**Defining and measuring hidden dropout at the ICBS**

Edna Shimoni, Haim Portnoy

**Defining hidden dropout**

What we mean here by the term "hidden dropout" is the phenomenon of a student's disengagement from school and learning, while formally enrolled in school.

While overt dropout is relatively easier to spot and dealt with from a policy perspective, hidden or covert symptoms of school disengagement, which is likely to be more prevalent, is much more difficult to identify and to handle.

Hidden school disengagement is a condition caused by stress or social factors which may eventually lead to a student dropping out of school. It is closely related to lack of motivation in learning and poor attitude towards school since they often co-occur and possibly share similar risk factors (Lan & Lanthier, 2003; Vitaro et al., 2001). It has been conceptualized as a multi-dimensional construct consisting of behavioral, emotional and cognitive domains (Fredricks, Blumenfeld & Paris, 2004).

Hidden school disengagement is also conceptualized as students' affective responses to school which includes two domains, namely, the academic identification domain and interpersonal relationship domain. Within the academic identification domain are poor academic achievement and school disaffection. Within the relationship domain are social isolation and victimization. Hence, students who suffer from hidden school disengagement are those who feel that they are alienated from the schooling process, and that they are isolated from the social network of the school.

Personal and contextual factors, such as students with one or more siblings in the family, non-intact families, low family economic background, migrant families, left-over children, schools located in rural areas, and non-model schools, also contribute to a higher prevalence of hidden school disengagement.

Our conceptualization of hidden dropout in Israel is very similar to other conceptualizations: it applies to students who are still enrolled in schools regulated by the Ministry of Education. Among hidden symptoms of school disengagement there are absenteeism, irregular school attendance, poor academic achievements, feelings of alienation and disengagement from the school learning process, behavioral problems and social problems at school.

In 2007 the Law on compulsory education was extended to include 17-year-olds. This change means that upper secondary schools are expected *by law* to retain the students and prevent dropout. This requirement might result in an increase of the phenomenon of hidden dropout, while the schools may keep the appearances of formal enrolment of those who would otherwise be found among the overt drop-outs.

**Measuring hidden dropout**

Hidden drop-out (students in school, but mostly disengaged) is seen as an educational problem. While frequent tardiness to school (Taras, 2005) and truancy (Henry, 2007), are overt symptoms, some symptoms, such as authority avoidance (Loeber et al., 1993), alienation from school (Osco, 2004) and school avoidance (Regner & Loose, 2006), are covert. Before students actually drop out from school, they normally exhibit some symptoms of disengagement from the social life and emotional involvement of school. Thus, **hidden school disengagement or avoiding school psychologically may be an early stage or the first stage of school dropout**.

In order to measure hidden drop-out we need a set of simple (or relatively easy to interpret) but accurate indicators for identification. We need to have a better measure of disengaged children at school and to be able to identify those children while they are enrolled as a preventive action. At least two possible ways to do so are envisaged here with this purpose.

1. **A multidimensional measure of risk factors**

A multidimensional measure will allow us to draw together our knowledge of what it means to be a disengaged student at school. It should tell us the total number of children at risk of hidden drop-out, show us the severity of that risk, show us how it might affect different groups of children and be methodologically robust.

Which dimensions to include in such a multidimensional measure will be crucial to its success, and this question is at the core of this consultation. The dimensions suggested here are based on an integration of multiple administrative databases containing information on children, parents, schools and neighborhood. The databases contain information on demographic characteristics, educational participation and achievement, children placed in juvenile delinquency care and in welfare residential care, child and parent criminal involvement, income and socioeconomic status of the locality of residence.

One exercise that could be implemented would be to derive a multidimensional measure of hidden dropout using the variables found to eventually predict overt dropout. For this purpose one would have to first devise such a predicting model.

1. **Building a model that predicts dropout**

Since hidden school disengagement may be an early stage of overt school dropout, one could aim at directly predicting the odds of eventually dropping out of formal schooling, thus obviating the need for directly measuring (real-time) hidden dropout as it happens. The objective could be to reach a regression model, having the overt dropout as our binary dependent variable.

For such an exercise to take place, it becomes imperative to identify the predictors and their availability. The following list of variables proposed for predicting dropout could be used – at least to a large extent – for both building a dropout prediction model and creating the multidimensional measure as suggested above. These variables exist in ICBS databases and have been used in ICBS for some preliminary explorations.

**Variables available to ICBS (mainly from student files)**

Socio-demographic variables:

1. Gender
2. Parents' education
3. Number of siblings
4. Mother's marital status
5. Country of birth
6. Parents' country of birth
7. Ethnicity (Jews/Arabs)
8. Type of locality
9. Parents' income
10. Frequent school transitions
11. Teenage marriage (for girls)
12. Teenage childbirth (for girls)
13. Teenage legal pregnancy termination (for girls)

School variables:

1. Grade
2. Track of education (Vocational/General)
3. Special/Regular education
4. Receiving accommodations for examinations
5. Truant officer's records
6. Advancement of Youth at Risk records
7. Schools' supervision (General/Religious/Ultra-Orthodox)
8. Achievements at the national GEMS examinations
9. Average class size at school

This list covers only partially the possible variables that could theoretically have an effect of dropout and hidden dropout. Supported by theory, we could build a tentative list of additional variables to collect, concerning:

1. Criminal files, juvenile delinquency care and in welfare residential care
2. Quality of education
3. Family stability
4. Parental health
5. Student absenteeism
6. Record of student discipline events at school
7. Student academic achievement throughout the school year (grades obtained by subject)

Variables on items 5-7 are not currently available to ICBS, but could be obtained from the MANBAS[[1]](#footnote-1) system run by the Ministry of Education.

All these could be viewed either as indicators of hidden dropout, or as predictors of overt dropout.

But not all hidden dropout eventually ends up in actual dropout, and many cases of hidden dropout will remain hidden, since the student will somehow remain attending school and finish his studies. There can also be a myriad of reasons for a student to drop out of school, without necessarily showing previous symptoms of hidden dropout. This may suggest that **indicators of hidden dropout do not necessarily overlap with predictors of overt dropout**.

Another way to identify hidden dropout could be identifying a proxy measure, such as poor achievement in the Matriculation examinations (including not taking these final examinations at all). This could be interpreted as a result of the disengagement process described above, accounting for those hidden drop-outs who managed to stay in school to the end of 12th grade. We could compare the characteristics of these students to those of overt dropouts, or build a model to predict this measure in itself. This could be seen as a complementary measure to the ones proposed above, since each has its strengths and its blind spots.

1. Acronym in Hebrew for School Management System. [↑](#footnote-ref-1)