

BEHAVIOURAL PROBLEMS:

NEW KNOWLEDGE, NEW INITIATIVES





SUMMARY OF THREE RESEARCH STUDIES FUNDED BY THE RESEARCH PROGRAM ON STUDENT RETENTION AND ACADEMIC SUCCESS (MELS-FQRSC)

- Behavioural problems, special education and the student's experience with services offered
- Various educational paths taken at the beginning of adulthood: identify personal, social and educational factors from a developmental perspective to better understand them and take action
- Reviews of the literature on the effectiveness of intervention programs for girls with behavioural disorders: successful action through understanding



INTRODUCTION

Student behavioural problems are among the most difficult to deal with, for teachers as for counsellors and parents. In Québec, according to data from the Ministère de l'Éducation, du Loisir et du Sport (MELS), nearly 25 000 students in public schools, half of whom are enrolled at the elementary level, receive complementary educational services¹ provided by professional resource persons experienced in dealing with behavioural problems. The number of requests for intervention involving students with behavioural problems is three times greater than for any other problem during the childhood years.

For the purpose of informing school counsellors and parents about the most recent findings on behavioural problems and on the most widely recommended initiatives, the present summary outlines three Québec research studies completed by researchers affiliated with the Groupe de recherche sur les inadaptations sociales de l'enfance (GRISE) of the Université de Sherbrooke, within the context of the Research Program on Student Retention and Academic Success.

The research studies outlined in this document provide accurate information on behavioural problems. They show the seriousness and range of problems of a very large number of students who are receiving free services at the elementary and secondary school levels. New research is also included on problems that are particularly common among girls, yet seldom detected, since they are generally less apparent in comparison to the behavioural problems demonstrated by boys.

How can we help these students? Because each one of them presents very different problems, researchers agreed that differentiated interventions are necessary to deal with the specific problems of each young person and to determine the type of intervention required. They also highlighted the tendency of behavioural problems to persist over time and attempted to identify the most promising aspects of intervention programs.

Given the broad range of behavioural problems and the fact that they most often involve all aspects of a student's life, these research studies raise important questions about the schools' abilities to cope with such problems alone. Researchers unanimously stressed the importance of joint action with the social services sector in employing psychosocial professionals in the elementary schools to modify the developmental trajectory of these young people as early as possible.

Although these studies paint a somewhat negative picture, a certain number of young people receive special education and social services similar to those offered to other students, regardless of their behavioural problems. In this way, the MELS is convinced that by making researchers' new findings widely known, school counsellors will be able to better coordinate their actions and to adapt them to the specific needs of young people with behavioural problems.

1. For more information, consult *Complementary Educational Services: Essential to Success*, available on the MELS Web site at the following address: <http://www.mels.gouv.qc.ca/DGFJ/csc/general/complementaires/complementaires.html>.

BEHAVIOURAL PROBLEMS: NEW KNOWLEDGE

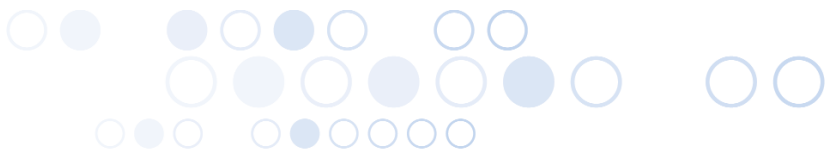
A number of research projects and assistance programs for students with behavioural problems are conducted in Québec schools. Large gaps in our present knowledge are yet to be filled in before we better understand this problem. For example, exactly how do students differ according to the severity of their problems? Do boys and girls present the same problems? Do such problems persist or dissipate over time? Which are the most effective support measures? Are general intervention programs useful, or would it be better to take a more targeted approach?

The expression “behavioural problems” needs to be defined more precisely, in particular to indicate the presence or absence of Oppositional defiant disorder (ODD) or Conduct disorder (CD); Attention deficit disorder (ADD) or Attention-deficit hyperactivity disorder (ADHD); or antisocial traits (low empathy, lack of remorse, harsh demeanour, impulsiveness). Research has also shown that the greater the severity or the earlier the onset of the problems, the greater the likelihood that they will persist into adolescence or adulthood. If the student presents ADD/ADHD and ODD/CD simultaneously, or if he/she possesses antisocial traits, the probability of persistence over time is also higher. However, researchers did not know whether these three factors contribute interactively or independently to the differentiation of students’ unique developmental trajectories; nor did they know whether the interaction of these factors with the student’s cognitive, social and family characteristics resulted in a variation in the persistence of the difficulties.

In an attempt to answer these questions, Michèle Déry, Jean Toupin, Robert Pauzé and Pierrette Verlaan, a team of psycho-education professors from the Université de Sherbrooke, studied 362 elementary students receiving complementary educational services for behavioural difficulties. The study focused on special education and the experiences of the students receiving services. The researchers followed the students for a period of six years and divided them into groups according to the severity and progression of their difficulties.

In another study, Julie Marcotte, psycho-education professor at the Université du Québec à Trois-Rivières, analyzed the academic experiences of 93 students living with behavioural problems six years after they started secondary school. The students were between 17 and 18 years old, on the cusp of adulthood. Both these studies used a control group of students without behavioural difficulties in order to follow the development of students with difficulties as compared to that of students with a normal trajectory.

In a study about intervention, Pierrette Verlaan, psycho-education professor at the Université de Sherbrooke, and her collaborators (Michèle Déry, Louise-Anne Beauregard, Marie-Noëlle Charbonneau and Robert Pauzé) reviewed and analyzed reports on the effectiveness of 15 intervention programs for elementary students with behavioural difficulties. The objective of this review was to identify the most promising means of intervention to prevent the appearance or progression of difficulties for girls.



NATURE AND SEVERITY OF DIFFICULTIES

One of the first observations in the study by Déry and her collaborators has to do with the severity of the difficulties of the elementary students they followed. In nearly two thirds of cases, the problems were severe enough to meet the criteria for Oppositional defiant disorder (ODD) and Conduct disorder (CD) specified in the DSM-IV-TR, the standard diagnostic and statistical manual used in psychiatry. Researchers also noted that 85% of elementary students with behavioural difficulties had Attention deficit disorder (ADD) or Attention-deficit hyperactivity disorder (ADHD). The great majority of students with oppositional or behavioural disorders also had ADHD. Nearly 40% of the students, both boys and girls, showed antisocial traits.

NATURE OF DIFFICULTY	PERCENTAGE OF STUDENTS
Attention deficit disorder, with or without hyperactivity (ADD/ADHD)	85%
Oppositional defiant disorder	60%
Conduct disorder	40%
Antisocial traits	40%

In recent years, several studies have highlighted the urgent need to pay attention to the difficulties of elementary school girls, which seem more complex than those of boys. Déry's study noted that boys and girls have the same proportion of externalized difficulties, but that twice as many girls as boys have internalized problems: nearly 34% felt generalized anxiety, as compared to 17% of boys; similar figures were discovered for childhood depression. In total, 43% of girls were seen to have a combination of internalized and externalized problems, as compared to 24% of boys.

PROGRESSION OF DIFFICULTIES

Through following and analyzing the evolution of these students over six years, Déry's study shows that the students' number of symptoms decreased slightly, but that their behavioural difficulties stayed the same or may have gotten worse in some cases.

Researchers divided students into three distinct groups according to the progression of their difficulties: students with behavioural difficulties but without ODD or CD (35%), students with ODD or CD (45%) and students with a combination of all three (20%).

GROUP 1

35% of sample

Students without ODD or CD

GROUP 2

45% of sample

Students with ODD or CD, but without interaction with both ADD/ADHD and antisocial traits simultaneously

GROUP 3

20% of sample

Students with all three problems: ADD or ADHD; ODD or CD; and antisocial traits

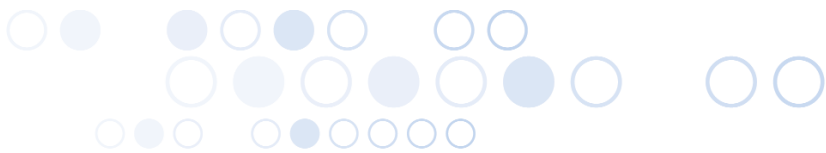
The students with the most serious progression of behavioural difficulties had ODD or CD combined with ADHD and antisocial traits (group 3). Not only did these students experience persistent difficulties in spite of the services received, but they also saw an increase in their difficulties. These students presented distinctly poorer cognitive skills (impulsiveness, cognitive rigidity, organizational difficulty), an antisocial family environment (specifically, problems with the law) and a certain social isolation. Over a period of six years, the percentage of these students enrolled in special classes or following an individualized path increased steadily from 30% at the beginning of the study to over 70% six years later. By the age of 16, 60% of the students in this group had quit school, a distinctly higher percentage than in the other groups. Nearly 67% of the dropouts in this group had problems with drugs and alcohol, compared to 20% in the control group. Moreover, barely 20% of the dropouts in this group were employed.

Students in group 1, who had neither ODD nor CD, had the most favourable prognosis (whether or not they presented ADHD or antisocial traits), even though their behavioural difficulties remained with them over the six-year period. Compared to the students with ODD or CD, students in group 1 had better cognitive skills, enjoyed a larger social circle and received better support from their parents. The parents of students in this group showed less involvement and held more negative attitudes toward their children than did the parents of students in the control group without behavioural difficulties, but the parents' educational practices seemed adequate. These students have a lower risk of experiencing serious behavioural problems in the future, and their school attendance is comparable to that of students without behavioural difficulties. Of this group, 21% dropped out of school, and 37.5% of the dropouts had problems with drugs and alcohol. About 40% of the dropouts in this group had paid employment.

The students in group 2, who had ODD or CD but did not have both ADD/ADHD and antisocial traits simultaneously, showed a more negative prognosis than those in group 1. Over a period of six years, their behavioural difficulties remained at a high level and even tended to increase slightly. At the elementary level, this group also had significant family problems (instability, separations, blended families, etc.) and relationship difficulties. However, these students kept their school attendance comparable to that of students without behavioural difficulties: 26% quit school and 50% of the dropouts had drug and alcohol problems. In this group, 40% of the dropouts were employed.

PERSISTENCE IN EARLY ADULTHOOD

Researchers in Québec and abroad have considered the question as to whether such difficulties continue into adulthood. In this respect, the research community is divided. Some believe that the difficulties persist and lead to other, even more serious problems with social integration. Others believe that reaching adulthood marks a turning point that can lead young people to a more constructive path. Changing schools, getting a job or committing to a serious relationship are events that can have a positive influence on behaviour.



After their secondary studies, what happened to the students followed by Déry's team? In school, more than half ended up in a special education class or on an individualized path. However, the dropout rate was comparable to that for students without behavioural difficulties, except for the group experiencing a combination of all the symptoms, which had higher risk. Between 21 and 60% of the elementary students experiencing behavioural difficulties abandoned their studies, compared to 18.5% of the students without such difficulties. Of the dropouts, 37.5 to 67% had problems with psychotropic substance abuse, compared to 20% of students not experiencing behavioural difficulties. Between 60 and 80% of the dropouts were not employed.

While Julie Marcotte's study used a different sample and different measuring instruments, it brought to light the persistence of antisocial behaviours when students entered college. In her study, students who had presented behavioural difficulties at the secondary level continued to commit acts of vandalism and theft, while exhibiting aggressive behaviour and consuming more alcohol and drugs than students without such difficulties. However, even if their antisocial tendencies remained the same, they adjusted to college in much the same way as the young people without such difficulties, except that more of them did not finish their secondary studies, but continued in the youth and adult sectors.

One of the major contributions of Julie Marcotte's research is it showed that the passage to adulthood is more prolonged today and generally includes significant developmental challenges. Given that the Secondary School Diploma is no longer enough to obtain specialized, advantageous employment, and that students also tend to drop out of school and come back later, the transition to adulthood stretches out longer than it used to. "In this context, I am not surprised to see young adults waiting longer to take on financial and family responsibilities," notes Julie Marcotte. This transition period also means that parents provide financial support for their children until later in life.

The challenges of adulthood are increased tenfold for at-risk students. The risk is especially great since they often come from families unable to provide or extend support. In addition, several of the school and social services offered to adolescents in difficulty are no longer offered when they finish their secondary studies or when they turn 18. This combination of greater challenges increases the vulnerability and risk for these young people at a decisive moment in their lives that could be a positive turning point in their developmental trajectory. However, according to Marcotte's analysis, entering college is no longer such a turning point.

DIFFICULTIES SPECIFIC TO GIRLS

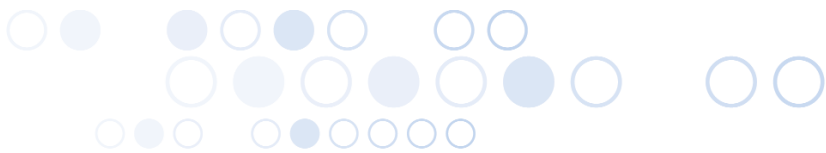
At the elementary level, few girls show signs of behavioural difficulties in the same way as do boys. The ratio is about one girl to five boys. However, when such disorders appear in childhood, they can mean significant problems for girls in adolescence and adulthood. Too often, failure, dropping out of school, delinquency, drug addiction and mental health problems are in store for these girls. In spite of the severity of such problems and their possible consequences, little is known about early onset behavioural difficulties in girls. Most of the information available is limited to the results of studies conducted on boys, as are the approaches used to guide intervention initiatives with children. It is essential to find out more information in order to provide better support for girls.

Researchers on the Déry study noted a significant number of cases of depression and generalized anxiety among girls who experienced behavioural difficulties at the elementary and secondary level. This problem compounds the externalized problems and persists when these students enter college. According to Marcotte's study, girls do not adapt emotionally as well as boys during the transition to college. In fact, the symptoms of depression and anxiety increase. "At that age, girls encounter other risks as well," says Marcotte. "Many studies have shown that early pregnancy is not infrequent and can jeopardize these girls' schooling."

In addition, it seems difficult for girls to enter CEGEP: among students with behavioural difficulties in secondary school, half as many girls as boys will enroll in college. When they do, girls continue to show antisocial behaviour (physical assault, vandalism, psychotropic substance abuse), as do boys.

Researchers have also noted that girls, especially at the elementary level, tend to exhibit indirect aggression, such as ostracism and malicious gossip, compared to boys, whose aggressive behaviour is more direct (opposition, physical assault). Indirect aggression is considered a form of violence, although it is not very visible. Students who resort to it tend to attack a person's reputation, to exclude or reject other students. Perpetrators may use it in the classroom, in the schoolyard, as well as on the bus. Indirect aggression is a sign of serious malaise and can deeply distress its victims.

From childhood to adulthood, girls show more complex and diversified behavioural difficulties than do boys. This discovery is disturbing, given the possibility that these girls might experience mental health problems, become mothers without the necessary resources and pass on their aggressive behaviour to their children.



INTERVENTION: NEW INITIATIVES

What can be done to help students with behavioural difficulties? This question is fundamental and, according to researchers, it should attract more attention and promote the use of shared resources. Déry's team observed that among the groups of elementary students of the study with behavioural difficulties, 68 to 90% received support services at school when they started. However, these percentages have decreased steadily over time, in spite of persistent difficulties, especially in the groups with the most problems. Regardless of the severity of their difficulties, only 50% of students continued to benefit from services six years later. On average, students met twice a month with a school psychosocial worker. However, the percentage of students who received services in a youth centre has increased over the years and was higher among young people with ODD and CD and those with all of the disorders studied (ADD/ADHD, ODD or CD, and antisocial traits).

Researchers are unanimous about intervention: services provided to students with behavioural difficulties must be increased and reinforced from the elementary to college levels. They also agree on the importance of schools collaborating closely with the social services milieu, including youth centres and health and social services centres. "On their own, schools cannot deal with the severity of the difficulties that a high percentage of elementary students are facing," estimates Déry.

Given the connection between the early onset of difficulties and their persistence over the long term, Déry's team also recommends that psychosocial professionals (psychoeducators, psychologists, etc.) be assigned to elementary students with behavioural difficulties. Researchers also agree on the need for better screening for these students, using measures to evaluate the nature and severity of problems. After diagnosis, the researchers recommend the following interventions.

For students with behavioural difficulties, but without ODD or CD, interventions should aim to reinforce existing skills, including pro-social skills and to strengthen the parent-child relationship. Researchers suggest putting emphasis on educational practices, which seem to have more positive results for this group.

For students with ODD as well as CD, interventions should focus on reducing the behavioural disorder and improving parental skills (closer supervision, consistent discipline) and the parent-child relationship. These groups benefit from interventions focusing on the family, especially on educational practices and the parent-child relationship.

For more at-risk students, those with combined symptoms of ADD/ADHD, ODD or CD and antisocial traits, researchers suggest working on improving cognitive skills and, as much as possible, increasing their contact with pro-social peers at school. This group should receive special attention in the cognitive and social spheres, because not only did these students obtain the lowest results in all the cognitive measurements taken during the study, but they also performed much more poorly in tasks involving sense of organization, working memory, inhibition capability and cognitive flexibility.

In order to intervene jointly as early as possible, Déry's team suggests closer collaboration between the school system and the social services network (youth centres or CSSS). Complementary assistance from the social services network seems particularly important for students with ODD or CD, as well as for those with ADD/ADHD, ODD or CD and antisocial traits, given the diversity of their personal and family problems.

Moreover, it is recommended that students be accompanied through frequent meetings, and that meeting more often would be beneficial to those students with the greatest difficulties. Dialogue and collaboration with youth centre services seems even more appropriate as it remains difficult to accompany adolescents who have little interest in school; in Déry's study, 60% of the students in the group with the greatest difficulties dropped out of school and would therefore become difficult to reach through the school system.

EFFECTIVE PROGRAMS

Pierrette Verlaan, a professor at the Université de Sherbrooke, and her collaborators (Déry, Beauregard, Charbonneau and Pauzé) have reviewed the intervention programs carried out in North America for 6- to 12-year-old students presenting behavioural difficulties or at risk of developing them. Only those programs whose impact was evaluated according to gender were used in the review, which aimed to identify the most effective practices for preventing the appearance or aggravation of such difficulties, while paying particular attention to the deterrence of indirect aggression among girls.

Among the more effective programs studied, the most promising, both for boys and for girls, included general as well as targeted components. These are the ideal programs to prevent behavioural problems in young people. Research shows that the success of these programs is due to the additional or complementary activities offered in the child's different

environments. "The challenge in Québec is to find a way for schools to offer programs with different components, including one on family practices," observes Verlaan, who also believes that a new formula should be implemented using teams of professionals who can work with schools as well as families.

The intervention strategies used in these programs with more than one component are numerous and intense. For example, training in intervention for teachers can involve up to 25 meetings. Many activities are offered in the classroom: 17 to 30 in 45- to 60-minute periods. Peer mediation in the schoolyard can be added to the main component, as can target interventions with the most at-risk students and their parents, in the form of group activities and individual therapy. However, the positive effects of these programs are directly related to the quality of the implementation, the frequency of classroom activities led by teachers and the extent of their training.

General single-component programs can show interesting results, given the low human and financial investment required for their implementation in schools. This type of program aims to increase behaviour competencies and conflict resolution among students. These programs are used in the classroom and are generally implemented by teachers. Some of these programs help decrease the incidence of physically aggressive behaviours and the frequency of school disciplinary measures. These programs seem more effective with boys than with girls, possibly due to the intervention target. It is important to remember that the effectiveness of these programs depends on how often and how long students are exposed to them.

Regarding intervention measures,² Verlaan's study shows that they had very specific effects, according to different types of programs and the gender of the children involved.

2. For more information about the programs described in the following table, please consult the report by Pierrette Verlaan et al (2006) on the Fonds québécois de la recherche sur la société et la culture Web site: www.fqrcs.gouv.qc.ca/recherche/pdf/RF-PierretteVerlaan.pdf.



IMPACT OF INTERVENTION PROGRAMS ON BOYS AND GIRLS

TYPE OF PROGRAM		OBJECTIVE	IMPACT
General programs used in the classroom	One component	<ul style="list-style-type: none"> • Develop behavioural and socio-cognitive skills 	<ul style="list-style-type: none"> • Improved self-control (boys) • Decrease in aggressive behaviour (boys)
		<ul style="list-style-type: none"> • Develop social and emotional skills 	<ul style="list-style-type: none"> • More self-assertive (girls)
	Schoolyard component added	<ul style="list-style-type: none"> • Encourage and reinforce peaceful conflict resolution 	<ul style="list-style-type: none"> • Fewer fights, injuries and conflicts (boys and girls)
	Community component added	<ul style="list-style-type: none"> • Address problem issues and help young people feel greater confidence • Reduce aggressive behaviour 	<ul style="list-style-type: none"> • Important decrease in violent behaviour (boys and girls) • Decrease in indirect aggression (girls) • Increase in assertiveness and improved pro-social behaviour (girls)
Mixed programs	In-class and targeted components	<ul style="list-style-type: none"> • Promote conflict resolution • Increase understanding of bullying and decrease the incidence of it 	<ul style="list-style-type: none"> • Improved socio-cognitive strategies (boys and girls) • Improved positive attitudes toward non-violence (boys and girls) • Improved psychosocial awareness and decreased violent behaviour (boys)
Clinical programs	Multiple components (teachers, parents and children)	<ul style="list-style-type: none"> • Learn problem-solving skills • Improve parenting practices • Prevent school dropouts and behavioural and emotional difficulties 	<ul style="list-style-type: none"> • Decreased behavioural difficulties (boys and girls) • Improved family atmosphere (boys and girls)

CHARACTERISTICS OF AN INTERVENTION PROGRAM SPECIFICALLY FOR GIRLS

Researchers did not find any evaluations that provided a critical assessment of the characteristics necessary for a program focusing on indirect aggression as exhibited by girls in elementary school. However, they noticed that some of the large-scale programs used in the United States use strategies similar to those used in the most effective programs identified in the study: an approach that favours group training, repetition, feedback and natural reinforcement of girls' social and emotional skills. However, the effectiveness of the American programs is not known. They also recommend teaching workshops on assertiveness and positive, structured interaction.

General programs that also target the development of social and emotional skills bring about more changes in girls than in boys. Changes observed in girls had more to do with their emotional skills (assertiveness) than their behaviour (aggressive behaviour, disciplinary measures). These effects were noted only when students had participated in the program for two years.

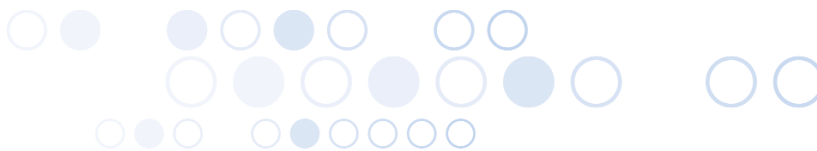
Activities that encouraged development of social and emotional competencies within a circle of friends or in class discussions seemed to work especially well for girls. Girls who participated in this type of program saw an improvement in their behavioural difficulties and exhibited more pro-social and empathetic behaviour.

Peer mediation programs seem more promising for girls than for boys, given that girls more often turn to mediation to solve their conflicts and that girl mediators most often settle conflicts involving other girls.

Means of intervention that could prevent behavioural difficulties in girls in elementary school

- Adding a component on emotional and social competency development in programs that aim to improve behavioural and socio-cognitive skills
- Using means of intervention that involve interpersonal relations (such as a circle of friends) and that aim to have students express their feelings and assert themselves
- Encouraging activities that bring girls together in groups
- Encouraging girls to participate in school and community activities that build their self-esteem and are connected to their interests so that they can develop competencies
- Adopting an inclusive multi-method approach, a combination of daily actions that involve all the students, teachers, school staff and parents

These studies show the importance of maintaining and reinforcing services for students with behavioural difficulties until they reach adulthood. Marcotte observes that it is not too late to intervene with students who pursue their studies in college and to try to create turning points in their lives to help them leave the path of antisocial behaviour. "In college, in adult education or in vocational training, it is possible to implement significant intervention initiatives, especially given that the cusp of adulthood as a developmental phase is particularly conducive to turning points," she concludes.



APPENDIX: METHODOLOGY

Déry, M., J. Toupin, R. Pauzé and P. Verlaan. *Difficultés de comportement, adaptation scolaire et parcours dans les services*, report submitted to the Fonds québécois de recherche sur la société et la culture, 2007.

For this longitudinal study, Michèle Déry's team followed three cohorts of elementary students (from age 6 to 13) every two years, for six years. These cohorts were made up of 260 boys and 64 girls from all three elementary cycles. At the beginning of the study, all of the students received complementary services for behavioural difficulties. They were selected in 1999, 2000 and 2001. In 2004, researchers selected a fourth cohort, made up of 38 girls with behavioural difficulties, to get a better idea of the difficulties specific to girls. These students came from schools in six school boards in Estrie and Montérégie. In each phase of measurement, the homeroom teacher and one parent of each student were asked to provide information about the child's behavioural, social and socio-familial characteristics. The research specifications also included a control group of 101 students who did not have behavioural difficulties. Selected in 2000, this group allowed researchers to compare the cognitive, social and family characteristics of students at the beginning of the study, as well as their special education and sociovocational adaptation during the last measurement phase. Several evaluation instruments were used, and participants were given a battery of tests. The question of whether or not the sample was representative indicates the limitations of the study, given that the team had no data on the behavioural difficulties of non-participants, or on the attrition rate during the different phases of measurement, and given that the study was carried out in only two administrative regions of Québec.

Marcotte, J. *Les différentes trajectoires éducationnelles empruntées à l'émergence de la vie adulte: identifier les facteurs personnels, sociaux et scolaires dans une perspective développementale pour mieux comprendre et intervenir. Étude comparative des élèves ayant présenté des problèmes de comportement et des élèves sans problèmes de comportement*, report submitted to the Fonds québécois de recherche sur la société et la culture, 2007.

For this cross-sectional study, Julie Marcotte selected a sample of 93 young people who experienced problems in secondary school and a control group of 93 young people without such problems. The data were taken from the sixth measurement phase of the longitudinal study of students with social and academic adaptation difficulties, specifically from the sample of 186 subjects whose average age was 17 years and 5 months; they were in their fifth year of secondary school. The group of students who presented problems included 61 boys and 32 girls. For each young person studied, another young person without the same problems was selected for the control group, with matching gender, region of origin, family type and family income. The subjects came from Trois-Rivières, Québec and Sherbrooke. Several questionnaires about the internalized and externalized psychosocial transition and the academic adjustment to college were submitted to young people entering CEGEP. The main limits to this study are related to the inequality of the groups, which are made up of an uneven ratio of boys to girls, as well as the fact that there was only one measurement phase, which does not allow researchers to see the changes that might have occurred in subsequent years (at 19 and 20 years of age), which are important years.

Verlaan, P. et al. *Recension des écrits sur l'efficacité des programmes d'intervention auprès des filles d'âge scolaire primaire présentant ou à risque de présenter des difficultés de comportement*, report submitted to the Fonds québécois de recherche sur la société et la culture, 2006.

In conducting this review, Pierrette Verlaan's team used a strategy including systematic computer research, manual research in certain reference books and important publications, as well as a study of previous reviews and primary studies. Once the published studies had been located using keywords, the team established criteria regarding the publication date (between 1994 and 2004), the ages of the children studied, the issues studied, the specific results of programs designed to alleviate behavioural difficulties in girls, and the evaluative nature of the published studies. Of the 54 studies selected according to the criteria, only 28% (15) included empirical evaluations that allowed researchers to establish the efficiency of the programs for girls. The main limit for this study lies in the absence of a systematic evaluation of programs for girls, which required the team to scrutinize the results of each study in order to establish differences according to gender. A second limit is that no study reviewed compares the different means of intervention used. Thus, the summary does not provide concrete conclusions about the best practices to adopt for girls, but rather it establishes working hypotheses.



This document is available at the following address:
www.mels.gouv.qc.ca

TEXT

Nathalie Dyke

COORDINATION

Julie-Madeleine Roy

Monica Rosales

Direction de la recherche, des statistiques et de l'information

LINGUISTIC REVISION IN FRENCH

Direction des communications

TITLE OF ORIGINAL DOCUMENT

Difficultés de comportement: Nouvelles connaissances, nouvelles interventions

ENGLISH VERSION

Direction de la production en langue anglaise

Secteur des services à la communauté anglophone

Ministère de l'Éducation, du Loisir et du Sport

GRAPHIC DESIGN

Ose Design

© Gouvernement du Québec

Ministère de l'Éducation, du Loisir et du Sport, 2008 – 08-00365

ISBN 978-2-550-53684-0 (Printed version)

ISBN 978-2-550-53679-6 (On-line)

Legal deposit – Bibliothèque et Archives nationales du Québec, 2008

