



The First Project Year - An Overview -

by

Manuel Eisner

Project Director
Institute of Criminology, University of Cambridge

and

Denis Ribeaud

Scientific Project Coordinator
Institute of Education Science, University of Zurich

z-proso started on October 1, 2003. Since then all members of the project team have worked hard to get this complex project running. We knew that the first year would be decisive in determining the scientific potential of the project for the future years. This issue reports on the main activities up to the present. They may be subdivided into ten major tasks:

- *Getting expert advice on open questions*
- *Sampling and allocation to experimental groups*
- *Developing the initial caregiver questionnaire*
- *Translating the questionnaire into nine languages*
- *Recruiting and training of interviewers*
- *Setup of a technical and organisational interviewing infrastructure*
- *Contacting and recruiting parents*
- *Fieldwork*
- *Planning the implementation of the prevention programmes with the Schools and Sports Department of the City of Zurich*
- *Communication, publication, and valorisation activities*

In what follows we briefly summarise the main steps achieved regarding each of these tasks.

Expert Advice

At the beginning of the project it appeared particularly important to identify as many potentially problematic issues of the planned study in order to avoid possible pitfalls. For this reason we set up an interna-

tional expert committee that includes some of the world's leading scholars working in the field of longitudinal studies, experimental interventions, and juvenile problem behaviour and which was introduced in the first issue of the *z-proso Newsletter*.

Members of the expert committee met on 12 and 13 March 2004 in Zurich to discuss the design of the interventions, the sampling strategy, the questionnaire development, strategies to improve participation rates, and the approach towards the translation process. The discussions proved to be highly productive and resulted in a series of important clarifications that helped to further develop the project.

Sampling and Allocation to Experimental Groups

Developing an adequate sampling procedure was amongst the pivotal tasks of the first year. Basically, it had to match four prerequisites: 1) to generate a sample in the targeted size, 2) to adequately represent all children of the targeted age cohort, 3) to include enough at-risk children to yield significant treatment effects, and 4) to generate four groups of comparable size and structure to allow for comparisons among the four treatment conditions.

z-proso's target population are all 2,482 children who started with Grade 1 in public primary schools of the city of Zurich in 2004, including all types of "small classes" aimed at promoting children with special needs. Based on an estimated initial participation rate of 70%, and a subsequent attrition rate of 8% in each of the two follow-up measurements, about 1,700 addresses were needed to achieve the target sample size of 1,000 children.

In order to increase the proportion of at-risk children without relying on individual characteristics (e.g., gender, socio-economic background, etc.) we decided to oversample children from socially disadvantaged school districts. The social status of the school districts was assessed by means of a composite index of socio-economic indicators.

For several reasons (i.e., school-wide programme implementation, "contagion effects", within school mobility, small average school size, etc.) schools, rather than classes or individuals, were defined as sampling units. In order to ensure comparability of the four experimental conditions (control, Triple P, PATHS, combined programmes) as to size and population structure, we created quadruplets of schools

within each of the seven school districts, which were further stratified by school size. Accordingly, in each district half of the schools were allocated to a “large school group” and half to a “small school group”. From such groups four schools were then randomly selected to form a quadruplet. Within these quadruplets schools were randomly allocated to the treatment conditions. This procedure resulted in fourteen structurally comparable quadruplets with schools of similar size including 56 out of the city’s 89 primary schools (i.e., a quadruplet of large and one of small schools in each school district, except in the wealthiest district where only a large-school quadruplet was included, plus one quadruplet including four of the city’s five day-care schools). The oversampling of children from disadvantaged school districts results from the fact that the two most disadvantaged districts are also the smallest. Moreover, only one quadruplet was selected in the wealthiest district.

Sampling-frame data were provided by the *Schools and Sports Department* of the City of Zurich. They include address and basic demographic information (i.e., nationality, language spoken, date of birth) on the child and both his/her parents, as well as on the child’s school allocation (i.e., school district, school, type of class, teacher). Based on this information, the sample was drawn as described above.

Table 1 *Sampling Overview, by Presumed Interview Language*

Presumed Interview Language		Sample	Sampling Frame	% in Sample	Sampling Factor
German	N	772	1153	67.0	0.97
	%	45.1	46.5		
Bosnian, Croatian, Serbian	N	163	222	73.4	1.07
	%	9.5	8.9		
Albanian	N	158	216	73.1	1.06
	%	9.2	8.7		
Portuguese	N	119	169	70.4	1.02
	%	7.0	6.8		
Tamil	N	87	125	69.6	1.01
	%	5.1	5.0		
Italian	N	86	117	73.5	1.07
	%	5.0	4.7		
Spanish	N	79	102	77.5	1.12
	%	4.6	4.1		
Turkish	N	75	105	71.4	1.04
	%	4.4	4.2		
English / Other Languages	N	171	273	62.6	0.91
	%	10.0	11.0		
Total	N	1710	2482	68.9	1.00
	%	100.0	100.0		

Table 1 shows the structure of the target population (column “sampling frame”) with respect to the presumed (interview) language of the caregivers.

Overall, 68.9% of the Grade 1 cohort has been selected for participation. As can be seen, less than half of the target population speaks German as the main language, while no other language is spoken by more than 10% of the population. This marked linguistic and cultural variety characterises many contemporary West-European metropolitan areas and represents a serious challenge for the caregiver interviews, which is further discussed below.

Note also that the oversampling of disadvantaged school districts is reflected by the fact that migrant languages are systematically overrepresented (see column “sampling factor”) in the sample.

Caregiver Baseline Questionnaire

The development of the questionnaire for the first wave of parent interviews was the most important substantive task of this initial stage. Preparatory work involved an extensive search of instruments used in existing longitudinal studies. We obtained sample questionnaires of a large number of studies and created a comprehensive database that provides information about the domains covered and instruments used by those studies. It was a welcome resource at later stages of our own questionnaire development.

Various considerations went into the design of the first parent questionnaire: The most important practical limitation was that it had to be completed within an average 60 minutes including the informed consent. Hence a choice had to be made as to what domains had logical and conceptual priority for the first wave and which ones could also be left to subsequent waves. Also, the selected instruments should on the one hand be sensitive to the expected impact of the interventions and on the other hand be broad enough to cover major risk-factors relevant in a longitudinal study of potentially several years. Finally, a compromise had to be found between using established instruments with known psychometric properties and developing new instruments to examine dimensions not convincingly covered by existing questionnaires.

The final instrument is divided in two parts. The first part covers nine domains and consists of conventional standardised questionnaire items. The second part is an *Event History Calendar* developed to capture major aspects of the life history of the child between birth and the present age.

Part I: The Standardised Questionnaire

Household Structure (own development): It appeared important to get a comprehensive picture of the household composition and the family situation of the child at the beginning of the study. Accordingly, only changes will need to be recorded in subsequent waves. For each household member information gathered includes age, gender, relationship to the child, and relationship to the primary caregiver.

Parent Socio-Demographic Background (own development): For each biological parent and – if applicable – any other female and/or male caregiver living in the household the questionnaire includes items relating to education, occupation, residential status, religious affiliation, and civil status. We also ask about the main language of communication with the child, household income, getting welfare contributions, financial difficulties, and the division of household work between spouses.

Neighbourhood Characteristics (Sampson et al.): We administer the neighbourhood characteristics questionnaire developed by Sampson (1997) and Sampson et al. (1997). The questionnaire consists of three subscales that are designed to measure collective efficacy, trust, and intergenerational closure. Additionally we have included a brief 7-item scale to measure the density of neighbourhood network interactions.

Parenting Values (own development): The parenting values scale is designed to measure basic dimensions of dominant parenting values. It includes a list of 15 items that represent basic goals such as “hard work”, “imagination”, “faith”, etc., some of which were taken from the World Values Survey (e.g., Inglehart & Flanagan, 1987). Respondents are asked about how important these values are for their parenting goals.

Family Climate (Wikström, Peterborough Study): Three items are used to assess the overall family climate. These items have been shown to highly correlate with more extensive family and partnership climate scales and were considered to be a parsimonious way to assess family happiness and conflict.

Alabama Parenting Questionnaire (Shelton et al., 1996): The Alabama Parenting Questionnaire is one of the most widely used instruments to measure parenting practices. The 40 items of the questionnaire measure six basic dimensions, namely involvement, positive parenting, poor monitoring, inconsistent discipline, corporal punishment, and “other discipline practices”.

Child Routine Activities (own development): Many existing longitudinal studies have somewhat neglected the structure and change of children’s everyday activities. For this purpose, we developed a 16-item questionnaire on the weekly incidence of activities such as “reading a book”, “playing with other children”, “eating lots of sweets”, “doing sports” or “playing an instrument”. Additionally, we ask about the extent of media use.

The Social Behaviour Questionnaire (Tremblay et al. (e.g., NLSC PROJECT TEAM, 1995)): The Social Behaviour Questionnaire is our main instrument for measuring the extent of problem behaviour of the child. It will also be used for the child assess-

ments by the teachers. The questionnaire consists of 55 items measuring ten subdimensions including both externalising and internalising problem behaviours: Prosociality, Anxiety, Emotional Disorder, Hyperactivity, Inattention, Non-Aggressive Conduct Disorder, Indirect Aggression, Physical Aggression, Proactive Aggression, and Reactive Aggression.

Birth Complications and Child Health Problems (own development): This section includes questions on serious disabilities or illnesses of the child, on possible complications during pregnancy or birth, as well as on alcohol, tobacco, and cannabis use during pregnancy.

Obviously, a series of potentially important concepts is missing in the current questionnaire. This includes, for example, child and parent personality, current parent substance use, or general supportive networks. Indeed, our initial draft version was almost twice the length of the final product. However, time restraints made difficult decisions necessary. Ultimately, they were guided by the question of what appeared unconditionally necessary for the first interview and what could be administered equally well during the second or third wave.

Part II: The Event-History Calendar

Developmental research conclusively shows that many risk factors associated with problem behaviour developed themselves in the first years of life. We were hence concerned about how to gather information on the child’s life history.

A very promising technique for collecting retrospective data is the so-called event-history or life-events calendar (see, e.g., Caspi et al. 1996), a tool to elicit information on events in the past of a respondent’s life in a structured way. It consists of a calendar sheet with several rows representing distinctive phenomena that may have occurred during the life course. The time units of a calendar may vary depending on the purpose and the total period covered.

In practice, the interviewer shows the calendar to the respondent, explains its purpose, and then works through the themes of the calendar. The interviewer usually starts with themes that are easily remembered and proceeds to more difficult issues using earlier information to support correct memory. During the past 20 years event-history calendars proved to be a highly successful yet rarely used instrument in social-science research.

In our case, the primary purpose of the *Event-History Calendar* (EHC) was to gather information on events and circumstances in the child’s life since birth that may be assumed to be relevant for the development of problem behaviour.

Our EHC covers five main domains, namely 1) place of residence, 2) household members 3) external child care 4) critical life events, and 5) earlier problem

behaviour and related treatments. In the first domain we ask parents about all places where the child lived for periods of at least 6 months. This will provide information on change in neighbourhood contexts of the child. The second domain tracks change in the household composition. It provides information on, e.g., births and deaths, separation of the father or

change in partnerships. The third domain asks about child care arrangements outside the household such as day mothers, nurseries, or play groups. The fourth domain includes a list of 11 potentially disruptive types of life events. Finally, the fifth domain focuses on the child's problem behaviour (internalising, hyperactive, aggressive) and possible treatments.

Figure 1 Example of an EHC

Interviewers received detailed instruction about how to use the EHC. Together with the interviewee they go through a worksheet that allows them to code periods and to enter additional codes within the periods in order to capture more detailed information.

Figure 1 shows an example of the electronic EHC we use. It was implemented in Excel/Visual Basics and is fully integrated in the CAPI system, meaning that when an EHC is completed all data are numerically encoded and included in the file containing the data of the standardised interview. By this, data from the EHC are ready for use in SPSS as soon as the data is sent to our server.

Questionnaire Translation

One of the main criteria for the success of the project is the extent to which less integrated and vulnerable minorities can be motivated to participate. Initial analyses of school statistics showed that over 50% of the parents are not native German speaking and that many of the mothers would be unable to conduct an interview in German. We hence assumed that offering interviews in their native languages would greatly enhance response rates.

Fortunately, a grant by the Swiss Federal Office of Immigration, Integration and Emigration (IMES) provided the necessary financial means for the translations. Initial examination showed that a total of eight languages is spoken by 4 to 10% of the parents in our sample (see Table 1), namely Albanian, Croatian, Italian, Portuguese, Serbian (including Bosnian), Spanish, Tamil, and Turkish. These languages – as well as German as the main language – were targeted for translation from the English original. All other minorities were addressed in German and English.

There are various approaches towards achieving high-quality translations of questionnaires that render different language versions semantically equivalent (see, e.g., Harkness 2003). Before starting the translation procedure these alternatives were discussed in depth with Janet Harkness at the *Zentrum für Umfragen, Methoden und Analysen (ZUMA)*, one of the world's leading experts on translating social-science questionnaires. Based on her suggestions we set up expert panels for each language consisting of a professional translator, a social science expert in the target language, an interviewer, and the translation co-ordinator. The translator carried out the main translation which

was then forwarded to all other members of the panel who were asked to comment on possible problems and shortcomings. The group then gathered for meetings of up to one and a half day to discuss any controversial elements. If necessary, translators were asked to retranslate critical parts.

Interviewer Recruitment and Training

Interviewer recruitment started in April 2004. For each of the major migrant languages we tried to recruit two native speakers who optimally would also be able to carry out interviews in German. Out of 230 applications, we interviewed about 50 applicants, from which 20 were recruited. All but one interviewer are female and most of them are students with a social-science background.

Adequate training and instruction of our interviewers was deemed to be of prime importance to ensure a good quality of the data-gathering process. We hence developed a detailed 70-page interviewer manual that is based on the *Pittsburgh Girls Study* manual developed by Magda Stouthamer-Loeber.

The main interviewer training was done in a one-day course. The training provided detailed information on all written documents, data protection, safety issues, contacting strategies, and the handling of the questionnaire. In addition to the one-day course, interviewers were trained in using the interview software during 3-hour group sessions. New interviewers are trained individually by staff members and also attend one interview as bystanders to familiarise themselves with the interviewing situation.

Various measures are put in place for continuous quality control during the interviewing phase. Interviewers have to regularly report to the project administration and samples of questionnaires are being checked for correct usage of, e.g., the Event-History Calendar. Also, supervision meetings are being held at irregular intervals. Interview duration time is automatically registered by the software and allows for screening particularly short or long interviews.

Interviewing Infrastructure

We developed a fully IT-based infrastructure for conducting the interviews and managing the various databases. During early spring 2004 we evaluated various software products that would support computer-aided face-to-face interviews and that would help organise the flow of data. After careful evaluation of alternative products we decided to use NIPO, a software developed by the largest survey company in the Netherlands. It combines effective data management with flexible tools for developing

the questionnaire. Importantly, for example, interviewers may switch between languages at any time during the interview. Moreover, as soon as the interview data are delivered to the server through the internet they may be readily imported to SPSS and subsequently analysed.

After training by a specialist from NIPO in June, the German master questionnaire as well as the translations were scripted in the NIPO software. Simultaneously, a fully protected server located at the computing centre of the University of Zurich was set up by our IT administrator as the heart piece of the CAPI system.

Given the number of interviewers, 23 laptops were purchased and configured by our IT administrator using "cloning" software.

Contacting and Recruiting Parents

One important element to increase participation rate was an incentive that could be handed out to the participating parents. Several alternatives were evaluated. The final structure of incentives was influenced by both financial and substantive considerations and gives parents two alternatives. For one, we offer a voucher for all public sports facilities and courses in Zurich – including a wide range of activities for children – worth CHF 40. This voucher is subsidised by the *Schools and Sports Department* of the *City of Zurich* and the *Visana Plus Foundation*. Alternatively parents may choose a shopping voucher worth CHF 20.

On August 30 we mailed 1,742 letters in 10 languages to all addresses included in our sample. Three days earlier the head of the *Schools and Sports Department*, Monika Weber, had also sent out a letter that informed the parents about the study and asked for participation.

Overall, 44% of the response slips included in the letter were returned to the project office. This is an excellent result in comparison with similar studies. However, more detailed analyses revealed large differences between language groups. More than 60% of the German response sheets were returned while we only received about 15% of those sent to parents from former Yugoslavia. The response rate of the other migrant groups was comprised between 25 and 50%.

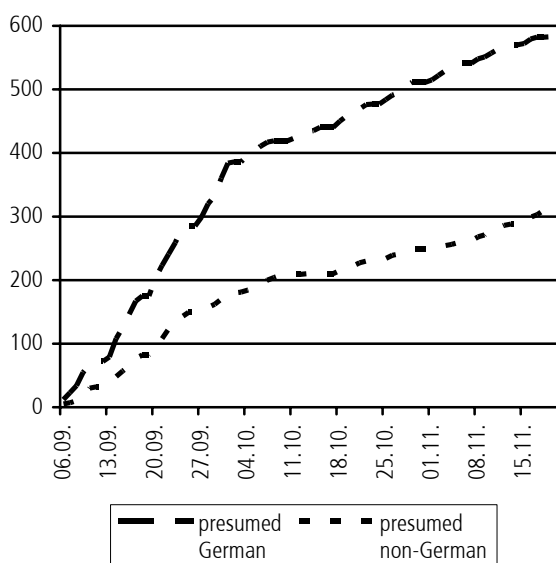
By the end of October, when most "response-slip" interviews had been conducted, we started to send out brief reminders to all remaining parents, the strategy being that the interviewers are requested to contact the parents in the same week they received the letter. The letter had previously been discussed and refined with stakeholders of the most difficult-to-reach minorities. In order to fur-

ther increase the participation of migrant groups, additional efforts such as attaching a supportive letter by a relevant minority organisation to our letter, or informing and mobilising representatives of minorities in the schools were undertaken. As a last resource, we started with “door knocking” to contact those parents that could not be reached otherwise.

Fieldwork Progress

By November 20, 583 (or 75%) of the interviews with presumed German speaking parents and 316 (or 34%) of the interviews with presumed non-German speaking parents had been conducted (see Figure 2), which corresponds to a 52% overall participation rate. At the same time only 9% of the parents had explicitly refused participation, while the remaining 39% either had not been contacted yet or had made an appointment with an interviewer. Accordingly, we expect a final participation rate of between 70 and 80%. It seems also likely that we can achieve a participation rate of at least 50% in each minority language.

Figure 2 Interview Progress, by November 20, 2004



Most of the German interviews are planned to be completed before Christmas holidays, while the deadline for non-German interviews is set by mid-February, i.e., before the beginning of the child assessments.

Implementation of the Prevention Programmes

In addition to the parent interviews another major focus during the past year was to organise the two interventions in collaboration with the *City of Zurich*.

Triple P

The most important upcoming step is the implementation of *Triple P* due to start in April 2005. *Triple P* will be offered for free to all parents in 50% of the schools of our sample. Translators working in collaboration with the *Institute of Family Research* at the *University of Fribourg* are currently in the way of producing a Turkish, a Portuguese, and an Albanian version of the *Triple P* material. Being interested in the results of offering *Triple P* to immigrant minorities, *Triple P International* has agreed to bear the full costs of these translations. Respective bi-lingual *Triple P* trainers have already been selected and trained.

Furthermore, the representatives of the *z-ok* project run by the *City of Zurich* have made large progress in preparing its delivery. Trainers were recruited and dozens of parent evenings have been organised since the start of the school year with the purpose of providing information to both parents and teachers. In order to further increase participation, our interviewers are taught to motivate those parents assigned to the *Triple P* experimental groups to participate in the programme. Moreover, all Albanian, Portuguese and Turkish speaking parents in the *Triple P* groups will be personally contacted by the trainers of the respective language.

PATHS

The school prevention programme *Promoting Alternative Thinking Strategies (PATHS)* will be implemented as scheduled after summer holidays 2005. The whole grade 2 curriculum consisting of 47 lessons has been translated into German. The draft translations have been extensively revised and adapted, and the complete programme is now available as an attractive teaching instrument. Much attention was paid to providing teachers with references to German children's books that correspond to the books recommended in the American original. We are currently in the process of testing a series of lessons in three primary school classes. First results are extremely encouraging. The teacher training in using *PATHS* is currently planned to take place between April and June 2005.

Communication, Publication, and Valorisation

Since May 2004 the *z-proso* project runs a website at www.z-proso.unizh.ch. The website is fully bilingual (English/German) and currently consists of information on the project, electronic copies of the newsletter, specific information for the parents as well as CVs of the project staff. It also proved to be useful to advertise for interviewers and to provide answers to questions frequently asked by parents.

Since August 2004 the collaborative project z-ok has also started to run a website at www3.stzh.ch/internet/ssd/vss/homevss/troubleshooter/praeventionsprogramme.html that provides information on the two prevention programmes offered by the City of Zurich. We are currently planning various steps to expand the website including, for example, a joint portal for both projects.

Furthermore, on March 12, 2004 the *Schools and Sports Department* of the *City of Zurich* and the *Institute of Education Science* of the *University of Zurich* jointly organised a launch meeting. The main aim was to present the project and its goals to a wider audience of practitioners and experts. About 120 participants including several media representatives attended the half-day conference. Various extensive newspaper articles were published subsequent to the event. We are currently planning to organise an even larger public conference in Spring/Summer 2005 that would focus on the topic of "parenting and parent interventions".

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The z-proso Team

Since our first newsletter the z-proso team has significantly expanded and still does. At this place, we would like to thank everybody for doing a great job!

Project Direction:

Manuel Eisner

Permanent Staff:

Denis Ribeaud (scientific coordinator)

Gabrielle Frey (administrative coordinator)

Technical Staff:

Morten Anderson (translation coordinator)

Daniel Bucheli (IT coordinator)

Rahel Jünger (translation and adaptation PATHS)

Ruth Schmid (web coordinator)

Interviewers:

Brandao, Patricia (Portuguese, German)

Canjuga, Mirjana (Bosnian, Croatian, Serbian)

Del Bon-Martins, Nilva (Portuguese, Spanish)

Flores, Manuela (Italian, Spanish)

Giger, Antoinette (German)

Hobi, Barbara (German)

Hobi-Ragaz, Ginger (German, English, Spanish)

Hösli, Karin (German, English)

Hurst, Johanna (German, English)

Kalanderi, Majlinda (Albanian)

Koyuncu, Serra (Turkish)

Kühne, Andrijana (Serbian)

Lenz, Evelyne (German, English, Spanish)

Ligi, Sabrina (Italian, German)

Meidert, Ursula (German, English)

Müller, Monika (German, English)

Nay, Eveline (German)

Nimalakumar, Rugunashanth (Tamil, German)

Plaza, Gloria (Spanish, German)

Rajasehar, Gopinath (Tamil)

Schmid, Ruth (German, English)

Shajiei, Nina (German, English)

Sokoli, Evgjenija (Albanian)

Stierli, Eveline (Croatian, Bosnian)

Stolz, Anna (German, English)

Contact Information

z-proso

Pädagogisches Institut

Universität Zürich

Scheuchzerstr. 21

CH-8006 Zürich

Switzerland

Voice: +41 44 634 45 67

Fax: +41 1 634 43 65

Mail: z-proso@paed.unizh.ch

Web: www.z-proso.unizh.ch