4.7
Runs away from home	16.0	3.5
Sees things that aren't there	3.5	2.3
Sets fires	2.7	0.0
Talks about killing self	13.7	2.7
Uses drugs for nonmedical purposes	14.5	5.1

*Comorbidity between mental health problems.* Many children manifest serious problems in different areas, for instance comorbid internalizing (e.g., anxiety) and externalizing problems (e.g., aggressive behavior). For this reason, we computed comorbidity rates between classified scores on the DSM-oriented scales.<sup>5</sup> First, we examined the distribution of the number of scores on DSM-scales falling in the clinical range. We found that 57.4% of the children did not score in the clinical range on any of the DSM-scales, 20.3% had a score in the clinical range on one scale, 12.1% on two scales, 3.4% on three scales, 5.1% on four scales, and 1.2% on five scales. The comorbidity rates between DSM syndromes were rather elevated, with 21.8% of the children scoring in the clinical range on at least two scales (general rate). Excluding the children scoring in the clinical range on both the Oppositional Defiant Problems and the Conduct Problems scale ( $n = 31$ ), the general comorbidity rate was 10.2%.

### Correlates of mental health problems

*Institution characteristics.* In general, characteristics of institutions (size, actual number of children in the institution, number of children in the group of the target child, number of educators in the group of the target child) only marginally correlated with mental health problems. There was a significant and positive relationship between size of the institution and scores on the Anxiety Problems and Attention Deficit/Hyperactivity Problems scales.<sup>6</sup> Similarly, a significantly positive relationship was found between the actual number of children in the institutions and the scores on Total Problems, Anxiety Problems and Attention Deficit/Hyperactivity Problems. The number of children in the group of the target child correlated significantly with any of the CBCL scales, whereas the number of educators in the group of the target child only correlated significantly positive with the Total Problems scale. With regard to the number of staff members in the institution, there were only significantly positive relationships between the number of social workers and Total Problems, Anxiety Problems, Attention Deficit/Hyperactivity Problems, Oppositional Defiant Problems, and Conduct Problems. Some relationships, however, may be spurious, as the number of social workers in an institution is closely related to its size.

*Educator characteristics.* In general, characteristics of educators (age of educator, gender of educator, professional experience in the institution, professional experience elsewhere, ac-

quaintance with the child) not or only marginally correlated with mental health problems. Only one significance<sup>7</sup> was found, namely a positive relationship between acquaintance with the child and Attention Deficit/Hyperactivity Problems.

*Child characteristics.* In general, child characteristics (child's gender, age, level of education, contacts with relatives, placement history, care history) moderately correlated with mental health problems. There was a significant effect of gender on the Internalizing scale, with girls obtaining higher scores than boys. Further, a significant effect of gender was found on Affective Problems and Somatic Problems (girls scored higher than boys on both scales) and on Attention Deficit/Hyperactivity Problems and Oppositional Defiant Problems (boys scored higher than girls). A significant effect of level of education was found on Total Problems, Internalizing, Externalizing, all six DSM-oriented scales, and the number of scores on DSM-scales falling in the clinical range. In all cases, children not attending regular education scored higher than children attending regular education. The highest scores were obtained by the children who were out of the school system, due to problems. There were no significant effects of contacts with relatives (father, mother, family) on the CBCL scores. Neither were significant effects of placement history found. There was only one significant effect of care history, with children having been in foster care previous to placement in the institution obtaining higher scores on the Total Problems scale than children not having been in foster care. Length of stay in the institution correlated significantly positive with Attention Deficit/Hyperactivity Problems,<sup>8</sup> whereas age of the child correlated significantly positive with Internalizing, Affective Problems and Somatic Problems, and significantly negative with Attention Deficit/Hyperactivity Problems and Oppositional Defiant Problems.<sup>9</sup> Children about whom educators were concerned ( $n = 178$  or 69.8%) scored significantly higher on Total Problems, Internalizing, Externalizing, and all DSM-oriented scales, except Somatic Problems, than children about whom no concerns were expressed. Similarly, children who were diagnosed before as having a (DSM) psychiatric diagnosis ( $n = 22$  or 8.7%) scored significantly higher on these scales than children who were not diagnosed as having a DSM-disorder.

### Service utilization

A majority of the children (60.2%) received professional help for their mental health problems, either inside the institution (about one-third) or outside (about two-thirds). Eighteen children were treated inside and outside the institution. All children with a psychiatric diagnosis received professional help inside or outside the institution. Two children were treated inside and outside the institution.

**Table 3**

Percentages of children in the Flemish and the Greek sample scoring in the clinical range on the CBCL DSM-oriented scales

Scale	Flemish sample N = 256	Greek sample N = 202
Affective Problems	16.8	5.4
Anxiety Problems	11.7	2.5
Somatic Problems	6.3	1.5
Attention Deficit/Hyperactivity Problems	11.3	3.5
Oppositional Defiant Problems	15.2	3.0
Conduct Problems	24.2	8.4

### Comparison between Flemish and Greek prevalence rates

The Flemish CBCL data were compared with CBCL data from 202 6-to-18-year-old children living in residential institutions in Greece (see Agathonos-Georgopoulou, Sarafidou & Stavriani, this issue). The Flemish children scored significantly higher<sup>10</sup> than the Greek children on Total Problems, Internalizing, Externalizing, and the six DSM-oriented scales. In Table 3, percentages of Flemish and Greek children scoring in the clinical range on the DSM-oriented scales are given.

As can be seen, in the Flemish sample the prevalence rates were about three (e.g., Affective Problems) to five times higher (e.g., Oppositional Defiant Problems) as compared to the Greek sample.

### Significance of the findings

The present study clearly demonstrates that serious mental health problems, as measured by the Child Behavior Checklist, are highly prevalent among children in residential care facilities (counselling institutions) in Flanders. This is not a new finding. Similar rates were reported by Peeters and Wildiers (1994) in residential care facilities (counselling institutions and foster homes). Furthermore, the prevalence rates are highly comparable with those reported by Meltzer et al. (2003) on the mental health of children cared for by local authorities in the UK.

Our study not only adds to the international database on mental health problems in children in residential care facilities. The findings also help us to understand better the current situation in Flanders. We try to summarize the main trends.

#### *Children in counselling institutions show severe problems.*

The seriousness of problems is reflected by the high prevalence rates and by the high percentage (42.6%) of children scoring in the clinical range on at least one DSM-oriented scale. Internalizing as well as externalizing problems are prevalent, with the latter being most prevalent. The high number of children with severe externalizing problems in residential care is not surprising. The steady increase of children placed in foster families in Flanders (Hellinckx, Grietens & Geeraert, 2001) may have made that residential care gradually has become a (last?) resort for the most "difficult" (aggressive, delinquent) children or high need children. This trend is also visible in other European countries, in Canada and in the United States. Children in Flemish institutions displayed more severe problems than children living in residential care settings in Greece. This may be due to differences between both countries in the child and youth care system. In Greece, only a very small minority of looked after children are placed in foster families (see Agathonos-Georgopoulou, Sarafidou & Stavriani, this issue).

#### *Children's problems are complex.*

This is reflected by the high rate of children with deviant scores on more than one DSM-oriented scale and by the high comorbidity between problems. One should realize that many children suffer problems in different areas and that internalizing and externalizing problems often co-occur. The complexity of children's problems is also shown by the high prevalence of certain key symptoms. Highly prevalent key symptoms in this group were "Physically attacks people", "Uses drugs for nonmedical purposes", "Runs away from home", and "Talks about killing self". These symptoms require specific interventions by staff and educators (e.g., aggression management, crisis intervention).

#### *Prevalence rates of problems are marginally to moderately affected by institution, educator and child characteristics.*

With regard to institution characteristics, the highest effect on problem behavior was found for size and actual number of children in the institution. Larger institutions and institutions

with a higher actual number of children included relatively more children with anxiety or attention problems. With regard to child characteristics, some typical gender and age differences were found. Girls manifested more internalizing problems than boys (i.e., affective and somatic problems), whereas boys manifested more externalizing problems than girls (i.e., attention deficit/hyperactivity and oppositional defiant problems). Younger children manifested more externalizing problems than older children (i.e., attention deficit/hyperactivity and oppositional defiant problems), whereas older children manifested more internalizing problems than younger children (i.e., affective and somatic problems). A significant effect of level of education on all scales was found, with children attending special education or children dropped out of the school system manifesting high levels of problem behavior. These findings are not surprising, taking into account that a substantial number of the children in the sample attend special schools for children with severe conduct problems. The longer children were staying in residential care, the more attention problems were reported. Contrary to our expectations and to some of the findings reported by Peeters and Wildiers (1994), placement and care history did not significantly affect the prevalence rates. There was only one significant effect: children placed in a foster family previous to the placement in the institution showed more problems than children who had not been in foster care. This finding suggests that breakdowns of foster care placements are linked with the level of the child's problems. The potential link between foster care breakdowns and serious problem behavior needs to be examined further, however. Although several characteristics of institutions, educators and children were included, the present study has some limitations. For instance, we did not include the child's ethnicity or history of maltreatment. Both variables may influence prevalence rates of problems as well as service utilization.

*There seems to be an increase of problems among children in counselling institutions.*

Comparing the prevalence rates of the present study with the rates reported by Peeters and Wildiers (1994), we see that more children scored in the clinical range on the Externalizing scale (55.1 vs. 50%), the Internalizing scale (41.8 vs 33%), and the Total Problems scale (56.2 vs. 48%). Before interpreting these differences as reflecting secular trends, however, one should take into account differences between both studies with regard to age, gender distribution and type of residential care facility included. The present study included children between 6 and 18 years, whereas Peeters and Wildiers focused on 6-to-16-year-old children. Further, the present study included more girls and less boys, as compared to Peeters and Wildiers' study. This may explain the increase of internalizing problems, but not the increase of externalizing problems. Finally, differences in prevalence rates between both studies may be explained by differences between residential care facilities included. The present study solely included counselling institutions, whereas Peeters and Wildiers included counselling institutions and foster homes. Although empirical evidence about this lacks, it is plausible to assume that children with severe externalizing problems are more frequently referred to counselling institutions than to foster homes.

*Children in counselling institutions receive professional help for their problems.*

The high rate of children receiving professional help is undoubtedly to be evaluated as a positive result and a sign of social inclusion. It is not surprising that help to children with severe problems is offered inside the institution. Counselling institutions are considered to be treatment centres. Depending on their size, they can include specialized staff members (e.g., orthopedagogues, clinical psychologists). Neither is it surprising that help to children with severe problems is offered outside the institution. First, this shows the seriousness and the complexity of some children's problems. Second, it shows the way professional help in a certain region is organized (e.g., the referral system, the implementation of networks). Notwithstanding, several questions regarding the help provided to these children remain, for instance with regard to the effects of help, the availability of skilled professionals (e.g., to treat children with PTSD), the organization of the help, human resource management within the institution

(e.g., how to cope with high workloads and burnout problems?), training needs of staff, and so forth.

## ***Practice and policy implications***

The present study has several practice and policy implications. We make a distinction between implications on the microlevel (institution) and the macrolevel (child and youth care policy). We hope the following lines may guide future actions by staff of institutions and policy makers.

*At the microlevel.* The seriousness and the complexity of the problems displayed by children in counselling institutions are challenging to staff and educators. They require direct and specialized interventions. It is in the best interest of children that interventions are evidence-based and tailored to their specific needs. With regard to externalizing problems, interventions should focus on aggression and anger management. Since most of the institutions have to treat children with aggressive behavior, it would be helpful to develop treatment protocols. Protocols can be guided, for instance, by the practice parameters formulated by the American Academy of Child and Adolescent Psychiatry (2002). With regard to internalizing problems, needs for individual psychotherapy inside or outside the institution have to be met, for instance to help children suffering from posttraumatic stress disorders cope with their problems. These and other interventions require well-trained staff and educators. Currently, many institutions in Flanders have difficulties in managing children's aggression and trauma-related behavior problems. If educators and staff are not able to cope with these problems in their daily interactions with children, they run a higher risk to burn out early (Savicki, 2002). For this reason, training needs have to be identified early and to be met by supervisor support, formation and in-service training by experts.

*At the macrolevel.* As more counselling institutions have to deal with more serious and complex mental health problems, it seems reasonable to hold a plea for an extension of staff and training (supervision, formation, in-service training) resources. Looking at the high prevalence rates, one may conclude that each institution needs at least one part-time mental health care specialist (child and youth psychiatrist, psychotherapist), either as a staff member or as an external consultant. Further, the distribution of staff members can be reconsidered. Until now, the number of staff members depends on the size of the institution, with larger institutions having more staff. The present study revealed that the size of an institution only moderately affects the prevalence of mental health problems. In other words, one finds children with mental health problems in small as well as large counselling institutions. But do children with mental health problems in small institutions have fully access to help? We believe that the social inclusion of these children will improve if at least one specialized staff member would be available in the institution. In addition, policy makers need to evaluate the effects of treatment of children and youth with serious conduct disorders in special units, bridging the gaps between the child protection, the mental health care and the (juvenile) justice system. Finally, the assessment of mental health problems should be a crucial step when preparing out-of-home placements. Screening devices and risk assessment procedures need to be developed and refined in order to help referral agencies to take decisions in the best interest of children and youth.

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## Notes

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1. One subcategory of these institutions is exclusively intended for extremely difficult young people. Contrary to the other private facilities, they have the duty of admission.
2. In 1999, there were 93 counselling institutions subsidized by the Flemish Community (Hellinckx, Grietens, & Geeraert, 2001).
3. This number does not correspond with full-time equivalents.
4. Numbers of staff functions are linked to the size of an institution.
5. Comorbidity rates were computed by means of 2x2-tables with the distribution of classified scores (clinical vs. nonclinical range) on two scales. Comorbidity was defined as the percentage of children obtaining a score in the clinical range on two scales.
6. Correlation coefficients between these variables were only significant at the 5% level.
7. At the 5% level.
8. At the 5% level.
9. All correlations were significant at the 1% level.
10. The level of significance was  $p < .05$ .

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