Appendix

Nurses' emotions and oral care for hospitalised adults



Ilona Gail Johnson

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Appendix 1

Appendix 1.1

Literature search for the literature review

Search terms used in the search included:

Oral, health and hygiene:

```
"Oral", "mouth", "teeth", "tooth", "denture$1", "gingiv$", "mucosa$", "gum" "dental", "plaque" "Dental Care" "dental devices", "oral health", "dental health", "toothbrush$", "brush$", "cleaning", "cleansing", "dental hygiene", "oral Hygiene", "toothbrushing", "Dental Caries", "Dental Care for Disabled"
```

"Dental Care for Aged", "Dental Care for Chronically III" and "Oral assessment".

Healthcare staff, nursing care conditions and nursing locations:

```
"nursing homes", "residential", "Dementia", "Care", "home", "long term care","

Residential Facilities"," home care services", "hospices"," care home", "Home Care

Services"," residential facilities"," assisted living facilities", "homes for the aged",

"nursing homes", "institution$", "institutionalization", "hospital units"," hospitals",

"critical care"," intensive care", "life support care"," Caregivers", "nurses"," nursing

staff"," personnel", "hospital", "nurs$", "carer$", "allied health occupations", "nursing",

"nursing, practical"
```

Social Science and Psychology terms:

```
"attitude to health"," attitude of health personnel", "attitude", "emotions", "affect", "irritable mood", "anger", "anxiety", "bereavement", "boredom", "euphoria", "expressed emotion", "fear", "frustration", "guilt", "happiness", "hate", "hostility",
```

1

^{1 \$} truncated term used in search

```
"jealousy", "laughter", "loneliness", "love", "motivation", "exploratory behaviour", "instinct", "intention", "Adaption" and "Psychological".
```

Authors:

"I Wardh", "J Chalmers", "M Macentee", "H Frenkel".

Journal alerts

British Medical Journal, Cognition and Emotion, Community Dentistry and Oral Epidemiology, International Journal of Public Health, Journal of Public Health Journal of Public Health Dentistry, Journal of Public Health Policy, Motivation and Emotion and Public Health. Additionally, subscriptions were held for Gerodontology and Special Care in Dentistry Journals.

Chapter 2

Appendix 2.1

Focus group guide for qualitative study

Introduction

Today I am trying to find out about what you you feel about the mouth. There are no right or wrong answers so please feel free to express your opinions.

Focus Group

D /	
Date	
Location	
Number of participants	
Description of Participants	
Moderator Name/Number	
Moderator Harris/Harrison	
Assistant Moderator	
Assistant Moderator	

To start off with I am going to show you some pictures and would like you to tell me the first thing that comes to mind when you see them.

- Picture of the lips
- Pictures of an open mouth/ teeth

Brief Summary/Key points	Notable quotes

So how do	you feel abo	out your owr	n mouth?
-----------	--------------	--------------	----------

Brief Summary/Key points	Notable quotes
So can you think about what you do when it.	you clean your own mouth tell me about
What do you see?	
How does that make you feel?	
How do you deal with that feeling?	
Brief Summary/Key points	Notable quotes
And at work when you look at someone el	se's mouth what do you feel?
Brief Summary/Key points	Notable quotes

So can you talk me through what you do when you go about cleaning someone else's teeth?

Prompts:

- What makes you go and do that task?
- How do you feel about ..?
- And how do you deal with that feeling?
- Extra prompts about physical contact
- And when you touch their lips,
- Saliva
- Their teeth
- Their tongue
- What about their toothbrush
- What about dentures
- Could you explain more...
- Would you give me an example of what you mean....

Brief Summary/Key points	Notable quotes

Appendix 2.2

Ethical approvals

University of Glamorgan



Prifysgol Morgannwg

Faculty of Health, Sport and Science Cyfadran lechyd, Chwaraeon a Gwyddoniaeth

25 November 2008

Ilona Johnson, Applied Clinical and Public Health Research, Cardiff University School of Dentistry, Heath Park, Cardiff, CF14 4XY

Dear Ms Johnson,

llona Johnson - Health care workers emotional feelings towards providing daily oral health care. [FESG 08/36]

I am writing to confirm that on the 24 November 2008 the Faculty of Health, Sport, and Science Ethics Sub Group approved your revised submission.

If you have any queries about the group's decision, please do not hesitate to contact me.

Yours sincerely,



Prof. Joyce Kenkre Chair







Dean of Faculty/Deon y Cyfadran University of Glamorgan/Prifysgol Morgannwg, Pontypridd, CF37 1DL, UK/DU Tel/Ffôn 01443 483094 Fax/Ffacs 01443 483118 www.glam.ac.uk

Professor/Yr Athro David Halton Vice-Chancellor/Is-Ganghellor



South East Wales Research Ethics Committee - Panel D

Telephone: 02920 376822/6823 Facsimile: 02920 376835

15 December 2008

Professor IG Chestnutt Professor of Dental Public Health Cardiff Univerity Dental Public Health, Cardiff University, School of Dentistry Heath Park, Cardiff CF14 4XY

Dear Professor Chestnutt

Full title of study:

A qualitative investigation of health care worker's

emotional feelings towards providing daily oral health

care for dependent patients

REC reference number:

08/WSE04/79

Thank you for your letter of 27 November 2008, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Vice-Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Ethical review of research sites

The Committee has designated this study as exempt from site-specific assessment (SSA). The favourable opinion for the study applies to all sites involved in the research. There is no requirement for other Local Research Ethics Committees to be informed or SSA to be carried out at each site.

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.



Canolfan Gwasanaethau Busnes Ty Churchill 17 Ffordd Churchill Caerdydd, CF10 2TW Ffôn: 029 20 376820 WHTN: 1809

Ffacs: 029 20 376826

Business Services Centre Churchill House 17 Churchill Way Cardiff, CF10 2TW

Telephone: 029 20 376820 WHTN: 1809

Fax: 029 20 376826

rhan o Addysgu Bwrdd Iechyd Lleol Powys / part of Powys Teaching Local Health Board

University of Glamorgan



Prifysgol Morgannwg

Faculty of Health, Sport and Science Cyfadran lechyd, Chwaraeon a Gwyddoniaeth

25 September 2010

I Johnson, Dental School, Applied Clinical Research and Public Health, Cardiff University, Heath Park, Cardiff, CF14 4XY.

Dear Mrs Johnson,

Re: Qualitative investigation of health workers feelings towards providing daily oral health care for dependent patients [08/36]

Thank you for your letter dated 23rd July 2010. I am writing to confirm that on the 20th September 2010, the Faculty of Health, Sport, and Science Ethics Sub Group approved your request for amendment for the research study stated above. We note that this request included the addition of 3 one to one interviews with staff from the University of Glamorgan.

If you have any queries about the group's decision, please do not hesitate to contact me

Yours sincerely,



Prof. Paul Rogers Faculty Ethics Champion







Professor/ Yr Athro Donna M Mead O.B.E.

Dean of Faculty/Deon y Cyfadran
University of Glamorgan/Prifysgol Morgannwg, Pontypridd, CF37 1DL, UK/DU

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Iulia E Ludon Vica-Chancellor/le-Ganghellor



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Heath Park, Cardiff, CF14 4XW Phone 029 2074 7747 Fax 029 2074 3838 Minicom 029 2074 3632 Parc Y Mynydd Bychan, Caerdydd, CF14 4XW Ffôn 029 2074 7747 Ffacs 029 2074 3838 Minicom 029 2074 3632

From:

Professor JI Bisson

R&D Director

R&D Office, 2nd Floor TB2 University Hospital of Wales

Cardiff CF14 4XW

20 August 2010

Professor Ivor Chestnutt
Dental Public Health Unit
Clinical And Applied Public Health Research
Cardiff University Dental School
Heath Park
Cardiff
CF14 4XY

Dear Professor Chestnutt

Project ID: 08/CLC/4388: A Qualitative Investigation Of Health Care Workers Emotional Feelings Towards Providing Daily Oral Health Care For Dependant Patients

REC Reference: 08/WSE04/79

Amendment Number: 2

Amendment Date: 16 March 2010

The above amendment has been received by the Cardiff and Vale Research Review Service (CaRRS).

The documents reviewed were:-

Version	Date
1.03	16/03/10
1.03	16/03/10
1.03	16/03/10
1.03	16/03/10
2	16/03/10
2	06/05/10
	1.03 1.03 1.03

Page 1 of 2

Version 1.0. 09.06.10



I can confirm that the above support documentation has been favourably reviewed and that you may continue with this study accordingly.

Please ensure that the appropriate Research Ethics Committee have a copy of this letter

May I take this opportunity to wish you success with the project and remind you that as Principal Investigator you are required to:

- Inform the R&D Office if any external or additional funding is awarded for this
 project in the future.
- Inform the R&D Office of any further amendments relating to the protocol, including personnel changes and amendments to the actual or anticipated start / end dates.
- Complete any documentation sent to you by the R&D Office or University Research & Commercial Division regarding this project.
- Adhere to the protocol as approved by the Research Ethics Committee.
- Ensure the research complies with the Data Protection Act 1998.

Yours sincerely,

Professor Jonathan I Bisson

Chair of the Cardiff and Vale Research Review Service (CaRRS)

CC R&D Lead Prof Barbara Chadwick

Mrs Ilona Gail Johnson

Chris Shaw, Research and Commercial Division, Cardiff University



South East Wales Research Ethics Committee - Panel D

Tel: 02920 376822/6823 Fax: 02920 376835

06 May 2010

Mrs I G Johnson Clinical Lecturer and Honorary Specialist Registrar Cardiff Univerity Dental Public Health, Cardiff University, School of Dentistry Heath Park, Cardiff

Dear Mrs Johnson

Study title:

A qualitative investigation of health care worker's emotional feelings towards providing daily oral health

care for dependent patients

REC reference:

08/WSE04/79 **Amendment 1** 08 April 2010

Amendment number: Amendment date:

The above amendment was reviewed at the meeting of the Sub-Committee held on 06 May 2010 by the Sub-Committee in correspondence.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Investigator CV	I G Johnson	07 April 2010
Notice of Substantial Amendment (non-CTIMPs)	Amendment 1	08 April 2010
Investigator CV	E T Treasure	09 April 2010

Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

Canolfan Gwasanaethau Busnes Ty Churchill 17 Ffordd Churchill Caerdydd, CF10 2TW Ffôn: 029 20 376820 WHTN: 1809 Ffacs: 029 20 376826

Business Services Centre Churchill House 17 Churchill Way Cardiff, CF10 2TW Telephone: 029 20 376820 WHTN: 1809 Fax: 029 20 376826

rhan o Bwrdd Iechyd Lleol Addysgu Powys / part of Powys Teaching Local Health Board

R&D approval

All investigators and research collaborators in the NHS should notify the R&D office for the relevant NHS care organisation of this amendment and check whether it affects R&D approval of the research.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

08/WSE04/79:

Please quote this number on all correspondence

Yours sincerely

Mrs Jagjit Sidhu

Committee Co-ordinator

E-mail: jagit.sidhu@bsc.wales.nhs.uk

Enclosures:

List of names and professions of members who took part in the

review

Copy to:

R&D office for Cardiff University



South East Wales Research Ethics Committee - Panel D

Tel: 02920 376822/6823 Fax: 02920 376835

06 May 2010

Mrs I G Johnson Clinical Lecturer and Honorary Specialist Registrar Cardiff Univerity Dental Public Health, Cardiff University, School of Dentistry Heath Park, Cardiff

Dear Mrs Johnson

Study title:

A qualitative investigation of health care worker's

emotional feelings towards providing daily oral health

care for dependent patients

REC reference: Amendment number: Amendment date: 08/WSE04/79 Amendment 2 16 March 2010

The above amendment was reviewed at the meeting of the Sub-Committee held on 06 May 2010 by the Sub-Committee in correspondence.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Addition to Protocol: Methods for Interviews	1.03	16 March 2010
Interview Schedules/Topic Guides	1.03	16 March 2010
Participant Consent Form	1.03	16 March 2010
Participant Information Sheet	1.03	16 March 2010
Notice of Substantial Amendment (non-CTIMPs)	Amendment 2	16 March 2010

Canolfan Gwasanaethau Busnes Ty Churchill 17 Ffordd Churchill Caerdydd, CF10 2TW Ffôn: 029 20 376820 WHTN: 1809 Ffacs: 029 20 376826

Business Services Centre Churchill House 17 Churchill Way Cardiff, CF10 2TW Telephone: 029 20 376820 WHTN: 1809 Fax: 029 20 376826

rhan o Bwrdd Iechyd Lleol Addysgu Powys / part of Powys Teaching Local Health Board

Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

R&D approval

All investigators and research collaborators in the NHS should notify the R&D office for the relevant NHS care organisation of this amendment and check whether it affects R&D approval of the research.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

08/WSE04/79:

Please quote this number on all correspondence

Yours sincerely

Mrs Jagjit Sidhu

Committee Co-ordinator

E-mail: jagit.sidhu@bsc.wales.nhs.uk

Enclosures:

List of names and professions of members who took part in the

review

Copy to:

R&D office for Cardiff University

Appendix 2.3

Participant information for the focus groups in the qualitative study

Dental School Applied Clinical Research & Public Health Head Professor Stephen Richmond Ysgol Deintyddol Ymchwil Clinigol Gymhwysol ac lechyd y Cyhoedd Pennaeth Yr Athro Stephen Richmond



Cardiff University Heath Park Cardiff CF14 4XY Wales UK

+44(0)29 2074 2447/2451 Fax Ffacs +44(0)29 2074 6489

Prifysgol Caerdydd Mynydd Bychan Caerdydd CF14 4XY Cymru Y Deyrnas Gyfunol

Participant Information Sheet

You are invited to participate in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take to time to read the following information carefully. Talk to others about the study if you wish.

Part 1 tells you about the purpose of the study and what will happen to you if you take part.

Part 2 gives you more detailed information about the conduct of this study. Ask us if there is anything that is not clear or if you would like more information. Take time to decide if you want to take part.

What is the purpose of the study?

Health care staff are often involved in cleaning the teeth of dependent patients. The purpose of this study is to find out about the feelings and emotions that staff experience in relation to this aspect of health care and how people deal with these emotions.

Why have I been invited?

You have been invited as you are either a student or employed member of staff involved in the care of patients. Individuals at who are employed at the same grade or students at the same level of training are being asked to participate in small focus groups for the purposes of this study.

Do I have to take part?

It is up to you to decide whether you wish to take part. We will describe the study and you can ask questions if you wish. You will then be asked to sign a consent form to show that you have agreed to take part. You are free to withdraw at any time, without giving a reason and any information.

What will happen if I do take part?

You will be contacted by your chosen method of communication and a meeting time and date will be arranged that is convenient to you.

The study will involve a focus group meeting for a maximum of 5 participants from the same grade or year of study. The focus group is an informal open discussion between the 5 participants in the focus group. This will involve one meeting lasting up to one hour of your time. If the discussions have not covered all of the areas of the study within that time you may be invited to attend one further meeting at a later date.

The focus group sessions will be held in a meeting room. The sessions will be audio-taped, and the tapes of the discussions will be transcribed, to ensure accurate reporting of the information, additional notes may also be taken during the discussions. The transcription will be carried out by the principal researcher. Information identifying individuals, for example the names of participants, will be removed from the transcript of the meeting

1



Version 1.02. 27.11.2008

Dental School Applied Clinical Research & Public Health Head Professor Stephen Richmond Ysgol Deintyddol Ymchwil Clinigol Gymhwysol ac lechyd y Cyhoedd Pennaeth Yr Athro Stephen Richmond



UNIVERSITY PRIFYSGOL CAERDYB Cardiff University Heath Park

Cardiff CF14 4XY Wales UK Tel Ffôn +44(0)29 2074 2447/2451 Fax Ffacs +44(0)29 2074 6489

Prifysgol Caerdydd Mynydd Bychan Caerdydd CF14 4XY Cymru Y Deyrnas Gyfunol

There are no anticipated physical risks to participants.

While there are no direct patient benefits in the course of this study the information obtained will be of value in understanding the range of feelings and emotions towards this area of care. Learning about both the positive and negative aspects of this work will contribute to helping people deal with this area of care. This may eventually contribute to improvements and developments of training in this area of care.

Part 2

What happens if I don't want to carry on with the study?

You are free to withdraw from the study at any time. If you have already participated in the focus group it may not be possible to extract all of the information from the transcript, as individuals will not be identifiable, however it may be possible to withdraw specific comments from the transcript.

Complaints

Please contact Ilona Johnson, Lecturer in Dental Public Health if you are experiencing problems with any aspect of this research. Contact details: Applied Clinical and Public Health Research, School of Dentistry, Cardiff University, Health Park, Cardiff, CY14 4XY. Telephone: 029 2074

If you remain unhappy then please contact Professor I. G. Chestnutt, Applied Clinical and Public Health Research, School of Dentistry, Cardiff University, Heath Park, Cardiff, CF14 4XY. Telephone: 029 2074 8675

Will my taking part in the study be kept confidential?

If you chose to participate, your name will be excluded from the transcript and results. Your participation in this research will be confidential.

The digital audio tapes will be kept in a password protected file in a password protected computer in a secure room before, during and after being transcribed. Paper notes will be kept in a locked cabinet in a secure room. Digital tapes and field notes will be destroyed after the completion of the transcription. The transcriptions will not hold any information that would disclose your identity; these will be stored in a password protected computer in a secure area. The transcripts will be kept for a minimum of 5 years. The only persons who will have access to the tapes will be research team involved in this project. All are bound by confidentiality.

The findings of this study will be presented in aggregate and no personally identifiable data will be disclosed.



Version 1.02. 27.11.2008

Dental School Applied Clinical Research & Public Health Head Professor Stephen Richmond

Ysgol Deintyddol Ymchwil Clinigol Gymhwysol ac lechyd y Cyhoedd Pennaeth Yr Athro Stephen Richmond

What happens to the results of the research study?

The results of the study will contribute to the development of further research in this subject area. The study results will be used as part the submission for the educational attainment of a PhD for Ilona Johnson. The results of this study will also be presented in an aggregate for publication in a journal or for presentation at a conference in this subject area.

Who is organising and funding the research

The study is being organised by researchers in the School of Dentistry at Cardiff

University. University.

For further information please contact: Ilona Johnson, Lecturer in Dental Public Health, Applied Clinical and Public Health Research, School of Dentistry, Cardiff University, Health Park, Cardiff,

Telephone: 029 2074 5490

CF14 4XY.





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Version 1.02. 27.11.2008

Dental School Applied Clinical Research & Public Health Head Professor Stephen Richmond Ysgol Deintyddol Ymchwil Clinigol Gymhwysol ac Iechyd y Cyhoedd Pennaeth Yr Athro Stephen Richmond



Health care workers en oral health care Centre Number_ Participant identification	Cardiff University Heath Park Cardiff CF14 4XY Wales UK Tel Ffőn +44(0)29 2074 2447/2451 Fax Ffacs		
Consent Form Title of Project: Heat towards providing of			+44(0)29 2074 6489 Prifysgol Caerdydd Mynydd Bychan Caerdydd CF14 4XY Cymru Y Deyrnas Gyfunol
Name of Researcher:	Ilona Johnson		DI
			Please initial box
I confirm that I have November 2008, ver had the opportunity t questions and have h	sion 1.02 for the a to consider the inf	above study. I have formation, ask	
I understand that my free to withdraw at a without my legal righ	ny time without g	giving any reason,	m
I agree to take part in	n the study		
Name	Date	Signature	
Name of Person taking consent	Date	Signature	
When completed, 1	copy for participa	and 1 researcher.	
UDDSODDWR MEWN POBL INVESTOR IN PEOPLE		4	Version 1.02. 27.11.2008

Appendix 2.4

Semi structured interview guide for the qualitative study

Date	
Location	
Description of Participant	
Interviewer Name	
I would like to start with the subject of cari	ng for a patient's mouth.
Can you tell me what daily mouth care for	a patient involves?
Prompt:	
Are there anything else that might be done	e to care for a patient's mouth?
Are there any mouth care tasks that are not normally done?	
Brief Summary/Key points	Notable quotes

So can you talk me through what you do when you go about cleaning someone else's teeth?

Prompts:

- What normally reminds you to clean a patient's teeth?
- What are the reasons why you would clean a patient's teeth?
- Are there any reasons why you would not clean a patient's teeth?
- How do you feel about ..?
- And how do you deal with that feeling?

 What about dentures 	
 Could you explain more 	
 Would you give me an example of 	what you mean
Brief Summary/Key points	Notable quotes
How does caring for a patient's mouth compare to caring your own mouth?	
Prompts:	
What do you see?	
How does that make you feel?	
,	
How do you deal with that feeling?	
Could you explain more	
Would you give me an example of what you mean	
The same of the sa	
Brief Summary/Key points	Notable quotes

And at work, when you look at your patients' mouths, what do you feel?

Prompts:

What do you see?

How does that make you feel?

Could you explain more		
Would you give me an example of what you mean		
Brief Summary/Key points	Notable quotes	
How do you feel about your own mouth?		
Prompts:		
What do you see?		
How does that make you feel?		
How do you deal with that feeling?		
Could you explain more		
Would you give me an example of what yo	ou mean	
Would you give me an example of what your Brief Summary/Key points	ou mean Notable quotes	
	Notable quotes	
Brief Summary/Key points	Notable quotes	
Brief Summary/Key points So can you tell me about what you do whe	Notable quotes	
Brief Summary/Key points So can you tell me about what you do whe Prompts:	Notable quotes	
Brief Summary/Key points So can you tell me about what you do whe Prompts: What do you see?	Notable quotes	
So can you tell me about what you do when Prompts: What do you see? How does that make you feel?	Notable quotes	

How do you deal with that feeling?

Would you give me an example of what you mean....

Brief Summary/Key points	Notable quotes
Is there anything else about mouth care the	nat you would like to tell me about?
Brief Summary/Key points	Notable quotes

Appendix 2.5

Participant information sheet for interviews in the qualitative study

You are invited to participate in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take to time to read the following information carefully. Talk to others about the study if you wish.

Part 1 tells you about the purpose of the study and what will happen to you if you take part.

Part 2 gives you more detailed information about the conduct of this study.

Ask us if there is anything that is not clear or if you would like more information. Take time to decide if you want to take part.

What is the purpose of the study?

Health care staff are often involved in cleaning the teeth of dependent patients. The purpose of this study is to find out about the feelings and emotions that staff experience in relation to this aspect of health care and how people deal with these emotions.

Why have I been invited?

You have been invited as you are either a student or employed member of staff involved in the care of patients.

Do I have to take part?

It is up to you to decide whether you wish to take part. We will describe the study and you can ask questions if you wish. You will then be asked to sign a consent form to show that you have agreed to take part. You are free to withdraw at any time, without giving a reason.

What will happen if I do take part?

You will be contacted by your chosen method of communication and a meeting time and date will be arranged that is convenient to you.

The study will involve semi-structured interviews. These interviews will be conducted using a question guide, allowing you to talk about your answers to each question. This interview will involve one meeting lasting up to one hour of your time. If the discussions have not covered all of the areas of the study within that time you may be invited to attend one further meeting at a later date.

The interviews will be held in a meeting room. The sessions will be audio- taped, and the tapes of the discussions will be transcribed, to ensure accurate reporting of the information, additional notes may also be taken during the discussions. The

transcription will be carried out by the principal researcher. Information identifying individuals, for example the names of participants, will be removed from the transcript of the meeting

Risks

There are no anticipated physical risks to participants.

Benefits

While there are no direct patient benefits in the course of this study the information obtained will be of value in understanding the range of feelings and emotions towards this area of care. Learning about both the positive and negative aspects of this work will contribute to helping people deal with this area of care. This may eventually contribute to improvements and developments of training in this area of care.

Part 2

What happens if I don't want to carry on with the study?

You are free to withdraw from the study at any time. If you have already participated in the interview it will be possible to extract some or all of the information from the transcript.

Complaints

Please contact Ilona Johnson, Lecturer in Dental Public Health if you are experiencing problems with any aspect of this research. Contact details: Applied Clinical and Public Health Research, School of Dentistry, Cardiff University, Heath Park, Cardiff, CY14 4XY. Telephone: 029 2074 5490

If you remain unhappy then please contact Professor E.T Treasure, School of Dentistry, Cardiff University, Heath Park, Cardiff, CF14 4XY. Telephone: 029 2074 2470

Will my taking part in the study be kept confidential?

If you chose to participate, your name will be excluded from the transcript and results. Your participation in this research will be confidential.

The digital audio tapes will be kept in a password protected file in a password protected computer in a secure room before, during and after being transcribed. Paper notes will be kept in a locked cabinet in a secure room. Digital tapes and field notes will be destroyed after the completion of the transcription. The transcriptions will not hold any information that would disclose your identity; these will be stored in a password protected computer in a secure area. The transcripts will be kept for a minimum of 5 years. The only persons who will have access to the tapes will be research team involved in this project. All are bound by confidentiality.

The findings of this study will be presented in aggregate and no personally identifiable data will be disclosed.

What happens to the results of the research study?

The results of the study will contribute to the development of further research in this subject area. The study results will be used as part the submission for the educational attainment of a PhD for Ilona Johnson. The results of this study will also be presented in an aggregate for publication in a journal or for presentation at a conference in this subject area.

Who is organising and funding the research

The study is being organised by researchers in the School of Dentistry at Cardiff University.

For further information please contact:

Ilona Johnson, Lecturer in Dental Public Health, Applied Clinical Research and Public Health, School of Dentistry, Cardiff University,

Health Park, Cardiff, CF14 4XY.

Telephone: 029 2074 5490

Appendix 2.6

Table illustrating frequently occurring descriptive terms used in the focus groups derived from the most frequently occurring descriptive terms in the focus groups

Word	Count	Percentage (%) of term within transcripts calculated by word length and frequency
teeth	470	1.36
mouth	267	0.77
oral	101	0.29
time	94	0.27
dentures	65	0.19
toothbrush	47	0.14
ward	45	0.13
hygiene	41	0.12
tooth	39	0.11
gums	36	0.10
mouths	34	0.10
face	25	0.07

Appendix 2.7

Table of frequently occurring words to describe persons described within the focus groups transcripts. Data derived from all words generated within the focus groups

Terminology group for people involved	Frequency of Term in Transcript
them	604
yours	378
patients	348
nurses	199
someone	141
person	75
dentist	42
everybody	27
hygienist	23
young	20
professional	12
together	10
l've	10
relatives	6
workers	4
visitors	1

Appendix 3

Appendix 3.1

Ethical and school approvals for the pilot studies

Cardiff University Nursing, Health and Social Care Research Centre 4th Floor, Eastgate House 35-43 Newport Road Cardiff CF24 0AB

> Tel Ffôn +44(0)29 2091 7800 Fax Ffacs+44(0)29 2091 7803 E-mail *E-bost* <u>Willialmsrc@cardiff.ac.uk</u>

Prifysgol Caerdydd Ysgol Astudiaethau Nyrsio a Bydwreigiaeth 4ydd Llawr, Ty Eastgate 35-43 Heol Casnewydd Caerdydd CF24 0AB

10 December 2010

Ilona Johnson
Clinical Lecturer and Honorary Specialist Registrar
Dental Public Health
School of Dentistry
Cardiff University
Heath Park
Cardiff

Dear Ms Johnson,

Re: Emotional Barriers and Facilitators of Oral Care – the development of an assessment tool

Thank you for submitting your research proposal to the SONMS Research Review and Ethics Screening Committee for permission to access student nurses in order to collect data.

The Committee has now had the opportunity to review your proposal and is pleased to inform you that the Committee is happy to approve your plans subject to you receiving ethics approval from the School of Psychology. When you have received approval please send a copy of the letter for our file and we will then be able to give you details of how to contact the students. When your research negotiations are complete please can you give full details of the group accessed for our database.

Yours sincerely

Rosemary Williams

EO: Research Administration

School of Psychology
Head of School Professor Dylan M Jones OBE BSc (Tech) PhD DSc FBPsS AcSS CPsychol
Ysgol Seicoleg
Pennaeth yr Ysgol Yr Athro Dylan M Jones OBE BSc (Tech) PhD DSc FBPsS AcSS CPsychol



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Tower Building
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Cardiff CF10 3AT
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Tel F/fon +44(0)29 2087 4007
Fax Ffacs +44(0)29 2087 4679
www.cardiff.ac.uk/psych
Prifysgol Caerdydd
Adeliad y Tŵr
Plas y Parc
Caerdydd CF10 3AT
Cymru Y Deyrnas Unedig

Ref: PSYCH SREC

16 February 2011

To Whom It May Concern,

This letter is to confirm that the following project has been reviewed and approved by the School of Psychology Research Ethics Committee:

Andy Smith, Ilona Johnson, Elizabeth Treasure, Andrew Lawrence (Staff) - Emotional barriers and facilitators of oral care - the development of an assessment tool. (EC.11.01.11.2740RR).

Any future revisions or amendments to the project will only be allowed to proceed after further review and approval by the Committee.

If there are questions relating to this, please do not hesitate to contact me.

Regards,

Dominique Mortlock

Secretary to the School of Psychology Research Ethics Committee

Cardiff University
School of Nursing and Midwifery Studies
4th Floor, Eastgate House
35-43 Newport Road
Cardiff CF24 0AB

Tel Ffôn +44(0)29 2091 7800 Fax Ffacs+44(0)29 2091 7803 E-mail *E-bost* <u>Willialmsrc@cardiff.ac.uk</u>

Prifysgol Caerdydd Ysgol Astudiaethau Nyrsio a Bydwreigiaeth 4ydd Llawr, Ty Eastgate 35-43 Heol Casnewydd Caerdydd CF24 0AB

18 February 2011

Ilona Johnson
Clinical Lecturer and Honorary Specialist Registrar
Dental Public Health
School of Dentistry
Cardiff University
Heath Park
Cardiff
Dear Ms Johnson,

Re: Emotional Barriers and Facilitators of Oral Care – the development of an assessment tool

Thank you for submitting your research proposal to the SONMS Research Review and Ethics Screening Committee for permission to access student nurses in order to collect data.

The Committee notes that you have ethical approval from the School of Psychology and is willing to grant access to student nurses for the purpose of generating data. When your research negotiations are complete please can you contact me giving full details of the group accessed for our database.

We suggest you liaise with Ms Gail Williams, Director for Quality Enhancement in order to arrange access. Her contact details are: Cardiff School of Nursing and Midwifery Studies, Room 613, EastGate House, 35-43 Newport Road, Cardiff, CF24 0AB, tel. 029 2091 7733, email Williamsga6@cf.ac.uk.

We wish you well with your project.

Yours sincerely

Rosemary Williams

EO: Research Administration

the study. Participant information sheet for the pilot

Your participation in this research will be anonymous. Will my taking part in the study be kept anonymous?

unique study identification number will be used during only record retained of your name this will not include your study number and will be kept separate from the f you choose to participate, you will be given a study identification number. The consent form will be the associated with the data that you provide, only your study data in a locket cabinet in a secure room. To make sure that that your name is not disclosed or

gate for publication in a journal or for presentation at a

conference in this subject area.

Who is organizing and funding the research

The study is being organized by researchers in the School of Dentistry at Cardiff

results of this study will also be presented in an aggre-

cational attainment of a PhD for Ilona Johnson. The

notes will only contain your unique study identification that will be used for analysis will not hold any informa-Study data will be kept in a password protected file in and will be kept in password protected files in a password protected computer in a secure room. The files Any paper notes will be kept in a locked cabinet in a secure room. Digital tapes from interviews and field a password protected computer in a secure room. tion that would disclose your identity.

Data from this study will be kept securely for a minimum of 5 years after the end of the project and will be destroyed before the end of 10 years. Access to response to requests for governance or verification purposes. No personally identifiable data will be redata from this research will be restricted to the research team involved in this project however; anonymised data may be viewed by the authorities in

for Ilona Johnson. Study findings will be presented in The findings of this study will be presented academic will also be used as part of the submission for a PhD ournals and at academic conferences. The findings aggregate and you will not be personally identifiable.

information sheet **Participant**

ment of further research in this subject area. The study

The results of the study will contribute to the develop-

Appendix 3.2

What happens to the results of the research study?

results will be used as part the submission for the edu-



Research Study

ARDIFF

Royal College of Physicians and Surgeons by Cardiff University and a grant from the University. The research is being funded

facilitators of mouth care **Emotional barriers and**

Development of an assessment tool

For further information please contact: Iona Johnson

Applied Clinical Research and Public Heath, ecturer in Dental Public Health, School of Dentistry,

Cardiff University,

Heath Park,

CF14 4XY. Cardiff,

Email: johnsonIG@cardiff.ac.uk

Centre for Occupational and Health Psychology, Professor Andrew Smith

Before you decide you need to understand why the research is being done and what it would involve for you.

You are invited to participate in a research study.

Please take to time to read the following information carefully. Talk to others about the study if you wish.

63 Park Place, CF10 3AS Cardiff,

Telephone: 02920874757

Part 1 tells you about the purpose of the study and what will happen to you if you take

Part 2 gives you more detailed information about the conduct of this study.

Ask us if there is anything that is not clear or if you would like more information. Take time to decide if you

Part 1

What is the purpose of the study?

Nurses and carers are often involved in cleaning the mouth and teeth for dependent patients. This work is a pilot study to develop an assessment to measure feelings and emotions that are experienced in relation to mouth care.

Why have I been invited?

You have been invited as you are a student nurse who will have some experience of mouth care as part of your course.

Do I have to take part?

It is up to you to decide whether you wish to take part. We will describe the study and you can ask questions fryou wish. You will then be asked to sign a consent form to show that you have agreed to take part. You are free to withdraw at any time, without giving a reason. Once the study has commenced, if you decide to withdraw from the study you will still receive the gift voucher as a thank you for your time.

What will happen if I do take part?

We will contact you using the telephone number or email that you have provided. A meeting time and date will be arranged that is convenient to you.

The study will involve

- Completing one questionnaire with pictures and questions that is being developed to identify emotions in relation to oral care.
- Carrying out a simple exercise which involves pictures on a computer screen while wearing a monitoring device.
- A short interview to discuss the images and questions in the questionnaire

Completing the questionnaire will involve sitting at a computer screen for up to 25 minutes at a time and using a computer mouse and keyboard. The computer exercise will take 10-15 minutes at a computer with images appearing, again using a keyboard and mouse.

A one-to-one interview will be carried out after the tests. This should take around 25 minutes. This will be used to check that the questions and answers in the new questionnaire make sense. We will also confirm that the questionnaire will be able to measure the experiences of oral care to do this both the questions and the photographs used in the tests will also be discussed. The interview will be audio-recorded and notes may also be taken during the discussions. The interview will be transcribed into text for analysis. Transcription into text will be carried out by a member of staff at Cardiff University who will be bound by confidentiality. Any information that you provide that could identify individuals, for example your name or place of work will be removed from the transcript.

Slusions

Participants with no experience of seeing or undertaking oral care should not participate. Participants who are unable to sit and look at a computer screen for 25 minutes at a time or who are unable to use a computer mouse/keyboard for any period of time should not participate. Participants who cannot read written English should also not participate.

Risks

Participants may experience positive or negative emotions in response to the pictures used in the study. There are no anticipated physical risks to participants.

Benefits

While there are no direct patient benefits in the course of this study, the information obtained will be of value in understanding the range of feelings and emotions towards this area of care. Learning about both the positive and negative aspects of this work will contribute to helping people deal with this area of care and we may then be in a position to make improvements and developments in training in this area of care.

ar 2

What happens if I don't want to carry on with the study? You are free to withdraw from the study at any time before or during the tests. If you have already participated in the interview it will be possible to extract some or all of the information from the transcript immediately following the interview. The data we will collect in the study will be anonymised when we collect it and so we will not be able to identify which results are yours and we will not be able to remove data once it has been collected.

Complaints

Please contact Ilona Johnson, Lecturer in Dental Public Health if you are experiencing problems with any aspect of this research. Contact details: Applied Clinical and Public Health Research, School of Dentistry, Cardiff University, Heath Park, Cardiff, CY14 4XY. Telephone: 029 2074 5490

If you remain unhappy then please contact: Dominique Mortlock or Natalie Moran, Ethics secretary, School of Psychology, Park Place, Cardiff University.
Telephone: 029 208 70360

Email: psychethics@cardiff.ac.uk

Appendix 3.3

Debrief for the pilot study

Emotional Barriers and Facilitators of Oral Care – The development of an assessment tool

We would like to thank you for participating in this study. In this study, we have been working to find out how you feel about specific oral care situations and we will use this information to help us develop a tool to measure how carers feel about oral care.

We asked how you felt about seeing and touching these conditions in a patient who needed oral care. We are aware that some of these conditions are considered unpleasant and harmful, a nurse may worry about providing oral care. We are also aware that because of the unpleasantness and worry about some conditions a nurse may feel that they need to provide care. We are particularly interested in the emotion of disgust which appears to have role hygiene behaviour. The emotion of disgust has a relationship with fears and anxieties and these emotions have been used in health promotion work for hand hygiene in nursing. We are working to develop a way to measure and understand these feelings for oral care.

In the first task you were shown a number of different pictures of conditions that relate to oral hygiene. We wanted to know how you would feel if faced by one of these scenarios and how these emotions are related to what you would want to do.

In the second test we measured your reaction time and your heart rate in response to the pictures of clean and unclean mouths. These reactions will allow us to see if there is a physical reaction to "unclean" mouths.

The interview at the end allowed us to check whether the questions make sense and mean the same thing to everyone answering them. Also, we were able to confirm whether the questionnaire was measuring your feelings.

The information you have provided will be anonymous and we will only use a unique study number to identify your results. As the data entered into the computer has been anonymised, from this point, it will not be possible to identify which results are yours. You may withdraw consent and information from your interview at this point but after this your transcript will anonymous, and we will not be able to remove data.

Please tell us if there is anything that you have seen in this research that concerns you.

This is a new area of research. If you are interested in reading more about research into emotions of unpleasantness used in this research there is an interesting easy to read summary at: http://www.bbc.co.uk/science/humanbody/mind/articles/emotions/disgust.shtml If you would like to know more research based information about the emotion of disgust, then a good site can be found at:

http://people.virginia.edu/~jdh6n/disgustscale.html

Contact details required for the researcher and supervisor

Name of Researcher Ilona Johnson	Name of supervisor Professor Andrew Smith
PhD student (Clinical Lecturer in Dental School)	Professor
School of Dentistry	School of Psychology
Cardiff University	Cardiff University
Heath Park	Centre for Occupational and Health Psychology,
	63 Park Place
Cardiff	Cardiff
CF14 4XY	CF10 3AS
Tel: 029 2074 5490	Tel: 02920874757
Email: johnsonIG@cardiff.ac.uk	Email: smithap@Cardiff.ac.uk

Appendix 3.4 Images produced for the pilot study

Image order	Description	lmage
1	Bleeding gums lateral view	
2	Plaque free teeth lateral view	
3	Pooled clear saliva	
4	Palate "clean" disease free	
5	Anterior view of clean teeth	

Image order	Description	Image
6	Dirty denture	
7	Palatal denture induced inflammation	
8	Lower anterior gingivitis	
9	Treated periodontal disease in a clean plaque free mouth	
10	Plaque free teeth lateral view	

3.4 Study images continued

Image order	Description	Image
11	Clean denture	
12	Dental plaque and debris lateral view	
13	Palate clean and disease free minimal restoration	
14	Periodontal disease and plaque	
15	Food (green) between the teeth lateral view	

3.4 Study images continued

Image order	Description	Image
16	Putrid saliva	
17	Palate thrush	
18	Anterior gingival inflammation	

Appendix 3.5

Outline of procedures for the production of pilot study images

Picture			Procedures u	sed		
Picture numbered by order of delivery in questionnaire	Category	Image content	Clinical photography and basic digital ageing	Digital photography with the following applied to the teeth/mouth	Digital image editing and application of "clinical" conditions	Food product used
1	Dirty (blood- body product)	Bleeding gums lateral view	Yes	Yes	No	Glycerine food colouring
2	Clean	Plaque free teeth lateral view	Yes	No	No	No
3	Clean	Pooled clear saliva	No	Yes	No	Glycerine
4	Clean	Palate "clean" disease free	Yes	No	Yes	No
5	Clean	Anterior view of clean teeth	Yes	No	No	No
6	Dirty (body envelope)	Dirty denture	Yes	Yes	No	Laboratory produced denture and tea leaves
7	Dirty Infection	Palatal denture induced inflammation	Yes	No	Yes	No
8	Dirty infection	Lower anterior gingivitis	Yes	No	Yes	No
9	Clean	Treated periodontal disease in a clean plaque free mouth	No	No	Yes	No
10	Clean	Plaque free teeth lateral view	Yes	No	No	No
11	Clean	Clean denture	Yes	Yes	No	Laboratory produced denture

3.5 Outline of procedures for the production of pilot study images continued

Picture			Procedures u	sed		
Picture numbered by order of delivery in questionnaire	Category	Image content	Clinical photography and basic digital ageing	Digital photography with the following applied to the teeth/mouth	Digital image editing and application of "clinical" conditions	Food product used
12	Dirty	Dental plaque and debris lateral view	Yes	Yes	No	Banana milkshake powder
13	Clean	Palate clean and disease free minimal restoration	Yes	No	No	No
14	Clean (infection and hygiene)	Periodontal disease and plaque	No	No	Yes	No
15	Dirty (food)	Food (green) between the teeth lateral view	Yes	Yes	No	Green paper
16	Dirty (food)	Putrid saliva	Yes	Yes	No	Milk and food colouring
17	Dirty (infection)	Palate thrush	Yes	No	Yes	No
18	Dirty (infection)	Anterior gingival inflammation	Yes	No	Yes	No
11a * not in questionnaire	Clean	Yes	No	No	No	Yes
16a not in questionnaire	Clean	Yes	No	No	No	Yes

Appendix 3.6

Figure illustrating emotion ANEW wordlist example

Description	Word	Valence	Arousal	Dominance	Word
	No.	Mean(SD)	Mean(SD)	Mean (SD)	Frequency
dentist	589	4.02 (2.23)	5.73 (2.13)	3.80 (2.16)	12
depressed	107	1.83 (1.42)	4.72 (2.95)	2.74 (2.13)	11
depression	108	1.85 (1.67)	4.54 (3.19)	2.91 (2.27)	24
derelict	722	4.28 (1.84)	4.10 (1.94)	4.78 (1.56)	1
deserter	109	2.45 (1.80)	5.50 (2.55)	3.77 (2.29)	Ċ
desire	508	7.69 (1.39)	7.35 (1.76)	6.49 (1.83)	79
despairing	110	2.43 (1.47)	5.68 (2.37)	3.43 (2.11)	4
despise	111	2.03 (1.38)	6.28 (2.43)	4.72 (2.80)	7
destroy	112	2.64 (2.03)	6.83 (2.38)	4.94 (2.86)	48
destruction	723	3.16 (2.44)	5.82 (2.71)	3.93 (2.29)	38
detached	113	3.86 (1.88)	4.26 (2.57)	3.63 (2.15)	12
detail	724	5.55 (1.58)	4.10 (2.24)	5.21 (1.60)	72
detest	114	2.17 (1.30)	6.06 (2.39)	5.83 (2.60)	1
devil	115	2.21 (1.99)	6.07 (2.61)	5.35 (2.75)	25
devoted	116	7.41 (1.37)	5.23 (2.21)	6.18 (2.36)	51
diamond	117	7.92 (1.20)	5.53 (2.96)	5.54 (2.28)	8
dignified	118	7.10 (1.26)	4.12 (2.29)	6.12 (2.40)	7
dinner	509	7.16 (1.50)	5.43 (2.14)	6.10 (1.87)	91
diploma	119	8.00 (1.39)	5.67 (2.80)	6.76 (2.50)	
dirt	725	4.17 (1.77)	3.76 (2.26)	4.83 (1.82)	43
dirty	590	3.08 (2.05)	4.88 (2.29)	4.70 (2.12)	36
disappoint	120	2.39 (1.44)	4.92 (2.64)	3.29 (2.32)	
disaster	121	1.73 (1.13)	6.33 (2.70)	3.52 (2.42)	26
discomfort	726	2.19 (1.23)	4.17 (2.44)	3.86 (2.26)	7
discouraged	122	3.00 (2.16)	4.53 (2.11)	3.61 (2.01)	15
disdainful	123	3.68 (1.90)	5.04 (2.14)	4.55 (1.92)	2
disgusted	124	2.45 (1.41)	5.42 (2.59)	4.34 (1.94)	6
disloyal	125	1.93 (1.61)	6.56 (2.21)	3.79 (2.75)	2
displeased	126	2.79 (2.23)	5.64 (2.48)	4.19 (2.19)	7
distressed	127	1.94 (1.10)	6.40 (2.38)	3.76 (2.41)	4

Figure illustrating emotion wordlist example from Strauss and Allen (2007)

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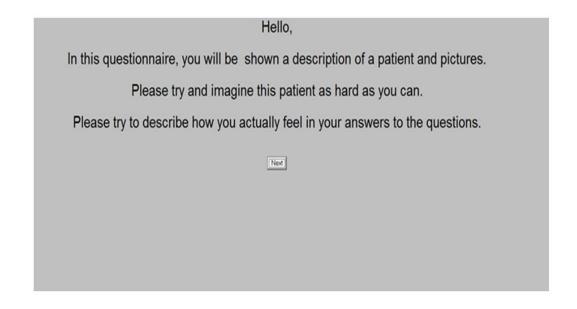
Appendix 3.7

Table showing median qualitative rating score for images with images categorised as "dirty" for the Stroop tests shaded in red

Median sort score	Image no	Description of image in scenario		
1	2	Clean mouth lateral view		
1	10	Clean mouth lateral view		
1	3	Clean mouth lateral view with clear saliva		
1	5	Clean mouth anterior view		
1	13	Clean mouth palatal view		
1	15	Small amount of food in an otherwise clean mouth lateral view		
2	11	Clean denture		
2	9	Clean mouth with gingival lengthening from previous periodontal disease		
2.5	18	Red gums		
3	4	Clean mouth with restorations palatal view		
3	6	Dirty denture		
3	17	Red palate		
3	16	Putrid saliva		
3	12	Plaque debris		
3	1	Blood		
3	7	Palate restored hyperplasia		
3	8	Red gums		
3	14	Severe periodontal disease		

Appendix 3.8

The pilot questionnaire tool



Your unique study number						
About you						
Age						
7.90			Years			
Gender						
	Female				Male	
	0				О	
Ethnicity						
Current Year of Nursing Study						
First year		Second year		Third year		Fourth year
0		0		0		0
			Next			

Previous Experiences of Oral Care Before you became a nursing student had you:

Brushed someone else's natural teeth?	Never	Yes, on one or more relatives	Yes, occasionally as part of my work	Yes, frequently as part of my work
	0	0	0	С
Brushed/cleaned someone	С	С	С	С
else's denture				
Cleaned someone else's	O	0	О	0
mouth using swabs?				

Current Experiences
As a nursing student have you:

Brushed someone else's natural teeth	I have never seen this	No, but I have seen this	Yes, occasionally	Yes, frequently
Brushed/cleaned someone else's denture?	O	C	С	С
Cleaned someone else's mouth using swabs	С	С	C	С



How would you feel seeing this				
Not disgusted				Very disgusted
0	C	0	0	0
Not anxious				Very anxious
0	C	C	C	С

How would you feel to l	ching this			
Not Disgusted				Very Disgusted
С	С	С	С	С
Not anxious				Very Anxious
С	С	С	С	С

How would you feel while				
Not disgusted				Very disgusted
0	0	0	0	0 .
Not anxious				Very anxious
0	0	0	C	0
Not satisfied				Very Satisfied

If you did not brush	these teeth, how	would you feel?		
Not disgusted				Very disgusted
C	C	С	С	С
Not anxious				Very anxious
C	c	C	C	c
Not satisfied				Very satisfied
C	C	С	С	С



If you were the patient ho	w would you feel abo	out this?		
Not disgusted				Very disgusted
c	C	C	C	С
Not anxious				Very anxious
C	C	C	C	C

For this patient would y	ou:			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	c	C	С
Use a gauze swab to cl	ean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
c	C	C	С	С
Use a swab on a stick t	o clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	C	C	C
Ask or refer for help				
Never	Possibly	Definitely		
C	C	C		

How would you feel se	eing this	Very disgusted		
Not disgusted				Very disgusted
0	0	0	0	0
Not anxious				Very anxious
0	0	0	0	0



How would you feel to	uching this			
Not Disgusted				Very Disgusted
C	С	С	С	С
Not anxious				Very Anxious
С	С	С	С	С

How would you feel while				
Not disgusted				Very disgusted
0	0	0	0	0 .
Not anxious				Very anxious
0	0	0	0	0
Not satisfied				Very Satisfied

you did not brush	these teeth, how	would you feel?		
Not disgusted				Very disgusted
C	C	С	С	C
Not anxious				Very anxious
C	C	C	C	c
Not satisfied				Very satisfied
C	C	С	С	С



Marana tha a stiant has				
If you were the patient ho	w would you feel abo	out this?		
Not disgusted				Very disgusted
C	C	Ċ	C	C
Not anxious				Very anxious
C	C	C	C	C

For this patient would yo	u:			
Brush in the mouth with a	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	c	С	С
Use a gauze swab to cle	an this			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	C	С	C
Use a swab on a stick to	clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	C	С	C
Ask or refer for help				
Never	Possibly	Definitely		
C	C	C		

How would you feel seeing this					
Not disgusted				Very disgusted	
0	0	0	C	0	
Not anxious				Very anxious	
. 0	0	C	0	0	



How would you feel touching this					
Not Disgusted				Very Disgusted	
С	С	С	С	С	
Not anxious				Very Anxious	
С	С	С	С	С	

How would you feel while brushing these teeth					
Not disgusted				Very disgusted	
0	0	0	0	۰.	
Not anxious				Very anxious	
O	C	0	0	0	
Not satisfied				Very Satisfied	

Not disgusted				Very disgusted
C	C	C	C	С
Not anxious				Very anxious
Not satisfied	c	C	C	Very satisfied
C	C	С	C	C
you were the patient h	now would you feel abo	out this?		
Not disgusted				Very disgusted
С	C	c	c	C
Not anxious				Very anxious
0	0	С	c	c
or this patient would yo	ou:			
rush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per



How would you feel seeing this					
Not disgusted				Very disgusted	
0	0	0	0	C	
Not anxious				Very anxious	



How would you feel touching this						
Not Disgusted				Very Disgusted		
С	С	С	С	С		
Not anxious				Very Anxious		
С	С	С	С	С		

How would you feel while brushing these teeth					
Not disgusted				Very disgusted	
0	0	0	0	0 .	
Not anxious				Very anxious	
C	0	0	0	0	
Not satisfied				Very Satisfied	

you did not brush	these teeth, how	would you feel?		
Not disgusted				Very disgusted
C	С	С	C	C
Not anxious				Very anxious
C	C	C	C	C
Not satisfied				Very satisfied
0	C	С	С	C



		• .		
If you were the patient h	ow would you feel ab	out this?		
Not disgusted				Very disgusted
С	C	Ċ	C	С
Not anxious				Very anxious
C	C	C	C	C

For this patient would y	ou:			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	c	С	С
Use a gauze swab to c	lean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	C	C	C
Use a swab on a stick t	to clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	C	C	С
Ask or refer for help				
Never	Possibly	Definitely		
C	C	C		

How would	you feel seeing this			
Not disg	usted			Very disgusted
0	0	0	0	0
Not an	xious			Very anxious
0	C	0	C	0



How would you feel touching this					
Not Disgusted				Very Disgusted	
С	С	С	С	С	
Not anxious				Very Anxious	
С	С	С	С	C	

How would you feel while brushing these teeth						
Not disgusted				Very disgusted		
0	0	0	0	Ο.		
Not anxious				Very anxious		
0	0	C	0	0		
Not satisfied				Very Satisfied		



If you did not brush these teeth, how would you feel?

For this patient would you:



Brush in the mouth with a tooth brush Never Infrequently At least once per day At least twice per day Most days C C C Use a gauze swab to clean this Infrequently Most days At least once per day At least twice per day Never Use a swab on a stick to clean this Infrequently At least once per day At least twice per day Never Most days C C 0 Ask or refer for help Never Possibly Definitely 0 C C



How would you feel seeing this					
Not disgusted				Very disgusted	
0	C	0	0	C	
Not anxious				Very anxious	
0	С	0	0	0	

How would you feel touching this						
Not Disgusted				Very Disgusted		
С	С	С	С	С		
Not anxious				Very Anxious		
C	С	С	С	С		

How would you feel while brushing these teeth						
Not disgusted				Very disgusted		
0	0	0	0	۰.		
Not anxious				Very anxious		
C Not satisfied	0	О	c	Very Satisfied		



If you did not brush	these teeth, how	would you feel?		
Not disgusted				Very disgusted
С	C	C	C	С
Not anxious				Very anxious
Not satisfied	С	C	C	C Very satisfied
C	C	C	c	С
If you were the patient h	now would you feel abo	out this?		
Not disgusted	C	c	C	Very disgusted
Not anxious		***		Very anxious
C	c	c	c	c
For this patient would yo	ou:			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	c	c	С	С
Use a gauze swab to cle	ean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	C	С	C
Use a swab on a stick to	clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	C	С	C
Ask or refer for help				
Never	Possibly	Definitely		
C	C	C		



How would you feel se	eing this			
Not disgusted				Very disgusted
0	C	0	0	0
Not anxious				Very anxious
0	0	C	0	C

How would you feel tou	ching this			
Not Disgusted				Very Disgusted
C	С	С	С	C
Not anxious				Very Anxious
С	С	С	С	С

How would you feel while	e brushing th	ese teeth		
Not disgusted				Very disgusted
0	0	0	0	0 .
Not anxious				Very anxious
0	0	C	0	0
Not satisfied				Very Satisfied

you did not brush	these teeth, how	would you feel?		
Not disgusted				Very disgusted
C	С	С	C	С
Not anxious				Very anxious
C	C	C	C	C
Not satisfied				Very satisfied
C	C	С	c	C



If you were the patient ho	w would you feel abo	out this?		
Not disgusted				Very disgusted
c	C	C	C	C
Not anxious				Very anxious
C	C	C	C	c

For this patient would yo	ou:			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	С	C	С
Use a gauze swab to cle	ean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
c	C	C	С	C
Use a swab on a stick to	clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	С	C	C
Ask or refer for help				
Never	Possibly	Definitely		
C	0	0		



	How would you feel se	eing this			
	Not disgusted				Very disgusted
	0	C	0	0	C
П	Not anxious				Very anxious
	0	0	0	0	0

How would you feel tou	iching this			
Not Disgusted				Very Disgusted
С	С	С	С	С
Not anxious				Very Anxious
C	С	C	С	С

How would you feel whi	le brushing the	ese teeth		
Not disgusted				Very disgusted
0	0	С	0	C. Very anxious
Not anxious	C	C	C	very anxious
Not satisfied				Very Satisfied

Not disgusted				Very disgusted
C	C	C	C	C
Not anxious				Very anxious
Not satisfied	С	C	C	Very satisfied
C	С	C	С	C
f you were the patient ho	w would you feel abo	out this?		
Not disgusted				Very disgusted
С	C	c	C	C
Not anxious				Very anxious
C	C	C	C	C



	2.2			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	C	С	С
Jse a gauze swab to cl	ean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	С	С	С
Jse a swab on a stick to	o clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	C	C	C
Ask or refer for help				
Never	Possibly	Definitely		
C	C	0		



How would you feel Se	eing this			
Not disgusted				Very disgusted
C	0	0	0	С
Not anxious				Very anxious
0	0	0	0	C

How would you feel touching this					
Not Disgusted				Very Disgusted	
C	С	С	С	С	
Not anxious				Very Anxious	
С	С	С	С	С	

How would you feel while brushing these teeth					
Not disgusted	c	o	c	Very disgusted	
Not anxious				Very anxious	
C Not satisfied	С	C	С	Very Satisfied	



Alle de la				Manager Comments of
Not disgusted				Very disgusted
C	C	C	C	C
Not anxious				Very anxious
Not satisfied	c	C	C	Very satisfied
C	C	c	c	C C
f you were the patient h	now would you feel abo	out this?		
Not disgusted				Very disgusted
С	C	c	c	C
Not anxious				Very anxious
С	C	С	c	С
or this patient would yo	ou:			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	С	С	С
Jse a gauze swab to cle	ean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
c	C	C	C	c
Jse a swab on a stick to	clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	C	С	C
sk or refer for help				
Never	Possibly	Definitely		
C	C	0		



How would you feel se	eing this			
Not disgusted				Very disgusted
0	0	0	C	C
Not anxious				Very anxious
О	О	0	С	C
How would you feel to	uching this			
Not Disgusted				Very Disgusted
С	С	С	С	С
Not anxious				Very Anxious
С	С	С	С	С

How would you feel while	e brushing the	ese teeth		
Not disgusted				Very disgusted
0	0	0	0	Ο.
Not anxious				Very anxious
0	0	O	0	0
Not satisfied				Very Satisfied

If you did not brush	these teeth,how	would you feel?		
Not disgusted				Very disgusted
c	C	C	C	C
Not anxious				Very anxious
Not satisfied	С	C	С	C Very satisfied
c	С	C	С	c
If you were the patient ho	w would you feel abo	out this?		
Not disgusted				Very disgusted
С	C	c	C	C
Not anxious				Very anxious
C	C	C	c	С



For this patient would	you:			
Brush in the mouth wit	h a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	C	C	С
Use a gauze swab to	clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	C	C	C
Use a swab on a stick	to clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	C	C	C
Ask or refer for help				
Never	Possibly	Definitely		
C	C	0		



How would you feel Se	eing this			
Not disgusted				Very disgusted
0	0	0	0	0
Not anxious				Very anxious
C	0	0	C	0

How would you feel to	uching this			
Not Disgusted				Very Disgusted
С	С	C	С	С
Not anxious				Very Anxious
С	С	С	С	С

How would you feel whil	e brushing the	ese teeth				
Not disgusted				Very disgusted		
0	0	0	0	0		
Not anxious				Very anxious		
0	0	C	0	0		
Not satisfied				Very Satisfied		



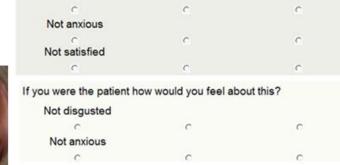
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Not disgusted				Very disgusted
C	C	C	C	C
Not anxious				Very anxious
C	С	C	C	C
Not satisfied				Very satisfied
C	С	C.	С	С
If you were the patient h	ow would you feel abo	out this?		
Not disgusted				Very disgusted
С	C	C	c	С
Not anxious				Very anxious
0	C	С	C	С
or this patient would yo	u:			
Brush in the mouth with a	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per da
C	C	c	С	C
Jse a gauze swab to cle	an this			
Never	Infrequently	Most days	At least once per day	At least twice per da
C	C	C	С	C
Use a swab on a stick to	clean this			
Never	Infrequently	Most days	At least once per day	At least twice per da
C	C	C	C	C
Ask or refer for help				
Never	Possibly	Definitely		
C	C	0		



How would you feel seeing this					
Not disgusted				Very disgusted	
0	C	0	C	0	
Not anxious				Very anxious	
0	0	0	0	0	

How would you feel touching this					
Not Disgusted				Very Disgusted	
С	С	С	С	С	
Not anxious				Very Anxious	
С	С	С	С	С	

How would you feel while	e brushing the	ese teeth		
Not disgusted				Very disgusted
0	0	0	0	Ο.
Not anxious				Very anxious
0	0	0	0	0
Not satisfied				Very Satisfied



If you did not brush these teeth, how would you feel?

Not disgusted



For this patient would	you:			
Brush in the mouth with	h a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	c	C	c
Use a gauze swab to d	lean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	c	C	С	C
Use a swab on a stick	to clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	C	C	C
Ask or refer for help				
Never	Possibly	Definitely		
C	C	0		

Very disgusted

Very anxious

C
Very satisfied

Very disgusted

Very anxious



ŀ	How would you feel See	eing this			
	Not disgusted				Very disgusted
	0	C	0	0	C
	Not anxious				Very anxious
١	0	0	0	0	С

How would you feel to	uching this			
Not Disgusted				Very Disgusted
С	С	C	С	C
Not anxious				Very Anxious
С	С	С	С	С

How would you feel while brushing these teeth						
Not disgusted				Very disgusted		
0	0	0	0	Ο.		
Not anxious				Very anxious		
0	0	0	0	0		
Not satisfied				Very Satisfied		
not satisfied				very calloned		





Not anxious

	1,63			
For this patient would y	ou:			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	c	c	С	c
Use a gauze swab to c	lean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	С	C	С	C
Use a swab on a stick t	to clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	C	C	C
Ask or refer for help				
Never	Possibly	Definitely		
С	C	0		

Very anxious

VE				
	1			
4	R	-		
			No.	

How would you feel seeing this					
Not disgusted				Very disgusted	
0	0	0	0	0	
Not anxious				Very anxious	
0	0	0	O	C	

How would you feel touching this					
Not Disgusted				Very Disgusted	
C	С	С	С	С	
Not anxious				Very Anxious	
C	С	С	С	С	

How would you feel while brushing these teeth						
Not disgusted				Very disgusted		
0	0	0	0	Ο.		
Not anxious				Very anxious		
C	0	0	0	0		
Not satisfied				Very Satisfied		



If you did not brush	these teeth, how	would you feel?		
Not disgusted				Very disgusted
С	C	C	С	c
Not anxious				Very anxious
c	c	C	C	c
Not satisfied				Very satisfied
С	С	C	c	С
If you were the patient h	now would you feel abo	out this?		
Not disgusted				Very disgusted
С	C	c	C	С
Not anxious				Very anxious
С	C	c	c	С
For this patient would yo	ou:			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	С	С	С
Use a gauze swab to cle	ean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	C	c	C
Use a swab on a stick to	clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	C	C	C
Ask or refer for help				
Never	Possibly	Definitely		
C	C	0		



How would you feel seeing this					
Not disgusted				Very disgusted	
0	0	0	0	0	
Not anxious				Very anxious	
0	С	C	О	0	

How would you feel tou	iching this			
Not Disgusted				Very Disgusted
С	С	С	С	С
Not anxious				Very Anxious
С	С	C	С	С

How would you feel while	e brushing the	ese teeth		
Not disgusted				Very disgusted
0	0	0	0	Ο.
Not anxious				Very anxious
0	0	0	0	0
Not satisfied				Very Satisfied

Not disgusted				Very disgusted
C	C	C	C	С
Not anxious				Very anxious
C	C	C	0	C
Not satisfied				Very satisfied
C	С	C	c	С
If you were the patient h	ow would you feel abo	out this?		
Not disgusted				Very disgusted
С	C	c	c	C
Not anxious				Very anxious
0	C	С	c	С
For this patient would yo	u:			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per da
C	C	С	С	С
Use a gauze swab to cle	an this			
Never	Infrequently	Most days	At least once per day	At least twice per da
C	C	C	C	C
Use a swab on a stick to	clean this			
Never	Infrequently	Most days	At least once per day	At least twice per da
C	C	C	C	C

Definitely

Next

Possibly

C

Ask or refer for help

Never 0



How would you feel See	eing this			
Not disgusted				Very disgusted
0	0	0	0	C
Not anxious				Very anxious
C	C	0	C	C
How would you feel to	uchina this			

How would you feel touching this					
Not Disgusted				Very Disgusted	
С	С	С	С	С	
Not anxious				Very Anxious	
С	С	С	С	C	

How would you feel while	e brushing th	ese teeth		
Not disgusted				Very disgusted
0	0	0	0	Ο,
Not anxious				Very anxious
0	0	C	0	0
Not satisfied				Very Satisfied

f you did not brush	these teeth, how	would you feel?		
Not disgusted				Very disgusted
C	C	С	С	Ċ
Not anxious				Very anxious
C	C	C	C	C
Not satisfied				Very satisfied
C	C	С	С	C



If you were the patien	nt how would you feel abo	out this?		
Not disgusted				Very disgusted
С	C	Ċ	Ċ	С
Not anxious				Very anxious
0	c	C	C	С

For this patient would y	ou:			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	С	C	C	С
Use a gauze swab to c	lean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	C	C	C
Use a swab on a stick	to clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	C	C	C
Ask or refer for help				
Never	Possibly	Definitely		
C	C	0		

How would you feel seeing this					
Not disgusted				Very disgusted	
0	0	0	C	0	
Not anxious				Very anxious	
0	0	0	О	0	



How would you feel touching this					
Not Disgusted				Very Disgusted	
C	С	С	С	С	
Not anxious				Very Anxious	
С	С	С	С	С	

How would you feel while brushing these teeth					
Not disgusted				Very disgusted	
0	0	0	0	Ο.	
Not anxious				Very anxious	
C	0	0	0	0	
Not satisfied				Very Satisfied	

you did not brush	these teeth, how	would you feel?		
Not disgusted				Very disgusted
C	С	С	С	С
Not anxious				Very anxious
C Not satisfied	c	C	С	C Very satisfied
C	C	C	C	С



If you were the patient ho	w would you feel abo	out this?		
Not disgusted				Very disgusted
c	C	c	C	C
Not anxious				Very anxious
C	C	C	C	C

For this patient would yo	ou:			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	С	C	С	С
Use a gauze swab to cle	ean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	С	С	C
Use a swab on a stick to	clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
C	C	С	C	C
Ask or refer for help				
Never	Possibly	Definitely		
c	C	0		

How would you feel seeing this					
Not disgusted				Very disgusted	
0	0	0	0	0	
Not anxious				Very anxious	
0	C	0	C	0	



How would you feel touching this					
Not Disgusted				Very Disgusted	
С	С	C	С	С	
Not anxious				Very Anxious	
С	С	C	С	C	
C	U	U	C	C	

How would you feel while brushing these teeth					
Not disgusted				Very disgusted	
C	0	0	0	٥	
Not anxious				Very anxious	
0	0	0	0	0	
Not satisfied				Very Satisfied	

ou did not brush	these teeth, how	would you feel?		
Not disgusted				Very disgusted
C	C	C	С	C
Not anxious				Very anxious
Not satisfied	С	C	C	Very satisfied
C	C	С	С	C



f you were the patient ho	w would you feel abo	out this?		
if you were the patient no	w would you leel abo	out triis r		
Not disgusted				Very disgusted
С	C	c	C	С
Not anxious				Very anxious
C	C	C	C	C

For this patient would yo	ou:			
Brush in the mouth with	a tooth brush			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	C	C	С
Use a gauze swab to cle	ean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
c	C	C	С	C
Use a swab on a stick to	o clean this			
Never	Infrequently	Most days	At least once per day	At least twice per day
С	C	C	C	C
Ask or refer for help				
Never	Possibly	Definitely		
C	C	0		

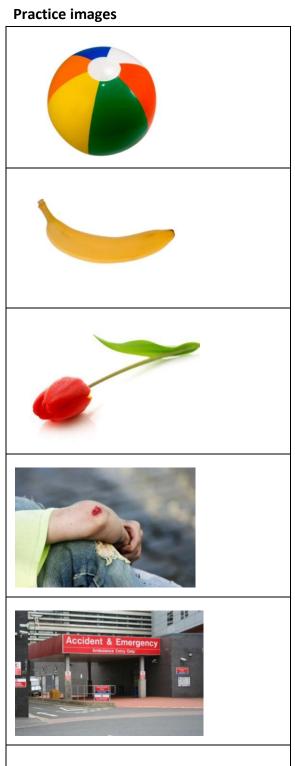
Appendix 3.9

Table showing pilot study participants' previous and current experiences of nursing

	Before you became	a nursing student h	ad you?
Previous experience of mouthcare	Brushed in someone else's adult mouth with a toothbrush	Brushed/ cleaned someone else's denture?	Cleaned someone else's mouth with white gauze or pink swabs
	n	n	n
Never	4	7	8
Yes, on one or more relatives	3	0	0
Yes occasionally as part of my work	3	2	2
Yes frequently	1	2	1
	As a nursing studer	nt, have you?	
Current experience of mouthcare	Brushed in someone else's adult mouth with a toothbrush	Brushed/cleaned someone else's denture?	Cleaned someone else's mouth with white gauze or pink swabs?
	n	n	n
I have never seen this	1	0	1
No but I have seen this	1	0	2
Yes occasionally	7	8	2
Yes frequently	2	3	6

Appendix 3.10

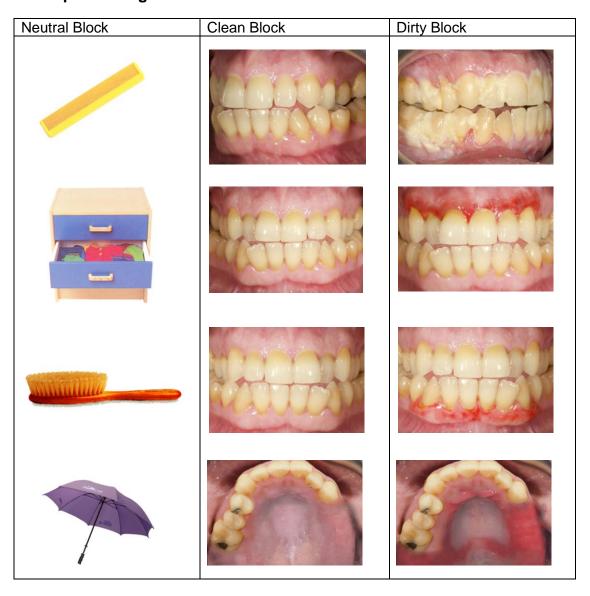
Pilot study Stroop test image stimuli



Stroop test image stimuli

Neutral Block	Clean Block	Dirty Block
00		
· ·		

Stroop test image stimuli



Appendix 3.11

Instructions for pilot Stroop test

Page 1

Welcome

During this test, a number of pictures will appear on the screen.

The pictures will be either slightly to the left or slightly to the right of the centre of the screen.

You will be asked about the pictures after the test.

Press the spacebar to continue...

Screenshot of Stroop welcome and instruction screens

Page 2

Instructions (Cont'd)

If the image appears on the left, Click on the L button (white sticker)

If the image appears on the right, click on the R button (white sticker)

Try and do this task as quickly as you can

First we will have a quick practice

Press the spacebar to begin...

Page 3

Now we will start the test

If the image appears on the left, Click on the L button

If the image appears on the right, click on the R button

Try and do this task as quickly as you can

Press the red button on the watch and

Press the spacebar to begin...

Page 4

Thank you very much

Press the stop button on the watch.

Press any key to finish

and let the researcher know

that you have completed the task

Screenshot of Stroop instruction page 2

Instructions (Cont'd)

If the image appears on the left, Click on the L button (white sticker)

If the image appears on the right, click on the R button (white sticker)

Try and do this task as quickly as you can

First we will have a quick practice

Press the spacebar to begin...

Screenshot of Stroop test



Appendix 3.12

Descriptive statistics for the log of reaction times for Stroop test stimuli across all participants in the pilot study

					95% confidence interval for mean			
Stimulus	Ν	Mean	Std. Deviation	Std. Error	Lower bound	Upper bound	Minimum	Maximum
Neutral	326	2.89	0.19	0.01	2.87	2.91	2.36	3.38
Clean	327	2.94	0.18	0.01	2.92	2.96	2.39	3.42
Dirty	327	2.99	0.20	0.01	2.97	3.01	2.52	3.52
Total	980	2.94	0.20	0.01	2.93	2.95	2.36	3.52

Appendix 3.13

Tukey HSD Mean differences in log reaction times of Stroop test Stimuli across all participants in the pilot study

		Mean	95% confidence interval				
Stimulus	Stimuli	difference	Std. Error	Lower bound	Upper bound		
Neutral	Clean	-0.05**	0.01	-0.08	-0.02		
	Dirty	-0.10 ^{**}	0.01	-0.14	-0.07		
Clean	Neutral	0.05**	0.01	0.02	0.09		
	Dirty	-0.05 [*]	0.01	-0.08	-0.01		
Dirty	Neutral	0.10**	0.01	0.07	0.14		
	Clean	0.05**	0.01	0.01	0.08		

^{*}Significant at p=0.05

^{**}Significant at p=0.001

Appendix 4

Appendix 4.1

Ethical and school approvals

From: "psychethics" <psychethics@Cardiff.ac.uk>

To: <johnsonIG@cf.ac.uk>

Cc: "A Smith" <smitha29@Cardiff.ac.uk>

Date: 31/10/2011 12:39

Subject: Ethics feedback - EC.11.01.11.2740R3, A2

Dear Ilona,

The Ethics Committee has considered the amendment to your staff/PG project proposal: Emotional barriers and facilitators of oral care - the development of an assessment tool. (EC.11.01.11.2740R3, A2).

The amendment has been approved.

If any further changes are made to the above proposal then you must notify the Ethics Committee.

Best wishes, Natalie Moran

School of Psychology Research Ethics Committee Tower Building Park Place CARDIFF CF10 3AT

Ffôn /Telephone: +44 (0) 29 2087 0360 Ffacs/Fax: +44 (0) 29 2087 4858

http://psych.cf.ac.uk/aboutus/ethics.html

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Prifysgol Caerdydd Ysgol Astudiaethau Nyrsio a Bydwreigiaeth 4ydd Llawr, Ty Eastgate 35-43 Heol Casnewydd Caerdydd CF24 0AB

16 September 2011

Dear Ms Johnson,

Ilona Johnson
Clinical Lecturer and Honorary Specialist Registrar
Dental Public Health
School of Dentistry
Cardiff University
Heath Park
Cardiff

Re: Emotional Barriers and Facilitators of Oral Care – the development of an assessment tool

Thank you for submitting your revised research proposal to the SONMS Research Review and Ethics Screening Committee for permission to access student nurses in order to collect data.

The Committee notes that you have ethical approval from the School of Psychology and is willing to grant access to student nurses for the purpose of generating data. When your research negotiations are complete please can you contact me giving full details of the group accessed for our database.

We suggest you liaise with Ms Gail Williams, Director for Quality Enhancement in order to arrange access. Her contact details are: Cardiff School of Nursing and Midwifery Studies, Room 613, EastGate House, 35-43 Newport Road, Cardiff, CF24 0AB, tel. 029 2091 7733, email Williamsga6@cf.ac.uk.

We wish you well with your project.

Yours sincerely

Rosemary Williams

EO: Research Administration

Appendix 4.2

Questionnaires for mixed methods questionnaire study

About you			
1. Age		In years	
	Age _		
2. Gender		Pleas	e tick ☑
	Male		Female□
3. Ethnicity	10		
4. Current year of nursing study	iii .	Please tid	ck one ☑
		Year 1	
		Year 2	
		Year 3	
		Year 4	
		Year 5	

Oral care experience	Oral care experience						
5. Before you became a nursing	student had you?						
Brushed in someone else's adul	t Never□	Monthly□					
mouth with a toothbrush	No, but I have seen this□	Weekly□					
Please tick one ☑	Yes, Infrequently□	Daily□					
	Yes, every few months□	•					
Cleaned someone else's	Never□	Monthly□					
denture?	No, but I have seen this□	Weekly□					
Please tick one ☑	Yes, Infrequently□	Daily□					
	Yes, every few months□	an order of					
Cleaned someone else's mouth	Never□	Monthly□					
with white gauze or pink swabs?	No. but I have seen this□	Weekly□					
Please tick one ☑							
	Yes, every few months□	Daily□					
6. As a nursing student, for your	placements on adult wards how often	en do vou usually					
experience		,					
Brushing someone else's	Never□	Monthly□					
teeth with a toothbrush?	No, I do not, but I have seen this□	Weekly□					
Please tick one ☑	Yes, I have done this once or	Daily□					
	twice□	•					
	Yes, every few months□						
Brushing someone else's	-						
denture?	Never□	Monthly□					
Please tick one ☑	No, but I have seen this□	Weekly□					
	Yes, Infrequently□	Daily□					
	Yes, every few months□						
Cleaning someone else's mouth	n i	10					
with white gauze or pink swabs?	P Never□	Monthly□					
Please tick one ☑	No, but I have seen this□	Weekly□					
	Yes, Infrequently□	Daily□					
1	Yes, every few months□	750					

In general	
7. How would you describe the task of oral care	Please tick one ☑
Repulsive	Not at all□
	Somewhat□
	Very□
Personal Encroachment	Not at all□
	Somewhat□
	Very□
Has to be done	Not at all□
	Somewhat□
	Very□
Good nursing	Not at all□
C4 (1942) 4. (1971) \$650	Somewhat□
9	Very□

General Oral Care	Э					
8.Indicate how mu	ch you agree or di	sagree with the followi	ng statements			
Oral care is a very	high priority			Please tick one ☑		
Strongly Disagree	Disagree	Not agree/Disagree	Somewhat Agree	Strongly agree		
Cleaning of the mouth is an unpleasant task Please tic						
Strongly Disagree	Disagree	Not agree/Disagree	Somewhat Agree	Strongly agree		
The oral cavity is o	lifficult to clean			Please tick one ☑		
Strongly Disagree	Disagree	Not agree/Disagree	Somewhat Agree	Strongly agree		
The mouths of pat	ients get worse no	matter what I do		Please tick one ☑		
Strongly Disagree	Disagree	Not agree/Disagree	Somewhat Agree	Strongly agree		
I have been given	adequate training	in providing oral care		Please tick one ☑		
Strongly Disagree	Disagree	Not agree/Disagree	Somewhat Agree	Strongly agree		
I have adequate ti	me to provide oral	care		Please tick one ☑		
Strongly Disagree	Disagree	Not agree/Disagree	Somewhat Agree	Strongly agree		

Scenarios					
Imagine that the pictuon the ward for a few arm and is unable to speech difficult to und vividly as you can.	days. This patient a	at present has m. The patient	little or no fund has some faci	ction in the	eir dominant ess making
vividiy as you can.	9. How would	d you feel tou	ching this mout	h?	
MARIE .	Please tick to indica Not anxious	te your answers ☑			Extremely anxious
Mill	Not disgusted □				Extremely disgusted
10. How would you fe	eel if you did not clea	an this mouth'	Please t	ick to indica	te your answer ☑
Not anxious	_	_	_		Extremely anxious
Not disgusted □					Extremely disgusted
Not dissatisfied □					Extremely dissatisfied
11. How would you feel if this was your mouth? Please tick to					r answer ☑
Not anxious	•				Extremely anxious
Not disgusted □					Extremely disgusted
12. For this patient w	ould you				
Brush in the mouth w Please tick one ☑	ith a toothbrush?		Never□ nfrequently□ ccasionally□		Once per day⊟ wice per day⊟
Use a flat white swab to clean this? Please tick one ☑			Never□ nfrequently□ ccasionally□		Once per day□ wice per day□
Use a pink swab on a Please tick one ☑	a stick to clean this?	i	Never□ nfrequently□ ccasionally□		Once per day⊟ wice per day⊟

Scenario continued Imagine that the pictures below are from a patient who has had a recent stroke and has been on the ward for a few days. This patient at present has little or no function in their dominant arm and is unable to walk to the bathroom. The patient has some facial weakness making speech difficult to understand. The patient is under your care at work; imagine this patient as vividly as you can.						
13. Would you al	so					
Take care to avo	id or be extra gentle	e for some areas of th	is mouth?	Please tick one ☑ Never□ Possibly□ Definitely□		
Ask for help?				Please tick one ☑ Never□ Possibly□ Definitely□		
14. How would ye	ou feel while brushi	ng these teeth?	Please tick to in	ndicate your answer ☑		
Not anxious				Extremely anxious		
Not disgusted □				Extremely disgusted		
Not satisfied □				Extremely satisfied		

Scenarios Imagine that the pictures below are from a patient who has had a recent stroke and has been on the ward for a few days. This patient at present has little or no function in their dominant arm and is unable to walk to the bathroom. The patient has some facial weakness making speech difficult to understand. The patient is under your care at work, imagine this patient as						
vividly as you can.		•				
AT DIT	Please an:	How would y etick to indicate your Not xious □	ou feel tou answers ☑	uching this mo	outh?	Extremely anxious
yell	disg	Not gusted				Extremely disgusted
16. How would you	feel if you did	not clean th	is mouth?	Please	tick to indica	ate your answer ☑
Not anxious						Extremely anxious
Not disgusted □						Extremely disgusted
Not dissatisfied □						Extremely dissatisfied
17. How would you	feel if this was	your mouth	?	Please tid	ck to indicate	your answer 🗹
Not anxious						Extremely anxious
Not disgusted		[_			Extremely disgusted
18. For this patient	would you					
Brush in the mouth with a toothbrush? Please tick one ☑				Never□ frequently□ casionally□		Once per day□ wice per day□
Use a flat white swab to clean this? Please tick one ☑				Never□ frequently□ casionally□		Once per day□ wice per day□
Use a pink swab or Please tick one ☑	n a stick to clea	an this?		Never□ frequently□ casionally□	C Tr	Once per day⊟ wice per day⊟

Scenarios cont	inued					
Imagine that the pictures below are from a patient who has had a recent stroke and has been on the ward for a few days. This patient at present has little or no function in their dominant arm and is unable to walk to the bathroom. The patient has some facial weakness making speech difficult to understand. The patient is under your care at work; imagine this patient as vividly as you can.						
19. Would you a	ilso					
Take care to avo	oid or be extra gent	e for some areas of th	is mouth?	Please tick one ☑		
	9			Never□		
				Possibly□		
				Definitely□		
Ask for help?				Please tick one ☑ Never□		
				Possibly□ Definitely□		
				Deminion		
20. How would y	ou feel while brush	ing these teeth?	Please tick to	indicate your answer ☑		
Not				Extremely		
anxious				anxious		
Not				Extremely		
disgusted	-	_	_	disgusted		
Not				Extremely		
satisfied		П		satisfied		
	, 					

Scenarios						
Imagine that the pictures below are from a patient who has had a recent stroke and has been on the ward for a few days. This patient at present has little or no function in their dominant arm and is unable to walk to the bathroom. The patient has some facial weakness making speech difficult to understand. The patient is under your care at work, imagine this patient as vividly as you can. 21. How would you feel touching this mouth?						
	ar	How woul se tick to indicate Not nxious Not substantial Not gusted	ld you feel your answers ☑	touching this i	mouth?	Extremely anxious Extremely disgusted
22. How would you	u feel if you d	d not clea	n this mou	th? Please t	ick to indicate	your answer ☑
Not anxious □ Not				1		Extremely anxious Extremely
disgusted				[1		disgusted
Not dissatisfied				1		Extremely dissatisfied
23. How would you	u feel if this w	as your m	outh?	Please	e tick to indica	te your answer ☑
Not anxious □				ŋ		Extremely anxious
Not disgusted □				ı		Extremely disgusted
24. For this patien	t would you	10.000				
Brush in the mouth Please tick one ☑	h with a toothl	orush?		Never Infrequently Occasionally		Once per day□ Twice per day□
Use a flat white swab to clean this? Please tick one ☑				Never Infrequently Occasionally		Once per day⊡ Twice per day⊡
Use a pink swab on a stick to clean this? Please tick one ☑				Never Infrequently Occasionally		Once per day□ Twice per day□

Imagine that the pictures below are from a patient who has had a recent stroke and has been on the ward for a few days. This patient at present has little or no function in their dominant arm and is unable to walk to the bathroom. The patient has some facial weakness making speech difficult to understand. The patient is under your care at work; imagine this patient as vividly as you can. 25. Would you also				
Take care to avo	id or be extra gentl	e for some areas of th	is mouth?	Please tick one ☑ Never□ Possibly□ Definitely□
Ask for help?				Please tick one ☑ Never□ Possibly□ Definitely□
26. How would you feel while brushing these teeth? Please tick to indicate your answer ☑				
Not anxious	П			Extremely anxious
Not disgusted				Extremely disgusted
Not satisfied □				Extremely satisfied

Scenarios					
Imagine that the pictures below are from a patient who has had a recent stroke and has been on the ward for a few days. This patient at present has little or no function in their dominant arm and is unable to walk to the bathroom. The patient has some facial weakness making speech difficult to understand. The patient is under your care at work, imagine this patient as vividly as you can.					
	27. How wou Please tick to indicate Not anxious Not disgusted	Ild you feel t e your answers ☑ ☐	ouching this mou	th?	Extremely anxious Extremely disgusted
28. How would you fee	I if you did not clea	an this mout	h? Please ti	ck to indicate	your answer ☑
Not anxious □					Extremely anxious
Not disgusted □					Extremely disgusted
Not dissatisfied □					Extremely dissatisfied
29. How would you fee	l if this was your n	nouth?	Please tick to indi	cate your ans	wer ☑
Not anxious □					Extremely anxious
Not disgusted □					Extremely disgusted
30. For this patient wou	ıld you				
Brush in the mouth with Please tick one ☑	n a toothbrush?		Never□ Infrequently□ Occasionally□		nce per day⊟ ice per day⊟
Use a flat white swab to clean this? Please tick one ☑			Never□ Infrequently□ Occasionally□		nce per day□ ice per day□
Use a pink swab on a stick to clean this? Please tick one $\ensuremath{\boxtimes}$			Never□ Infrequently□ Occasionally□		nce per day□ ice per day□

Scenarios conti					
Imagine that the pictures below are from a patient who has had a recent stroke and has been on the ward for a few days. This patient at present has little or no function in their dominant arm and is unable to walk to the bathroom. The patient has some facial weakness making speech difficult to understand. The patient is under your care at work; imagine this patient as vividly as you can.					
31. Would you also					
Take care to avo	id or be extra gentle	e for some areas of th	is mouth?	Please tick one ☑	
Take care to avoid or be extra gentle for some areas of this mouth?				Never□	
				Possibly□	
				Definitely□	
				Please tick one ☑	
Ask for help?				Never□	
Ack for holp.				Possibly□	
Definitely□					
			12247		
32. How would you feel while brushing these teeth? Please tick to indicate your answer ☑					
Not				Extremely	
anxious				anxious	
Not				Extremely	
disgusted				disgusted	
Not				Extremely	
satisfied				satisfied	
Ш			Ш		

Scenarios					
Imagine that the pictures below are from a patient who has had a recent stroke and has been on the ward for a few days. This patient at present has little or no function in their dominant arm and is unable to walk to the bathroom. The patient has some facial weakness making speech difficult to understand. The patient is under your care at work, imagine this patient as vividly as you can.					
	33. How wo	uld you feel	touching this mo	uth?	
A PARK	Not anxious	de your answers 2			Extremely anxious
COMPANY.	Not disgusted	0	0		Extremely disgusted
34. How would you feel it	you did not clear	n this mouth	? Please tick	to indicate	your answer ⊠
Not anxious					Extremely anxious
					_
Not disgusted					Extremely disgusted
Not dissatisfied					Extremely dissatisfied
35. How would you feel it	this was your mo	outh?	Please tick to in	dicate your	answer ⊠
Not anxious					Extremely anxious
Not disgusted					Extremely disgusted
36. For this patient would	l you				
Brush in the mouth with a Please tick one ⊠	a toothbrush?		Never□ Infrequently□ Occasionally□		nce per day⊡ vice per day⊡
Use a flat white swab to clean this? Please tick one ☑			Never□ Infrequently□ Occasionally□		nce per day⊡ vice per day⊡
Use a pink swab on a stick to clean this? Please tick one ⊠			Never□ Infrequently□ Occasionally□		nce per day⊡ vice per day⊡

Scenarios contin	ued			
Imagine that the pictures below are from a patient who has had a recent stroke and has been on the ward for a few days. This patient at present has little or no function in their dominant arm and is unable to walk to the bathroom. The patient has some facial weakness making speech difficult to understand. The patient is under your care at work; imagine this patient as vividly as you can. 37. Would you also				
Take care to avoid	d or be extra gent	tle for some areas of thi	s mouth?	Please tick one ⊠ Never□ Possibly□ Definitely□
Ask for help?				Please tick one ⊠ Never□ Possibly□ Definitely□
38. How would you feel while brushing these teeth? Please tick to indicate your answer ☑				dicate your answer 🗹
Not anxious	П	П		Extremely anxious
Not		ш	ш	Extremely
disgusted				disgusted
Not satisfied				Extremely satisfied

Scenarios Imagine that the pictures below are from a patient who has had a recent stroke and has been on the ward for a few days. This patient at present has little or no function in their dominant arm and is unable to walk to the bathroom. The patient has some facial weakness making speech difficult to understand. The patient is under your care at work, imagine this patient as vividly as you can.										
	Please tick to Not anxiou Not disgust	ed \Box	0		Extremely anxious Extremely disgusted					
40. How would you	feel if you did no	t clean this denture?	Please tick to	indicate your	answer ☑					
Not anxious □ Not					Extremely anxious					
disgusted					Extremely disgusted					
Not dissatisfied □)	Extremely dissatisfied					
41. How would you	feel if your dentu	re looked like this?	Please tick to	indicate you	r answer ☑					
Not anxious □					Extremely anxious					
Not disgusted □					Extremely disgusted					
42. For this denture	would you		2) <u> </u>							
Brush this with a too Please tick one ☑	othbrush?		Never□ requently□ casionally□		ice per day□ ice per day□					
Rinse this under a ta Please tick one ☑	ap?		Never□ requently□ casionally□		ice per day⊟ ice per day⊟					
Wipe this clean with Please tick one ☑	gauze or swabs	Inf	Never□ requently□ casionally□		ice per day□ ice per day□					

Scenarios conti	nuad								
Imagine that the pictures below are from a patient who has had a recent stroke and has been on the ward for a few days. This patient at present has little or no function in their dominant arm and is unable to walk to the bathroom. The patient has some facial weakness making speech difficult to understand. The patient is under your care at work; imagine this patient as vividly as you can.									
43. Would you al	so			Please tick one ☑					
Ask for help?				Never□ Possibly□ Definitely□					
44. For this patie	nt would you		Ĭ,						
Clean inside the swabs? Please tick one ☑	patient's mouth with		Never□ Infrequently□ Occasionally□	Once per day□ Twice per day□					
Clean inside the toothbrush? Please tick one ☑	patient's mouth with a	i	Never□ Infrequently□ Occasionally□	Once per day□ Twice per day□					
Clean inside the mouthwash? Please tick one ☑	patient's mouth with a	į	Never□ Infrequently□ Occasionally□	Once per day⊡ Twice per day⊡					
45. How would yo	ou feel while brushing	these teeth?		Please tick one ☑					
Not anxious □				Extremely anxious					
Not disgusted □				Extremely disgusted					
Not satisfied □				Extremely satisfied					

Commiss						
Scenarios Imagine that the pi	ictures below a	e from a r	nationt w	ho has dementia	and has h	and a stroke
This patient is very						
function in their do		e patient i	is under	your care at work	k, imagine	this patient as
vividly as you can.						
		How woul e tick to indicate		el touching this n	nouth?	
	A CONTRACTOR OF THE PARTY OF TH	Not	.*			Extremely
		xious				anxious
mounds						
		Not				Extremely
STATE OF THE PARTY	dis	gusted				disgusted
47. How would you	ı feel if you did	not clean	this mou	th? Please tick	to indicate y	our answer ☑
Not						Extremely
anxious						anxious
Not						Extremely
disgusted	_					disgusted
Not						Extremely
dissatisfied				П		dissatisfied
16 55	10-10		1,000			2071 s
49. How would you	i teel it this was	your mou	itn?	Please tick to indi	cate your ans	swer ⊻
Not						Extremely
anxious						anxious
Not						Extremely
disgusted						disgusted
50. For this patient	t would you	\$1057D		210	500	200
oo. I of this patient	would you					
Brush in the mouth	with a toothbro	ush?		Never□		once per day□
Please tick one ☑				Infrequently□ Occasionally□	Т	wice per day□
				Occasionally		
		_		20 22		
Use a flat white sw Please tick one ✓	ab to clean this	i?		Never		Once per day□
I loade tion one El				Infrequently□ Occasionally□		wice per day□
Use a pink swab o	n a stick to clea	n this?		Never□	(Once per day□
Please tick one ☑	a bliok to olde	ar ano.		Infrequently□		wice per day□
				Occasionally□		

Scenarios										
Imagine that the pictures below are from a patient who has dementia and has had a stroke. This patient is very forgetful and can be resistant to care. Currently, they have regained some function in their dominant arm. The patient is under your care at work, imagine this patient as vividly as you can.										
	ar Plea	se tick to indicat Not nxious Not		el touching this m	outh?	Extremely anxious				
F2 U		sgusted				disgusted				
52. How would you	teel it you ald	not clear	i this mou	Itn? Please ticl	to indicate	your answer ☑				
Not anxious □						Extremely anxious				
Not disgusted □						Extremely disgusted				
Not dissatisfied □						Extremely dissatisfied				
53. How would you	feel if this wa	s your mo	outh?	Please tid	ck to indicate	e your answer ☑				
Not anxious						Extremely anxious				
Not disgusted						Extremely disgusted				
54. For this patient	would you									
Brush in the mouth Please tick one ☑	with a toothbr	ush?		Never□ Infrequently□ Occasionally□		Once per day⊟ wice per day⊟				
Use a flat white swa Please tick one ☑	ab to clean thi	s?		Never□ Infrequently□ Occasionally□		Once per day□ wice per day□				
Use a pink swab or Please tick one ☑	ı a stick to cle	an this?		Never□ Infrequently□ Occasionally□		Once per day□ wice per day□				

Scenarios										
Imagine that the pictures below are from a patient who has dementia and has had a stroke. This patient is very forgetful and can be resistant to care. Currently, they have regained some function in their dominant arm. The patient is under your care at work, imagine this patient as vividly as you can.										
55. How would you feel touching this mouth?										
Y	Please tick to Not anxiou	indicate your answers 5			Extremely anxious					
	Not disguste				Extremely disgusted					
56. How would you	ı feel if you did not	clean this mout	h? Please	tick to indicat	e your answer ☑					
Not anxious					Extremely anxious					
Not disgusted □					Extremely disgusted					
Not dissatisfied □					Extremely dissatisfied					
57. How would you	ı feel if this was you	ir mouth?	Please t	ick to indicate	your answer ☑					
Not anxious					Extremely anxious					
Not disgusted □					Extremely disgusted					
58. For this patient	would you									
Brush in the mouth Please tick one ☑	n with a toothbrush?	,	Never□ Infrequently□ Occasionally□		nce per day⊟ rice per day⊟					
Use a flat white sw Please tick one ☑	vab to clean this?		Never□ Infrequently□ Occasionally□		nce per day□ vice per day□					
Use a pink swab o Please tick one ☑	n a stick to clean th	is?	Never□ Infrequently□ Occasionally□		nce per day□ vice per day□					

Scenarios conti	nued							
Imagine that the pictures below are from a patient who has dementia and has had a stroke. This patient is very forgetful and can be resistant to care. Currently, they have regained some function in their dominant arm. The patient is under your care at work, imagine this patient as vividly as you can.								
59. Would you al:								
Take care to avo	id or be extra gentl	e for some areas of thi	is mouth?	Please tick one ☑ Never□ Possibly□ Definitely□				
Ask for help?				Please tick one ☑ Never□ Possibly□ Definitely□				
60. How would yo	ou feel while brushi	ing these teeth?	Please tick to	indicate your answer ☑				
Not anxious □				Extremely anxious				
Not disgusted				Extremely disgusted				
Not satisfied □				Extremely satisfied				

Participant information



method of assessment Development of a

son. Study findings will be presented in aggregate and you be used as part of the submission for a PhD for Ilona John-The findings of this study will be presented academic journals and at academic conferences. The findings will also will not be personally identifiable.

What happens to the results of the research study?

study will also be presented in an aggregate for publication The results of the study will contribute to the development will be used as part the submission for the educational atin a journal or for presentation at a conference in this subof further research in this subject area. The study results tainment of a PhD for Ilona Johnson. The results of this ect area.

Who is organizing and funding the research

unded by Cardiff University and a grant from the Royal Col-The study is being organized by researchers in the School of Dentistry at Cardiff University. The research is being ege of Physicians and Surgeons Glasgow.



Applied Clinical Research and Public Heath, School of Dentistry, Cardiff University Heath Park, Cardiff, CF14 4XY. Lecturer in Dental Public Health. email: johnsonig@cardiff.ac.uk Telephone: 029 2074 5490 For further information please contact: llona Johnson.

Centre for Occupational and Health Psychology, 63 Park Place, Cardiff, CF10 3AS Professor Andrew Smith Tel: 02920874757

Ethics Secretary, School of Psychology email: psychethics@cardiff.ac.uk Ethics committee contact details: Park Place, Cardiff University. Telephone: 029 208 70360

for emotional barriers and facilitators of mouth care You are invited to participate in a research study the research is being done and what it would in-Before you decide you need to understand why volve for you. Please take to time to read the following information carefully. Talk to others about the study if you wish

'ersion 1.06 October 2011

Will my taking part in the study be kept anonymous?

Your participation in this research will be anonymous. If ou choose to participate, your data will be given a study

removed from the dataset after the draw. Participant conthe next phase of the study, your contact details will be If you enter the prize draw or if you opt to participate in tact details will be kept securely in a locked cabinet up until that point. If you decide to attend to participate in the second part of the tests. Your data will be allocated a unique participant dentification number and you will not be identified in the will not include your study number and will be kept sepa your name will be the consent form. The consent form contact you, to provide you with information and to arrange the most convenient time and place to carry out been allocated to your data the only record retained of rate from the study data in a locket cabinet in a secure analysis or results. Once the unique identification has the study, the details that you provide will be used to

Access to data from this research will be restricted to the kept in password protected files in a password protected close your identity. Data from this study will be kept securely for a minimum of 5 years after the end of the pro-Study data will be kept in a password protected file in a only contain your unique study identification and will be for analysis will not hold any information that would dispaper notes will be kept in a locked cabinet in a secure room. Digital tapes from interviews and field notes will computer in a secure room. The files that will be used poses. No personally identifiable data will be released. sponse to requests for governance or verification purpassword protected computer in a secure room. Any nymised data may be viewed by the authorities in reect and will be destroyed before the end of 10 years research team involved in this project however; ano-

Part 1 tells you about the purpose of the study and what will happen to you if you take part.

Part 2 gives you more detailed information about ihe conduct of this study.

Ask us if there is anything that is not clear or if you would like more information. Take time to decide if

Part 1

What is the purpose of the study?

Nurses and carers are often involved in cleaning the mouth and teeth for dependent patients. This work is a pilot study to develop a method of assessment to measure feelings and emotions that are experienced in relation to mouth care.

Why have I been invited?

You have been invited as you are a student nurse who will have some experience of mouth care as part of your

Do I have to take part?

It is up to you to decide whether you wish to take part.

There are two parts to this pilot study and if you do decide to participate in the first part and do complete the questionnaire, you will then be given the opportunity to opt in or out of the second part. You will be able to access the questionnaire to participate at any time, until we stop collecting data. You are free to withdraw from the study at any time, without giving a reason.

If you decide to opt in to attend for the second part of the pilot study, we will make sure that you have a participant information sheet and we will arrange a convenient time, date and location for you to attend in order to carry out the study.

You can ask questions if you wish. You will then be asked to sign a consent form to show that you have agreed to take part. You are free to withdraw from the study at any time and any information that is not yet anonymised can be removed from the dataset. Once the second part of the study has commenced, if you decide to withdraw from the study you will still receive the gift woucher as a thank you for your time.

What will happen if I do take part?

Online questionnaire:

You will be able to access and complete the questionnaire online at: http://discovery.cf.ac.uk/

online at: http://discovery.cf.ac.uk/ SurveyTracker/mouthcare2/mouthcare2.htm

You will be given the opportunity to enter a prize draw for 3 X £50 prizes; if you wish to enter, you will asked to enter contact details so that we can get in touch with you if you win. You will not need to do anything else unless you decide to volunteer to attend in person for the second part which involves two brief computer tests and a short interview.

For the second part:

If you volunteer for the second part, we will contact you using the telephone number or email that you have provided. A meeting time, date and location will be arranged that is

convenient to you. The study will involve

- Carrying out two simple computer based exercises which will take 5 minutes each
- A brief interview (approximately 5 minutes) to discuss the images and questions in the questionnaire
 The one-to-one interview will be carried out after the computer tests. This should take around 5 minutes. This will be

used to check that the questions in the questionnaire make

sense. The interview will be audio-recorded and notes may

also be taken during the discussions.

The interview will be transcribed into text for analysis. Transcription into text will be carried out by a member of staff at Cardiff University who will be bound by confidentiality. Any information that you provide that could identify individuals, for example your name or place of work will be removed from the transcript.

Exclusions

Participants with no experience of seeing or undertaking oral care for an adult should not participate. Participants who are unable to sit and look at a computer screen for 20 minutes at a time or who are unable to use a computer mouse/keyboard for any period of time should not participate. Participants who cannot read written English should also not participate.

Risks

Participants may experience positive or negative emotions in response to the pictures used in the study. There are no anticipated physical risks to participants.

Benefits

While there are no direct patient benefits in the course of this study, the information obtained will be of value in understanding the range of feelings and emotions towards this area of care. Learning about both the positive and negative aspects of this work will contribute to helping people deal with this area of care and we may then be in a position to make improvements and developments in training in this area of care.

Part 2

What happens if I don't want to carry on with the study?

You are free to withdraw from the study at any time before or during the tests. If you have already participated in the interview it will be possible to extract some or all of the information from the transcript immediately following the interview. The data we will collect in the study will be anonymised when we collect it and so we will not be able to identify which results are yours and we will not be able to remove data once it has been collected.

Complaints

Please contact Ilona Johnson, Lecturer in Dental Public Health if you are experiencing problems with any aspect of this research. Contact details: Applied Clinical and Public Health Research, School of Dentistry, Cardiff University, Heath Park, Cardiff, CY14 4XY. Telephone: 029 2074 5490

If you remain unhappy then please contact the Ethics Secretary, School of Psychology, Park Place, Cardiff

Telephone: 029 208 70360 email: psychethics@cardiff.ac.uk

University.

Debrief, volunteering sheet and prize entry for mixed methods questionnaire studies

Debrief- Development of a method of assessment for emotional barriers and facilitators of mouth care

We would like to thank you for participating in this study.

In this study, we have been working to find out how you feel about specific oral care situations and we will use this information to help us develop an assessment to measure how carers feel about oral care.

The aim of this study was to find out how you felt about seeing and touching various oral conditions in a patient who needed assistance with oral care. Some of these conditions are considered unpleasant and harmful. Nurses may feel that they need to provide mouth care for their patients, but for some of these conditions, nurses may worry that providing mouth care may cause the patient harm. In this research, we have focussed on the emotion of disgust which appears to have a role in hygiene behaviour.

The emotion of disgust has a relationship with fears and anxieties; these emotions have been used in health promotion work to encourage hand hygiene. In the questionnaire, you were shown a number of different pictures of conditions that relate to oral hygiene. We wanted to know how you would feel if faced by one of these scenarios and how these emotions are related to what you would want to do. These questions have been developed to measure and help us understand emotional feelings towards oral care.

Ethics Secretary, School of Psychology, Park Place, Cardiff University. Telephone: 029 208 70360 email: psychethics@cardiff.ac.uk

Please detach this sheet from the questionnaire and place this completed form into the attached "Prize entry/ participant volunteering" envelope.

You are invited to attend a further stage of this study:
Participation will take approximately 20 minutes at a convenient time, date and location for you.
The study involves two brief computer based exercises and a short one-to-one interview. Participants for this second stage of the study will receive a £5 gift voucher as a thank you for their time.
If you wish to participate, or would like further information in order to decide please complete the details below
Your memorable word
Last 2 digits of your year of birth
Contact email address
Contact telephone number
All participants who have completed the mouthcare questionnaire are invited to be entered into a prize draw with a chance to win one of 3 £50 gift voucher prizes.
If you wish to enter, please provide us with details of how to contact you Telephone number
or Email
or other contact detail

Please place this form into the attached "Prize entry/ participant volunteering" envelope

Completed questionnaires and prize entries/participant volunteering envelopes should be placed in the return box in the school office.

If you think you may like to be involved in the second part of the study please enter the following details. We will use this information to link the two tests with a unique participant identification number in a way that keeps your answers confidential. Identifying information will be deleted after the second part of the study. Thereafter all data will be stored. You will be asked to enter these details if you do decide to participate. Memorable word

Last 2 digits of the year you were born (eg 83)

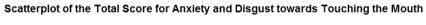
This is the end of the questionnaire.

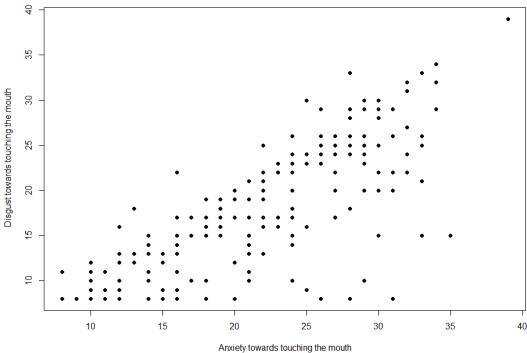
Please place the completed questionnaire into the envelope provided. Completed questionnaires should be returned to the school office.

The debrief form is overleaf, please retain this

If you wish to be entered for one of the 3 £50 prizes or if you wish to volunteer for the second stage of this research, please complete the form on the back of this questionnaire.

Scatterplot showing the relationship between anxiety and disgust towards touching the patient across all scenarios in the mixed methods questionnaire





Appendix 4.6
Satisfaction ratings towards brushing teeth for each scenario in the mixed methods study

			How	would y	ou feel	while k	orushing	this n	nouth?		
				Part	icipant	ratings	of emo	tion:			
Scenario	Not sa	atisfied							Extre	emely	Total
									sati	sfied	
		1		2	3	3	4	4		5	
	%	n	%	n	%	n	%	n	%	n	n
А	4.6	11	4.2	10	33.8	80	38.8	92	18.6	44	237
В	7.1	17	4.6	11	29.7	71	37.7	90	20.9	50	239
С	7.9	19	7.5	18	23.0	55	30.1	72	31.4	75	239
D	7.5	18	6.3	15	25.8	62	37.9	91	22.5	54	240
E	9.1	22	8.6	21	17.3	42	32.5	79	32.5	79	243
F	6.6	16	6.6	16	22.2	54	34.6	84	30.0	73	243
G	5.4	13	4.5	11	26.0	63	36.4	88	27.7	67	242
Н	5.8	14	7.1	17	29.5	71	34.4	83	23.2	56	241

Appendix 4.7

Table showing frequencies of behavioural intentions to provide oral care with a swab on a stick in each scenario in the mixed methods questionnaire study

Behavioural intention Use a pink swab on a stick to clean this										
Scenario	Never		Infrequen	Infrequent/ occasional		Once per day		Twice per day		
	%	n	%	n	%	n	%	n	n	
Α	33.9	83	35.9	88	11.4	28	18.8	46	245	
В	21.0	51	35.0	85	17.3	42	26.7	65	243	
С	18.9	46	29.1	71	15.2	37	36.9	90	244	
D	20.7	50	33.9	82	16.5	40	28.9	70	242	
Е	13.2	32	27.3	66	12.0	29	47.5	115	242	
F	34.0	82	23.2	56	13.7	33	29.0	70	241	
G	36.0	86	41.8	100	7.5	18	14.6	35	239	
Н	24.2	59	39.8	97	13.5	33	22.5	55	244	

Table: Correlation for behavioural intentions for scenario A

	Brush this with a tooth brush	n	Clean with white flat swab	n	Clean with pink swab	n	Avoid or be extra gentle	n	Ask for help	n
Brush this with a toothbrush	1	246	0.042	240	-0.097	244	-0.018	243	0.01	242
Clean with white flat swab	0.042	240	1	240	0.549**	240	0.158**	237	0.186**	237
Clean with pink swab	-0.097	244	.549 ^{**}	240	1	245	0.182**	242	0.191**	241
Avoid or be extra gentle	-0.018	243	0.158**	237	0.182**	242	1	244	0.296**	241
Ask for help	0.01	242	0.186**	237	0.191**	241	0.296**	241	1	242

^{**} Correlation is significant at the 0.01 level (2-tailed)

^{*} Correlation is significant at the 0.05 level (2-tailed)

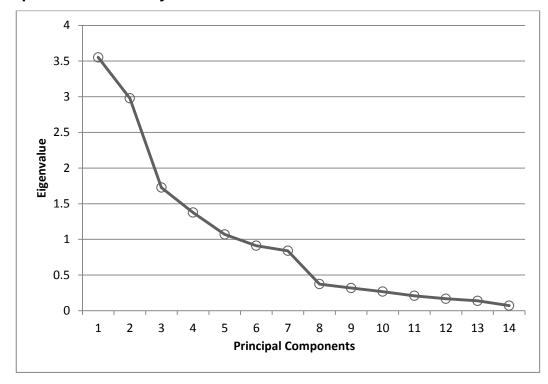
Correlation for behavioural intentions for scenario E

	Brush this with a toothbrush	n	Clean with white flat swab	n	Clean with pink swab	n	Avoid or be extra gentle	n	Ask for help	n
Brush this with a toothbrush	1	243	-0.011	241	-0.05	241	-0.042	242	136 [*]	242
Clean with white flat swab	-0.011	241	1	243	.593**	241	0.1	241	.127	242
Clean with pink swab	-0.05	241	.593 ^{**}	241	1	242	.170**	241	0.082	241
Avoid or be extra gentle	-0.042	242	0.1	241	.170**	241	1	245	.214**	244
Ask for help	136	242	.127	242	0.082	241	.214**	244	1	246

^{**} Correlation is significant at the 0.01 level (2-tailed)

^{*} Correlation is significant at the 0.05 level (2-tailed)

Appendix 4.10 Figure:Scree plot of principal component analysis for summative emotion and behavioural variables for the mixed methods questionnaire study



Disgust Sensitivity Questionnaire

Disgust Sensitivity Questionnaire

Please indicate how much you agree with each of the following statements, or how true it is about you. Please write a number (0-4) to indicate your answer:

- **0** = Strongly disagree (very untrue about me)
- 1 = Mildly disagree (somewhat untrue about me)
- 2 = Neither agree nor disagree
- **3** = Mildly agree (somewhat true about me)
- **4** = Strongly agree (very true about me)

		Write answer number 0-4
1.	I might be willing to try eating monkey meat, under some circumstances	
2.	It would bother me to be in a science class, and to see a human hand preserved in a jar	
3.	It bothers me to hear someone clear a throat full of mucous	
4.	I never let any part of my body touch the toilet seat in public lavatories	
5.	I would go out of my way to avoid walking through a graveyard	
6.	Seeing a cockroach in someone else's house doesn't bother me	
7.	It would bother me tremendously to touch a dead body	
8.	If I see someone vomit, it makes me sick to my stomach	
9.	I probably would not go to my favourite restaurant if I found out that the chef had a cold	
10.	It would not upset me at all to watch a person with a glass eye take the eye out of the socket	
11.	It would bother me to see a rat run across my path in a park	
12.	I would rather eat a piece of fruit than a piece of paper	
13.	Even if I was hungry, I would not drink a bowl of my favorite soup if it had been stirred by a used but thoroughly washed flyswatter	
14.	It would bother me to sleep in a nice hotel room if I knew that a man had died of a heart attack in that room the night before	

Disgust Sensitivity Questionnaire continued

Disgust Sensitivity Questionnaire

How disgusting would you find each of the following experiences? Please write a

number (0-4) to indicate your answer:

- **0** = Not disgusting at all
- 1 = Slightly disgusting
- 2 = Moderately disgusting
- 3 = Very disgusting
- **4** = Extremely disgusting

Write answer

	number 0-4
15. You see maggots on a piece of meat in an outdoor dustbin	
16. You see a person eating an apple with a knife and fork	
17. While you are walking through a tunnel under a railway	
track, you smell urine	
18. You take a sip of juice, and then realise that you drank from	
the glass that an acquaintance of yours had been drinking from	
19. Your friend's pet cat dies, and you have to pick up the dead	
body with your bare hands	
You see someone put tomato ketchup on vanilla ice cream, and eat it	
21. You see a man with his intestines exposed after an accident	
 You discover that a friend of yours changes underwear only once a week. 	
23. A friend offers you a piece of chocolate shaped like dog faeces	
24. You accidentally touch the ashes of a person who has been cremated	
25. You are about to drink a glass of milk when you smell that it is off	
26. As part of a sex education class, you are required to inflate a new unlubricated condom, using your mouth	
 You are walking barefoot on concrete, and you step on an earthworm 	

Disgust sensitivity calculations used for the study

Omit DSS12 and DSS16

Transform to DSS1, DSS6, DSS10 to different variables

Sum transformed variables

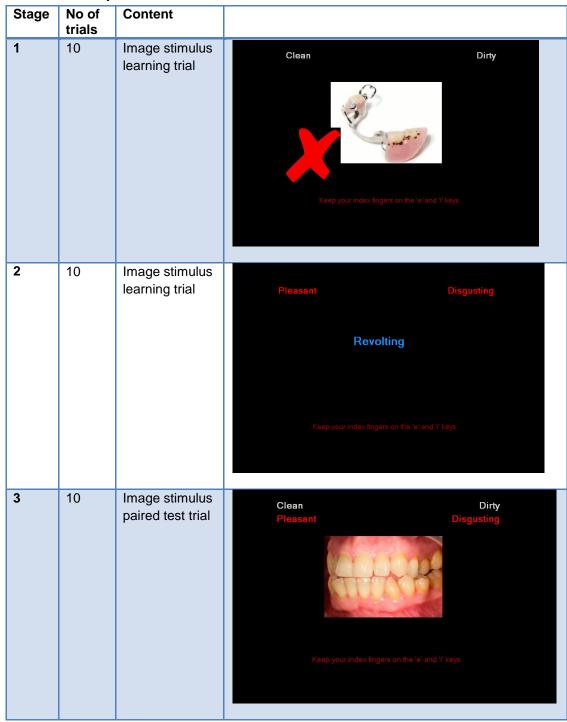
Reduce remaining variables scores by 1 and add together

Table showing Tukey HSD multiple comparisons and Bonferonni correction for the log of reaction times for Stroop tests with image stimuli in the mixed methods studies

						95% Confidence Interval	
	Stimulus	Stimulus	Mean Difference	Std. Error	Signifiance	Lower Bound	Upper Bound
Tukey HSD	Neutral	Clean	-0.01	0.024	0.90	-0.07	0.05
		Dirty	-0.08*	0.024	0.00	-0.14	-0.03
	Clean	Neutral	0.01	0.024	0.895	-0.05	0.07
		Dirty	-0.07*	0.024	0.01	-0.14	-0.02
	Dirty	Neutral	0.08	0.024	0.00	0.03	0.14
		Clean	0.07	0.024	0.01	0.02	0.13
Bonferroni	Neutral	Clean	-0.01	0.024	1.00	-0.07	0.05
		Dirty	-0.08*	0.024	0.00	-0.14	-0.02
	Clean	Neutral	0.01	0.024	1.00	-0.05	0.07
		Dirty	-0.07 [*]	0.024	0.01	-0.13	-0.01
	Dirty	Neutral	0.08	0.024	0.00	0.025	0.14
		Clean	0.07	0.024	0.01	0.0139	0.13
* TI	1:66	::	ificant at th	- 0.05			

^{*.} The mean difference is significant at the 0.05 level.

Table illustrating the order of the implicit association test trials in the mixed methods study



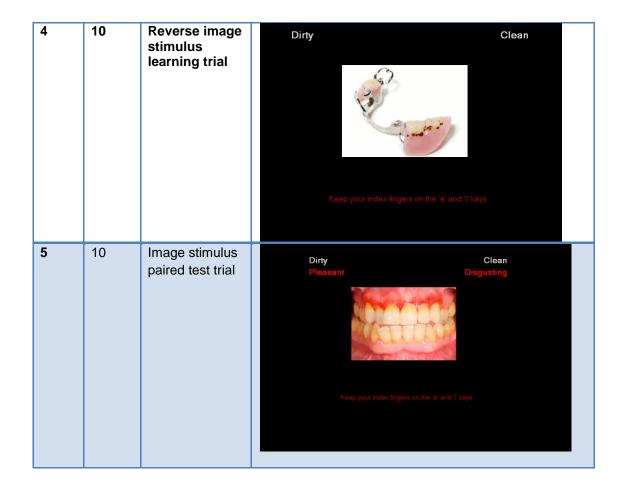
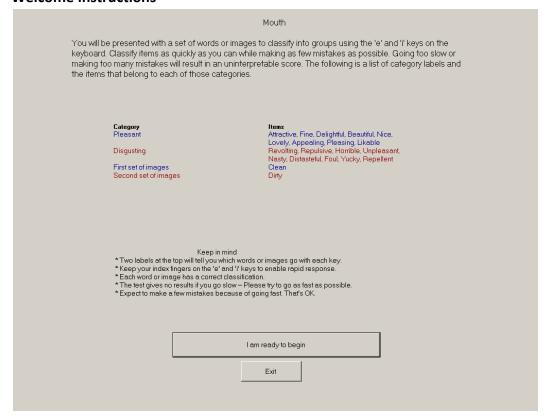


Figure showing pages and stimuli from the implicit association tests in the mixed methods study

Welcome instructions



Implicit Association Test Stimuli

	Clation Test Stiffium		15
Stimuli1- Label	Pleasant	Stimuli 2 Label	Disgusting
Stimuli 1 Words	Attractive Fine Delightful Beautiful Nice Lovely Appealing Pleasing Likable	Stimuli 2 Words	Revolting Repulsive Horrible Unpleasant Nasty Distasteful Foul Yucky Repellent
Imageset-1 Label	Clean	Image set- 2 Label	Dirty
Image set 1		Image set 2	

Table for the calculations for implicit association test B scores derived from freeiat and based on Greenwalk Nosek (2003)

Step	
1	Eliminate trials with reaction times (rts) > 10,000 ms
2	For block 3, replace rt for items initially answered as incorrect with the block mean of correct items (computed in step 3 above) + 600ms
3	For block 5, replace rt for items initially answered as incorrect with the block mean of correct items (computed in step 4 above) + 600ms
4	Compute the corrected average rt in block 3 and also block 5 using the data that includes replacement for incorrect trials (i.e., data from steps 2 and 3 above).
5	Compute the gmb score (called d in their terminology) as the average corrected rt from block 5 minus the average corrected rt from block 3 and divide this difference by the pooled sd.