A multi-user multi-method evaluation of childcare facilities in the Netherlands

Yvonne A. W. de Kort
Eindhoven University of Technology
The Netherlands

Ine van Liempd & Ed Hoekstra
AKTA
The Netherlands

ABSTRACT

The present study comprises an extensive evaluation of childcare facilities in the Netherlands. Data were gathered using analyses of plans and drawings, interviews, questionnaires, checklists and walk-through; management, staff, parents and children all participated in the study. The aim was to generate valuable information to help give direction to future design of newly built or renovated facilities in this domain.

INTRODUCTION

The main research question of the study is: What spatial and physical building characteristics determine the quality of child care facilities?

Although the goal is to study the role of physical and spatial building characteristics, organizational aspects and philosophy of care are explicitly incorporated in the research, since these are expected to moderate the outcomes of certain design decisions. In other words, we believe that a building that fits perfectly for one organization does not necessarily provide the ideal environment for a second organization that differs in scale, philosophy of child care or clientele. We therefore integrate information from building and surrounding area, organization and pedagogical vision into one model in our quest for quality of childcare facilities.

This quest for quality also distinctly aimed to investigate quality from various (user) viewpoints and thus combined the input from experts, management and staff of childcare organizations, parents and children.
METHOD

Facilities and participants
Twenty childcare facilities of varying scale, pedagogical vision, and building age participated in the study. Among these were 12 facilities for preschoolers, 2 facilities for children aged 4-12 and 6 combined facilities. After stratifying the population for scale, and newly built vs. renovated buildings, facilities were selected randomly from the Dutch body of child care organizations, thus making sure that the sample consisted of facilities from all parts of the Netherlands and from both urban and rural regions.
In every facility, various types of users were asked to share their experiences with us. In total, 190 child care staff members, 214 parents and 108 children participated in the study.

Measurements & procedure
As the title implies, we employed a multi-user and multi-method strategy to gather the necessary information.

Phase 1
The first phase consisted of two steps
1. Analysis of the plans of the building and its surroundings (size, number & types of spaces, connections between spaces, layout characteristics)
2. Questionnaire regarding general characteristics of building and organization (age, philosophy of care, organization of activities, etc.)
This provided the necessary information for preparing the site visit and interviews.

Phase 2
The second phase consisted of questionnaires for:
1. every group staff member (questions regarding behaviour patterns of the children, evaluation of group space, bedrooms, activity spaces, outside play areas, building and facilities)
2. a selection of the parents of children visiting the child care facility (evaluation of interior and exterior of the building, outside play areas and surroundings)
3. children of 6 years and older (evaluation of some building characteristics and feelings when in the center, open ended ‘I wish’ question)
These questionnaires were distributed at least one week before the site visit and collected on that day.

Phase 3
The third phase comprised a site visit of two researchers, this consisted of
1. a walkthrough evaluation guided by an extensive checklist of objective and subjective measurements (building hardware, layout, exterior, outside play areas, group spaces, activity spaces, kitchen and staff facilities, etc.)
2. an interview with two or three care givers
3. an interview with the management of the facility.
Results
At present, data have been gathered from 20 child care centers and data analyses are in progress. The first challenge was to combine all the data from the various instruments into one or two datasets.
Data from the questionnaires were analyzed for scale construction. Factor analyses were performed and scale reliabilities were computed. This resulted in over 20 indicators of quality of various parts and characteristics from the expert list, 14 indicators from staff questionnaires and 6 indicators from parents lists. Children’s lists and interviews have yet to be analysed.
The aim now is to look for relationships between objective building characteristics and these various quality indicators. Some of the questions we hope to answer in the near future are:

- Is scale of the facility related to satisfaction reported by staff, parents and children?
- Is scale of the facility related to freedom of movement of the children, variety of activities?
- Is the available space for children related to satisfaction reported by the various users and to the amount of activities possible in the building and on the playground?
- Do users prefer one playroom per group, or rather smaller playrooms and additional activity spaces?
- Is layout of the building related to freedom of movement of children, contacts between groups, children and or staff members and other indicators of quality?
- Is children’s sleeping behaviour related to space or number of bedrooms per group?
- Is there a connection between pedagogical aims and the way the building is organised?