

Evaluation of a health promoting program in French primary schools: methodological presentation of a mixed methods study



MR. Guével^{1,2}, D. Jourdan¹, J. Pommier²

INTRODUCTION

Schools' contribution to students' health and well-being has been increasingly recognized. Nevertheless, the development of suitable evaluation approaches for health promotion in schools remains a central question. In France, few studies have been published on the implementation and evaluation of programs aiming to develop health promoting (HP) practices among teachers and school communities.

Our research focuses on the development of an evaluation design that enables to take into account the complexity of the implementation of HP programs. We thus developed

- > a systemic approach of evaluation taking into account the mechanisms, the contexts and the outcomes as defined in realistic evaluation that we adjusted to our context (Chen, 1990, Pawson & Tilley, 1997);
- > the combination of qualitative and quantitative approaches (Tashakorri & Teddlie, 2003, Creswell & Plano Clark, 2007).

PRESENTATION OF THE HP PROGRAM

This initiative aims at:

- > improving children's well-being at primary school,
- > developing sustainable HP projects in school settings by promoting, sharing and enhancing teachers' and schools' HP practices.

Figure 1 presents the main principles and practices that underlie this HP program.



Figure 1: Program's main principles and practices

In each region, a resource team is trained. It is formed of teacher trainers, pedagogical advisers, members of HP services and members of local HP NGOs. This team then trains and supports the teachers. The aim is that teachers integrate HP approaches in their everyday practices at the class level as well as at the school and community

The project is constituted of two stages: a pilot and a generalization stages. Figure 2 presents the localisation and the participation to the 2 stages of the project.

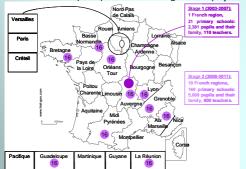


Figure 2: Localisation and participation to stage 1 (dark purple) and stage 2 (purple) of the project

This initiative is supervised by a scientific committee formed of health and educational experts and practitioners. An ethics committee was also settled.

RESEARCH PURPOSES AND QUESTIONS

According to Newman's research purposes typology (Newman et al, 2003), our research aims to "add to the knowledge base" of health promotion in the school setting. However, since it is a complex research, this general purpose can be further specified and divided in two stages, corresponding to the pilot and generalization stages. The first one focuses on understanding teachers' and schools' HP practices and the second focuses on the measure of change due to a HP program based on teacher training and support.

Based on these research purposes, our research questions can be defined as follows:

- > What are the mechanisms and the contextual factors in a school setting that allow the educational community to develop a HP approach?
- >What is the impact of teacher training and support in the development of HP practices at school and class levels?
- >What is the impact of these practices on children's well-being in the school setting?
- ➤ What is the impact of these practices on the relationships established with parents?

Figure 3 presents the iterative process from research purposes to opportunities to use quantitative and qualitative approaches (mixed methods).

Iterative pr	rocess between	purpose and questions	➤ Decision about methods		
Research purposes	Theoretical drive	Research questions	Theoretical framework	Traditional approaches	Opportunities to use mixed methods
Understand complex phenomena	Inductive	Which resources enable teachers and schools to develop HP practices? How do they use them to develop HP practices?	Analysis of activity (Leplat, 2008)	Qualitative research	Traditional plus quantitative research using multivariate techniques and taking into account multiple points of view
Measure change	Deductive	- What is the impact of teacher training and support in the development of HP practices at school and class levels? - What is the impact of these practices on well-being in the school setting? - What is the impact of these practices on the relationships established with perents?	Theory of social change (Schoonbroodt, 1996)	Quantilative approaches	Traditional plus qualitative research using open-ended process

Figure 3: Iterative process from research purposes to opportunities to use mixed methods

The pilot stage (stage 1) is based on a convergent triangulation design: QUAL+QUAN. Data collection, analysis and interpretation were concurrent and separate. Results were then compared and contrasted during the final interpretation step.

For the generalization stage (stage 2), an embedded design is used: QUAN(qual). It is mainly based on a QUAN approach where qual data provide a supportive role. Data are concurrently collected and then analyzed separately. Some qualitative data are transformed into quantitative data and introduced in statistical models. The interpretation combines both quantitative and qualitative data.

In both stages, data are collected from pupils, parents, teachers and school communities. In the pilot stage, there is a 4 year follow-up. In the generalization stage, there is a 3 year follow-up, with data collection at the beginning of the project and then at the end of each year (T₀, T₁, T₂, T₃).

Figure 4 details the design of the 2 stages and presents the data collection and analysis tools

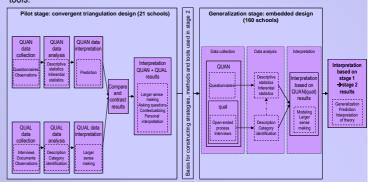


Figure 4: A mixed methods design to add to the knowledge base of health promotion in the school settings: pilot and generalization stages

Mixed methods provide a framework to combine qualitative and quantitative data, it helps to understand complex systems and therefore is an option to strengthen evaluation in the field of health promotion. Moreover, a systemic approach of evaluation that aims at understanding how the mechanisms are triggered, in which context and for whom, gives elements that can be decisive in the extension of the program and may help policy-makers and stakeholders to adapt the program to the specificities of their context and population.