

## Research Degree Thesis Submission Form (RD02)

You should submit a completed version of this form to the Research Degrees Office at the same time as you submit your thesis. **This should be at least one month before any date set for the oral examination.**

### Section A: Candidate details and abstract

Name of candidate:	Sucharita Nanjappa
Degree for which entered: (MPhil / PhD / MD(Res))	PhD
Date of thesis submission:	4/05/2012
Title of thesis:	Family functioning and frequency of sugar consumption by three and four year old children in Outer North East London.

Please paste or type (single-spaced) below an abstract of your thesis, up to 300 words long (you may extend the box onto the following page but Section B should start on a fresh page). If you prefer you may attach a separate sheet but this must be clearly labelled with your name, degree and thesis title. The abstract should be identical to the abstract bound into your thesis (see Guidance Notes). Copies will be circulated for publication in the Index to Theses Online.

Dental caries is a public health problem affecting over 30% of 3.5 to 4.5 year old children in the UK. One of its most important determinants is frequent consumption of sugary foods, without which plaque bacteria cannot produce sufficient acids to demineralise tooth structure. The aim of this study was to identify the contribution of family functioning in the domains behaviour control, affective responsiveness, affective involvement, communication, problem solving and roles towards the frequent consumption of sugary foods by three and four year old children in Outer North East London. The research questions were explored with data from the Outer North East London Family Study (ONEL-FS), which collected data through home visits, by trained dentists and interviewers, from a representative sample of adults and children living in the London boroughs of Redbridge, Barking and Dagenham and Waltham Forest in 2008-10. This study analysed data (N=698) from three and four year old children and their mothers and included unadjusted and adjusted logistic regression and mediation analysis. The results showed that 17% of the sample consumed sugary foods more than 4/day which was significantly associated with behaviour-control (OR 0.25; 95% CI: 0.11, 0.57), affective-responsiveness (OR 0.29; 95% CI: 0.14, 0.58), affective-involvement (OR 0.32; 95% CI: 0.17, 0.60), communication (OR 0.34; 95% CI: 0.14, 0.85) and roles (OR 0.22; 95% CI: 0.08, 0.62), after adjusting for confounders. The significant association between mother's education and children's sugar consumption (OR 0.35; 95% CI: 0.21, 0.58) was partially mediated through behaviour control, affective responsiveness, affective involvement, communication and roles. The significant association between mother's ethnicity and sugar consumption (OR 3.46; 95% CI: 1.63, 5.25) was also partially mediated through these same five domains. The study findings contribute to the literature on protective influences within the family environment and confirm current knowledge regarding mother's education and ethnicity.

## Section B: Declaration of word length and ownership of work

Name of candidate:

Degree for which entered:   
(MPhil / PhD / MD(Res))

Date of thesis submission:

Title of thesis:

Name of principal supervisor:

Approximate word length of thesis:

1. Please tick one box:

I confirm that the above thesis does not exceed the word limit prescribed in the Regulations.

I confirm that the above thesis exceeds the word limit and has received a suspension of Regulations with attached confirmation.

2. I confirm that the work presented in the thesis is my own and all references are cited accordingly (if the thesis includes any work conducted jointly please attach a statement of the part played by the candidate, certified by the supervisor). I accept that the College has the right to use plagiarism detection software to check the electronic version of the thesis.

Candidate signature:

Date:

Supervisor's signature:

Date:

Submit this form completed with two bound copies and one electronic copy of your thesis to:

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Statement of part played by Sucharita Nanjappa in collaborative portion of the study.

The research questions were explored with data from the Outer North East London Family Study (ONEL-FS) carried out by the Institute of Dentistry, Barts and The London School of Medicine and Dentistry, Queen Mary, University of London, in collaboration with the Barking and Dagenham, Redbridge and Waltham Forest PCTs. Data was collected from a representative sample of 2,343 adults aged 16 - 65 years and 1,174 children aged three and four years in 2008-10. The candidate (SN) was involved in the planning (obtaining ethical approval, identifying and preparing adult and child questionnaires, patient information sheets, consent forms and training the interviewers) and conducting (administering the questionnaires, co-ordinating data collection, co-ordinating and doing data entry and data cleaning and quality assessment) of the study. The clinical examinations were carried out by dentists registered with the General Dental Council (GDC) and SN acted as one of the scribes.



*Candidate's signature*

*Supervisor's signature*