

An evidence-based guideline to assist volunteers in working with at-risk children in a school context

Nele S. Pauwels¹, Emmy De Buck¹, Philippe Vandekerckhove^{1,2} and Karin Hannes³

¹ Belgian Red Cross-Flanders, Mechelen, Belgium,

² Belgian Red Cross-Flanders, Mechelen, Belgium and Department of Public Health and Primary Care, KU Leuven, Leuven, Belgium,

³ Faculty of Psychology and Educational Sciences, Methodology of Educational Sciences Research Group, KU Leuven, Leuven, Belgium



BACKGROUND & OBJECTIVE

The Bridging the Gap project is a voluntary project run by Belgian Red Cross-Flanders in affiliation with a school. In this project, volunteers help teachers to assist at-risk children. Teachers often have difficulties deciding which activities a volunteer can carry out with these children. It is important to select effective, feasible and meaningful activities. The objective of this project was to help volunteers decide which didactic activities are effective at improving the personal development of at-risk preschool and primary school children.

METHODS

Evidence-based guidelines were developed according to our methodological charter, adhering to the principles of AGREE II (Brouwers et al. 2010; De Buck et al. 2014). For every pillar of 'Evidence-Based Practice' the corresponding steps of guideline development are given below:

BEST AVAILABLE EVIDENCE

- We searched The Campbell Library, Medline (PubMed interface) and ERIC (EBSCOhost interface):
 - in March-April 2013;
 - to answer the question: "In at-risk pre-school or primary school children in Flanders (Population), is performing one of 16 didactical activities accompanied by a non-professional adult (Intervention) effective to improve knowledge, skills, attitude or behaviour (Outcome), when compared to no activity or another activity of interest (Comparison).";
- The quality of the scientific evidence was determined according to the GRADE methodology (Atkins et al. 2004).



PREFERENCES OF THE TARGET GROUP

- The target group (i.e. at-risk children in Flanders) was represented by panel members with experience in working with the target group.
- Implementation (reaching the target group) will be achieved by training volunteers to use the evidence-based guideline.
- To provide additional training to the volunteers, a manual will be developed describing:
 1. a brief description of the activity;
 2. the potential benefit for the target group;
 3. practical advice for the volunteer when starting and performing the activity together with the child.

PRACTICAL EXPERIENCE AND EXPERTISE OF EXPERTS IN THE FIELD

- One consensus meeting was held with a multidisciplinary panel of external experts: policy maker in the field of education, school teacher, tutor of teachers, or volunteer of the 'Bridging the Gap' project of Belgian Red Cross-Flanders.
- Final recommendations were formulated after discussing the following points, guided by a decision tree:
 - the scientific evidence base;
 - the feasibility of having the activity provided by a volunteer without formal educational certification;
 - the feasibility of the activity within a school context;
 - the potential of the activity to achieve beneficial outcomes in the target group;
 - the presence of limiting conditions related to e.g. training, organization or funding.

RESULTS

- Following title and abstract screening of 12,056 references, and full text screening of 420 references, 8 systematic reviews and 37 studies were identified.
- An activity was either recommended, suggested or not recommended (see poster Decision trees).
- 7 activities were recommended for preschool children: book reading, road safety education game, number games, puzzle-making, road safety education in practice, singing and playing with toy blocks (see Table 1).
- 2 activities were recommended for primary school children: reading a book and poetry.

Table 1. Evidence table for interventions with preschool children

| Intervention Type | Guidance of the child | Population | | Effect | Number of studies | Quality | (No) recommendation or suggestion |
|--|------------------------|---------------------------------------|-------|--|-------------------|-----------------|-----------------------------------|
| | | Solely at-risk children? | Age | | | | |
| Block building activities | Teacher | No | 5-6 y | Positive effect on spatial skills, but depends on the measurement tool | 1 | Moderate | Recommendation |
| Book reading | Volunteer | Yes, at risk for reading difficulties | 2-5 y | Positive effect on listening comprehension skills and phonological sensitivity | 1 | Low | Recommendation |
| Kids' game: road safety education game | Researcher | No | 4-5 y | Positive effect on knowledge of traffic safety (short-term and long-term) and short-term (not long-term) road-crossing behaviour | 2 | Low to very low | Recommendation |
| Kids' game: number game | Researcher | Yes | 4-5 y | Positive effect on numeracy skills (short-term and long-term) | 3 | Very low | Recommendation |
| Poetry | Researcher / teacher | No | 3-5 y | Positive effect on literacy skills; Negative effect on short-term comprehension skills | 4 | Very low | No recommendation or suggestion |
| Puzzle making | Parent (own children) | No | 2-4 y | Positive effect on spatial transformation skills | 1 | Very low | Recommendation |
| Doll as didactical tool | Student | Yes, due to context of war | 4-5 y | Positive effect on stress reactions during war | 1 | Moderate | Recommendation |
| Road safety education in practice | Volunteer / researcher | No | 4-7 y | Positive effect on short-term and long-term knowledge and behaviour | 4 | Very low | Recommendation |
| Singing | Researcher | No | 4-5 y | Positive effect on knowledge of traffic safety; No effect on road-crossing behaviour | 1 | Low | Recommendation |

CONCLUSIONS

- This evidence-based guideline was developed with a view of making the best possible use of the volunteer while providing the maximum benefit for the at-risk pupil.
- This evidence-based guideline will support volunteers -who are the end user of the guideline- in deciding which interventions to pick from when working with at-risk children.
- In the near future, a roadmap will be developed for the implementation, dissemination and evaluation of didactical activities for at-risk children.

