

Children in the Radiology Department  
- a study of anxiety, pain, distress and verbal interaction

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**Doctoral Thesis Defense**

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Abstract

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SUMMARY

This dissertation focuses on children’s experiences of going through an acute radiographic examination due to a suspected fracture. The finding from interviews with children 3-15 years showed anxiety, pain and distress to be a concern in conjunction with an examination (Paper I). These initial findings entailed empirical studies being undertaken in order to further study children’s pain and distress in conjunction with an examination (Paper II) as well as children’s anxiety, pain and distress related to the perception of care in the peri-radiographic process (Paper III). Finally, the verbal interaction between the child and radiographer during examination was studied (Paper IV).

The research was conducted through qualitative, quantitative and mixed method studies. The data collection methods comprised interviews (Paper I), children’s self-reprots (Paper II and III), drawings (Paper III), questionnaire (Paper III) and video recordings (Papers I, II, and IV). Altogether, 142 children (3-15 years) and 20 female radiographers participated in the studies.

Qualitative content analysis was used to analyse the interviews and the written comments in the questionnaire (Papers I and III). The Child Drawing: Hospital Manual (CD:H), was used when analysing children’s drawings (Paper III) and Roter Interaction Analysis System (RIAS), was used when analysing the verbal interaction derived from the video recordings (Paper IV). Non-parametric statistics were applied when analysing the quantitative data (Papers II, III, IV).

The finding showed that children 5-15 years reported on pain (CAS) and distress (FAS) above levels at which treatment or further intervention is recommended. These findings corresponded with the observed pain behaviour (FLACC) and anxiety as expressed through drawings (CD:H). The children’s perception of the care being provided in the peri-radiographic process, was not related to the experience of anxiety, pain and distress however. The children were confident in the radiographers, who they perceived to be skilled in the task and sensitive to their needs. These findings are supported by the analysis of the verbal interaction (RIAS), which showed that the radiographer adjusted the communication when balancing the task-focused and socio-emotional interaction according to the child’s age.