ENCYCLOPEDIA
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# Linkages Between Early Childhood, School Success, and High School Completion

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## Introduction and Problem

In industrialized societies, dropping out of school before receiving a high school diploma has serious consequences for both individuals and society as a whole. Compared to national averages, dropouts are more likely to be recipients of welfare and unemployment insurance,[1] experience more physical and mental health problems, engage in illegal activities, and are more prone to psychoactive substance abuse. Dropouts are also less involved in their communities and grow up to become parents whose children are at increased risk of experiencing problems at school and dropping out as well.[2] Although it has not been clearly established that all of these problems result from leaving school early, it is plausible that dropping out would compound many of them. In Canada, roughly one child out of five has still not received his/her high school diploma by age 20. Males in this category outnumber females by two to one.

## Research Context

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In many cases, school difficulties in childhood are precursors to dropping out of school.[3] For example, personal factors such as language disorders, attention deficits, and difficulties with recognizing and using the sounds of spoken words at school entry (i.e., at ages 5 or 6) are predictors of academic difficulties and, ultimately, of premature departure from school.[4-6] It is not clear, however, whether other types of behavioural problems, such as anxiety and depressed mood or aggression and opposition, play a role in predicting premature departure from school independently from language problems and attention deficits.[5,7,8] Even if these other behaviour problems do not impact school achievement directly, they may nevertheless be indirectly connected to school difficulties, and ultimately to school dropout, through two possible pathways: According to one pathway, behaviour problems may trigger social exclusion and victimization from fellow students or teachers throughout elementary school and high school. These negative social experiences may, in turn, reduce learning opportunities and school motivation, in addition to increasing behavioural difficulties.[9-13] According to another pathway, behaviour problems, particularly those of the externalized type, may foster affiliations with deviant peers who, in turn, might reduce conformity to social norms, school engagement, and academic performance,[14] as well as encourage antisocial behaviours. The two pathways are not mutually exclusive. In addition, both pathways acknowledge the importance of school engagement/motivation/commitment, as these factors have been shown to be important predictors of high school completion independently of academic performance.[14] Both pathways also include the possibility for transactional (i.e., bi-directional) links between behaviour problems and academic difficulties. These transactional links might involve either direct or indirect pathways.[15] These pathways, however, remain mostly speculative.

Notably, behaviour problems and learning difficulties at school entry can themselves be predicted by children’s and their parents’ personal characteristics and by the family dynamic during the preschool years.[16] Behaviour problems and learning difficulties during elementary school can therefore be considered intermediary elements in the developmental chain of events that lead to dropping out. However, several contextual variables may amplify or mitigate the effect of these very early predictors. For example, special teaching methods used by teachers or attendance at a good school may weaken the relationship between the children's personal and socio-familial risk factors that are present in early childhood and later drop-out.[17] Conversely, negative interactions between the teachers and students or the absence of a clear school disciplinary code may further exacerbate the negative effects of early risk factors, thus hastening the premature cessation of studies.[11,18-21]

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## Key Research Questions and Recent Research Results

Higher levels of academic failure among disadvantaged families and in some cultural communities is partly due to the parents' comparatively lenient attitudes towards school and partly due to the parents' limited ability to help their children develop behaviours that are conducive to learning.[22] Fortunately, various failure and dropout prevention programs exist, with the goal that any risk factors present during the preschool years do not give rise to new risk factors that will make the situation increasingly difficult to change. Some of these programs for preschoolers have been rigorously evaluated and produced positive results. Space constraints prevent us from providing anything but a very brief overview of these programs in this article (see Table 1).[23]

It should be noted that the programs described in Table 1 were all instituted before the children reached the age of six.[24] Preschool programs which did not gather information on high school completion are not mentioned in this Table. Aside from their specific content, the most effective programs were those that were the most intensive and lasted the longest. Most of these programs focused on the cognitive stimulation of the children and on literacy or academic prerequisites. Few have included a component to equip parents to deal with their children's behavioural problems or to improve their own knowledge of and attitudes towards school. Similarly, few have examined the personal needs of the parents or attempted to improve the family's socio-economic status. Programs like the Child-Parent Centers set up under the Chicago Longitudinal Study[21,25] are a noteworthy exception because of the variety of activities made available to the children and the parents. Nevertheless, even this model program places much less emphasis on social behaviours conducive to group learning (i.e., task-focusing, emotional self-regulation and social skills) than on academic prerequisites and language skills.

## Conclusion and Implications for Policy and Services

Despite effective programs for preschoolers that can be carried out in various childcare settings and involve the family,[21,25,26] it is important not to rely on these preschool programs alone to encourage high school completion. Even if over half of all preschoolers are exposed to educational environments other than the family, many others are not. However, the children living in a socioeconomically and educationally deprived environment[27] are typically those most in need of compensatory education. Hence, we must not overlook kindergarten (attended by more than 95% of children) and the first years of elementary school as an additional

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prevention/promotion platform. A number of promising prevention programs have been or are being conducted with children in kindergarten and early elementary school: the Conduct Problems Prevention Research Group's FAST TRACK program;[28] the Early Risers program;[29] the Montreal program;[30,31] Check and Connect.[32] These programs are noteworthy for several reasons: they focus on young children (i.e., starting in kindergarten, but often continuing throughout elementary school and beyond), they are comprehensive (i.e., they combine child- and parent-centered components and they target both academic and behavioural objectives), they have been evaluated using a strong evaluation design, and they reported some success with respect to high school completion. Action is urgently needed in the highest-risk communities, where one youngster out of three fails to complete high school within the prescribed time period, and one out of five never finishes at all. Future initiatives must neither underestimate the importance of the preschool years nor ignore strategies that have been proven effective in increasing completion rates and in reducing a whole range of adjustment problems in childhood, adolescence and even adulthood.[33,34] We should also not expect that corrective action during the preschool period alone, no matter how intensive and appropriate, will succeed in creating the right conditions for the academic success and personal development of all at-risk children. As it stands, no single program proved effective for all children. Indeed, one program may be more effective than another in one context or for some participants, whereas another program may be effective in a different context or for different participants. Sustained approaches that follow the children and their families through different developmental periods (like the one used in the Fast Track program) and that use a strategic combination of universal and targeted activities with dosage partially adjusted to individual needs (such as the one used in Early Risers and Check and Connect), deserve serious consideration and should be tested. These approaches would result in a sustained intervention that begins during pregnancy and occurs continuously or as required when the child is going through life changes (birth, commencement of daycare, transition to kindergarten and elementary school, transition to high school). This would have the advantage of addressing various risk and protective factors whose relevance becomes apparent at each developmental phase, thereby supporting any previous early intervention efforts.

Table 1

| **Title of program (Authors)** | **Overview** |
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| 1- Project Abecedarian[35] | **Duration**: 5 years (0 to 5 years)<br>**Description**: Focussed on the development of language, cognitive skills and appropriate behaviours at daycare centre; parental involvement.<br>**Results**: Positive effects on intellectual skills and academic achievement (fewer repeats) up to age 15. |
| 2- Project Perry Preschool[36] | **Duration**: 30 to 60 weeks (3 or 4 years)<br>**Description**: Centred on cognitive skills and spoken language at the day care centre; home visits.<br>**Results**: Higher completion rates, less criminality, fewer pregnancies and fewer cases of economic dependence. |
| 3- Even Start[37] | **Duration**: 9 months (3–4 or 4–5 years)<br>**Description**: Centred on cognitive learning and language; home visits, education of the parents.<br>**Results**: Mixed short-term results. |
| 4- Untitled Project[38] | **Duration**: One year (kindergarten)<br>**Description**: Interactive reading in class and at home; meetings with the parents.<br>**Results**: Improved performance in reading. |
| 5- Chicago Child-Parent Centers[25,39] | **Duration**: One year (kindergarten)<br>**Description**: Centred on reading, writing and phonological awareness; workshops for the teachers and for parents.<br>**Results**: Improved performance in reading. |
| 6- Untitled Project[40] | **Duration**: 3 to 9 years<br>**Description**: Cognitive and academic skills; involvement of parents and teachers.<br>**Results**: Decrease in dropout rate. |

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| 7- Early Head Start[41] | **Duration**: 3 years (0–3 years)<br>**Description**: Cognitive and emotional development of the children, help for parents.<br>**Results**: Positive but modest effects on the children's emotional self-regulation and behaviour problems.<br>Positive effects on the parents' educational practices. |
| 8- The Incredible Years[42] | **Duration**: 12 weeks (3–5 years)<br>**Description**: Centred on the educational strategies of the parents and teachers.<br>**Results**: Moderate positive effects on the children's disruptive behaviours and self-regulation;<br>Reduction in rates of school dropout. |

N.B.: Only experimental, randomized case-control studies are reported herein.

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