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FIMS1:"This is a qualitative research project looking at the 'personal social geographies' of people with type 1 diabetes. There are over 2.8 million people in the UK diagnosed with diabetes, and an estimated 850,000 with the condition who are undiagnosed. Diabetes is caused by an inability of the body to turn glucose into energy because of either a lack of insulin (type 1 diabetes) or resistance to its effects (type 2 diabetes). Around 5-15% of all persons with diabetes have type 1, which is an autoimmune condition where the body produces no or very little insulin and regular injections of insulin are required to compensate. Type 2 diabetes is the most common form of diabetes and is linked to genetic and lifestyle factors, such as diet and exercise. Incidence also increases with age. Type 2 diabetes is often controlled through diet and oral medication although some people do require insulin injections. All subjects with type 1 diabetes require the more intrusive injections of insulin, as they are unable to produce any themselves. The experiences of persons with type 2 diabetes will not be ignored in the proposed research, but the focus shall be primarily on type 1.

Diabetes has received much attention in academic literature from the biomedical field. Attempts to clarify its aetiology dominate much of the contemporary debate (Speakman 2008; Prentice et al 2008) and the effectiveness and feasibility of various new surgical treatments (Ford 2006; Gibly et al 2011). From a social science perspective, diabetes has been considered anthropologically, examining how the disease is understood by people in different contexts (Lawton et al 2007; Poudrier 2007). The treatment of people with diabetes has also been considered (Lawton et al 2009; Rankin et al 2011); while other literature has explored the links between socio-economic factors and geographical location and incidence of diabetes (SDRN Epidemiology Group 2011; Tompkins et al 2010). The grounded experiences of living with diabetes have been somewhat overlooked, although there has been a body of sociological literature that has opened up avenues for exploration in this area, mainly that there has been too much focus on diabetes as an abstracted disease based on a series of acceptable or unacceptable numbers, primarily self assessment blood glucose numbers and clinic assessed Hba1c numbers, a 'gluco-centric' approach, rather than as a pervasive disease that can dramatically affect one's life in social, cultural and various other ways (Rasmussen et al 2001; 2007; Stuckey 2009; Stuckey and Tisdell 2010; Minet et al 2011).

From a human geographical standpoint there has been little focus on diabetes, except for some attempts to map the disease by rural/urban or affluent/deprived factors (Tompkins et al 2010; Cardwell et al 2006; 2007). This has led to neglect of the multitude of different spatialities that diabetes can create for individuals with the disease. One significant exception to this is the work done by Myles Balfe on university students with diabetes. One reason for this neglect may be because diabetes is often considered an unseen disability or illness, as well as one that is not as serious as the discussions of chronic illness and disability in human geography have been concerned with more serious or obvious conditions such as HIV/AIDS; multiple sclerosis; obesity or dwarfism (Wilton 1996; Dyck 1995; Longhurst 2010; Kruse 2010). Much of this literature discusses the themes of stigma, concealment and the ways in which life-space routines are disrupted and spaces and places develop different significance and meaning in people's lives. A major aim of this project is to

scrutinise diabetes in a similar fashion and contribute to the geographies of illness and chronic illness literature base.

My aim, therefore, is to study the under-researched everyday geographies of living with type-1 diabetes, examining how the time-space geographies of diabetes, meaning the fine grain of the sites and spaces inhabited and utilised (indoor and outdoor; home, work and leisure; institutional and non-institutional; perhaps medically-related), are implicated in and affected by the persons with diabetes constant battle to artificially 'replace' the natural work of the pancreas. Part of this work will be undertaken in the context of week-long diabetes structured education DAFNE (Dose Adjustment For Normal Eating) courses seeking out the impact these course have on the time-space geographies of individuals with diabetes and establishing the importance of considering diabetes treatment in social, cultural everyday contexts, beyond the 'gluco-centric' and biomedical focus. Diabetologists [redacted] are keen to be active collaborators in the project, the proposal being that they will negotiate my access to cohorts of persons with diabetes (to be research participants) through their weeklong DAFNE training courses. In return, I will be able to assist these professionals in their evaluation of what these training courses are, and could be, achieving. One of the diabetologists has also expressed a willingness to act as a secondary supervisor for the project, providing advice, support and expertise although there is no formal obligation for support. NHS permission is separately sought for this aspect of the project and does not need to be formally approved in this application.

Research Aims

The overarching research aim is to expand the current, non-medical understandings of living with diabetes by examining the ongoing, routine and often unreflected everyday experiences of persons with diabetes. The following aims will form a basis for research.

•Investigating how the time-space geography of an individual is affected by the physical and mental trials and constraints of living with diabetes. For instance understanding the ways in which people may identify or disidentify with a 'diabetic' identity or the ways in which diabetes can make someone feel out of place in different contexts.

•Understanding how stigma is attached to the 'diseased' diabetic body, which subsequently can shape decisions about where to spend time and when to 'disclose' the condition to others. Related to this is an examination of the ways diabetes has been misunderstood in the wider world as a manageable less serious disease.

•Understanding how embodied changes occurring during episodes of hypoglycaemia and hyperglycaemia, affect the ability of persons with diabetes to travel, socialise, work and live.

•To establish whether there is any sense of community-making for people with diabetes, possibly through attendance of a DAFNE course or other training programme, or through the internet such as support forums and diabetes information sites."

FIMS2:"The research is funded in full by the Economic and Social Research Council.

Participants will be informed of this on the information sheet."

FIMS3:"Research Methods

Important note: NHS medical ethics approval is being separately sought for the part of the project that engages with patients of clinical services. University based Ethics permission is sought for non-clinical locations where people with diabetes will be engaged/recruited. This dual permission strategy has been agreed as the most thorough and yet efficient means of assuring ethical approval and this has supervisor support. I therefore ask the committee to assess 'the whole' of the project: but to be assured that the NHS medical ethics route is ALSO being taken with regards access to NHS patients, and with specific focus to recruitment via the mentioned DAFNE courses. The NHS ethics route does not consider non-clinical locations/voluntary sector recruitment hence the decision to also gain clearance via the Science and Engineering committee.

Interviews. Although this part of the research will be approved by NHS ethics, I include this for information. In-depth, semi-structured interviews (recorded, transcribed and coded: n=c.25) with persons with type 1 diabetes will be deployed to tease out the everyday, mundane aspects of living with diabetes, that are often be overlooked. Collaboration with the DAFNE team opens the possibility of conducting pre and post interviews with DAFNE participants, in order to evaluate the changes the course can make to a participant's daily life. This approach will give continuity to the interviews, which is vital when aiming to explore the everyday geographies rather than the geography at a particular moment of time. The DAFNE courses represent an excellent research site due to the small numbers of participants per course (usually 6-8), which is an ideal number to explore my research aims using the qualitative methods outlined in this section. My aim would be to access 3 or 4 DAFNE courses over the 3 year PhD period, mostly in Glasgow due to existing contacts. I estimate 20-25 individual interviews could be conducted through these courses complemented by follow up interviews. Interviews will last 60-90 minutes. Interviewees will be told that if they at any point during the interview they feel distressed or uncomfortable they can stop the interview immediately. The interviews will be audio-recorded, with the interviewees' permission, with a portable recording device and later transcribed and coded. The researcher will also take written notes during interviews. Potential interviewees from the DAFNE course will be made aware of the project by the course organisers who can give them an information sheet and the researcher's contact details. It is important that any respondents know that this project is in no way related to their current treatment of diabetes or their participation in a DAFNE course. An information sheet will be given to all potential respondents detailing this clearly and explaining that interviews are being sought as part of a human geography PhD project and they have absolutely no obligation to respond unless they are interested. The information sheet will also explain that questions in the interview may revolve around sensitive issues such as (experiences of) stigma and the difficulties that people face due to diabetes in their day-to-day lives, so that respondents can be as fully informed as possible about the project before agreeing to be interviewed. I have included sample copies of the information sheet to be given to potential interviewees and the interview guide.

Other potential interviewees can also be reached through the internet and through contacting other diabetes organisations. Formal information sheets and consent forms would be used via email and through organisations. Interviews would last 60-90 minutes. Interviewees will be told that if they at any point during the interview they feel distressed or uncomfortable they can stop the interview immediately. The interviews will be audio-recorded, with the interviewees' permission, with a portable recording device and later transcribed and coded. The researcher will also take written notes during interviews. Such respondents could be contacted through organisation such as Diabetes UK, which has offices in Glasgow and internet sites such as www.diabetes.co.uk, which has a thriving forum for people to discuss diabetes and ask for advice.

Time-Space Diaries. A sub-sample of the interview group (n=c.5-10) will be asked to keep time-space diaries where they record and note any influence of their diabetes upon, their everyday meeting, activities and interactions. Respondents wishing to do this will be given a notebook by the researcher. Respondents will then be asked to keep a written record of how their diabetes affected them in the course of a day and also to record any feelings, emotions or frustrations that they experienced throughout the day. No strict structure will be placed upon completion of these diaries so that respondents can complete them in a way they are comfortable with. Such a method could be used to great effect in conjunction with the interviews of DAFNE participants to record their day-to-day life after participation in a course.

Questionnaire/Survey. These interviews will be supported by a more extensive open-ended questionnaire survey of persons with diabetes' quality of life issues (n=c.100). Participants would be reached using online survey technology, which can allow the creation and easy collection of qualitative surveys, utilising text boxes for answers where respondents can express their opinions without any imposed structure or word limit. Respondents will be reached through diabetes websites such as general information websites and forums of which there are many, for example www.diabetes.co.uk. It is likely that many respondents to this survey will have types of diabetes other than type 1, but these responses will still be used, as they will still provide insight to diabetes as a general disease. These questionnaires will not ask for the respondent's name or contact details but these can still be left by the respondents and will be treated as confidential by the researcher. There are many online survey packages that can be used for this process, the one the researcher has previously used is survey monkey (www.surveymonkey.com), which allows the construction of appropriate questionnaires and does not require respondents to leave any personal details, such as names or email addresses. The researcher has previous experience with this research method at both undergraduate and masters level research projects for which ethical approval was received from the University of Glasgow ethics committees. I have included a sample copy of the questionnaire, laying out its format and questions.

Documentary Sources. Consideration and analysis of publicly available accounts of living with diabetes, such as online blogs, for example the rich community of bloggers at www.diabetesdaily.com will provide another rich source of qualitative information. Such online communities provide the possibility for consideration of other artistic accounts and expressions of diabetes and living with diabetes.

Literature Review. An ongoing analysis of existing literature will be used to inform the study and provide context for the final PhD thesis. Themes revolving around medical geography, health geography and geographies of the body as well as more medically situated literature will be of primary interest.

In all of the research methods the data gathered from respondents will be accessible only to the researcher. Any electronic data such as the online survey data will be held on a password protected computer, reserved for use only by the researcher at the University of Glasgow or in the researcher's private home computer which is also password protected. On occasion electronic data will be transferred between these computers; this will be done with the researcher's personal portable USB drive with any data being deleted after the transfer is complete. Any hard copies such as interview transcripts and handwritten notes will be held in a secure filing cabinet, for which only the researcher has a key, at the University of Glasgow or a secure location within the researcher's home. Any transfer of this material will only be conducted by the researcher. All respondents will receive the researcher's contact details and be encouraged to get in touch if they have any questions about the way their data will be used or the progress of the project. Respondents will also be offered summaries and updates of the project as it progresses."

FIMS4:"For this research people with type 1 diabetes will be invited for interviews with the researcher, either through the organisers of their DAFNE course, at the Southern General Hospital, or through another means such as internet recruitment. Respondents for interviews will have to carefully read the information sheet and consent forms before any interview can take place. Interviews will be carried out at a location in Glasgow or the surrounding area, selected by the interviewee. This will allow the interviewee to feel more comfortable, and minimise the effort on their part. I expect the interview locations to be cafés and other premises that the interviewees are familiar with, possibly the interviewees' homes. A thorough risk assessment will be carried out before going to any location. It will be indicated that interviews are semi-structured and intended to be 60-90 minutes long. However interviewees can determine the length of the interview in order to limit their time and effort expenditure to their own preferences. The researcher will be conscious not to place an unreasonable expectation of time on the interviewee. For instance, although the researcher will encourage going 'off topic' in order to uncover many of the mundane and hidden aspects of living with diabetes, some interviewees may doubt the usefulness of such a line of questioning and in such cases the researcher will adhere to the topic outlined on the information sheet. If any interviewees respond positively to the idea of keeping a research diary the researcher will provide details of how this can be done. For the online questionnaires respondents will be instructed to read the information sheet that forms the first page of the questionnaire before continuing any further. This information sheet will inform respondents that they can spend as long or as short a time they wish when answering the questions, noting that even brief responses can

often provide profound insight. Although it will also be noted that longer answers with more detail will be much appreciated by the researcher"

FIMS5:"Given the relationship with DAFNE organisers there is a danger that respondents may think that this research is part of their care through the NHS. It is not and this will be clearly explained, using everyday language that this is a social science project, in an information sheet and by the researcher before any interview begins. The researcher will not begin an interview if he feels that this is not fully understood. The DAFNE collaborators will also be fully informed of this project and asked to emphasis that it is not part of any clinical care for diabetes. This will also be expressed on the information sheet for the online questionnaires.

All participants will be asked to provide formal consent to be interviewed and for their information to be used in the thesis. For interviewees this consent will be obtained from a written consent form, while for online respondents it will be detailed in the information sheet and at the end of the survey that by submitting their responses respondents are giving consent for their information to be used. A sample copy of the consent form is attached to this application. No information given by respondents will be used without this consent. Diabetes is not a mental illness or psychological disorder and so the vast majority of people with diabetes are able to give informed consent. All respondents will be anonymous, any names of respondents or names of people they mention will be changed by the researcher and extra care will be taken when analysing responses that could reveal personal details about respondents. The researcher will respect any other information that is given to him 'off the record' by respondents and not include it in the thesis in any way. The respondents will be given the researcher's contact details so as to be able to indicate if they want to withdraw their information from the study, no reason has to be given and the researcher will oblige to any such requests. Information gathered will be kept for 5-10 years following completion of the thesis in order to present evidence should any academic publication using the data be challenged. The data will be stored securely either by the researcher or the researcher's supervisors at The University of Glasgow, should the researcher move on to non-academic employment in the future.

Given that talking about diabetes and related experiences can be a sensitive topic, there may be psychological risks to the respondents if during the course of an interview they recall negative experiences of discrimination, embarrassment or stigma. All respondents will choose to be part of the study after being fully informed by information sheet and so will be more willing and prepared to talk about such experiences. However there is still the risk that respondents could become upset by the interview and the memories that it causes them to recall. This is a risk of all social science qualitative research that seeks to discover individual's experiences and reflections on certain topics, especially one that is medical in nature. Many people with diabetes may choose not to disclose their condition to friends, family and colleagues for a variety of reasons including possible fear of discrimination or stigma. The researcher will therefore be conscious of the respondent's comfort during the interview and help them through any upsetting or negative memories the interview may stir up. The researcher will do this by offering to stop, or take a break from the interview should it seem the interviewee is experiencing distress. The researcher will also emphasis that the interviewee does not have to answer any question that they do not feel comfortable with and can choose for certain responses to be considered 'off the record' and not be used in the thesis. If it is the location of the interview that is causing distress (such as a café that suddenly becomes very busy) the researcher will offer to continue the interview at another location possibly at another

time. If the interview is taking place in the interviewee's house the researcher will be conscious of being a guest and be careful not to make the interview feel uncomfortable in their own home. If this does happen the researcher will offer to leave. If the interviewee asks, the researcher can also put them in touch with the researcher's advisors, if they wish to talk about the interview experience with someone other than the researcher. It is also important that the researcher be conscious of his own safety. A thorough risk assessment will be carried out before conducting any interviews, taking into consideration travel and location of the interview, especially if it is a respondent's home. The researcher will inform his supervisors, colleagues, friends or family when he is conducting an interview, although will be careful not to reveal the exact location, should it endanger the respondent's anonymity.

[redacted]

build trust with the interviewees allowing for the development of a conversation rather than an explicit interview where respondents can feel free to ask their own questions about the project or the experiences of the researcher. This also allows respondents to talk about the personal issues that they feel are important in diabetes which some literature has discussed is often not covered in the gluco-centric standard care of diabetes (Stuckey 2009; Stuckey and Tisdell 2010). In this way respondents can have value placed on their stories and experiences that they may have previously felt were overlooked or dismissed. [redacted]

FIMS6:"The research participants will be adults with diabetes. Those with type 1 diabetes will be considered a priority but those with other types will also be considered as potential participants for the research. The research will be conducted in Glasgow and so it is anticipated that most of the participants will be local to Glasgow. The research will not consider children. Any individuals deemed unable to give informed consent on their own will also not be included in the research. Any other respondents with disabilities other than diabetes, such as poor sight, or wheelchair bound will not be excluded from the process and measures such as large print information sheets and the mobility of the researcher himself will be used to ensure such respondents can participate. Due to the unpredictability of such individuals' disabilities and their willingness to participate such measures will have to be considered on a case-by-case basis as they occur. If a respondent wishes to disclose a disability, medical condition or any other condition to the researcher the researcher will respect their choice to have it acknowledged or not in the thesis."

FIMS7: "No payment or other material incentive will be made to any subject to encourage them to participate."

FIMS8: "A large part of the interview respondents (n=c.20-25) will be recruited from the DAFNE courses run at the Southern General Hospital, Glasgow. The organisers of the courses will make participants aware of the project and hand out information sheets for further information. People are then free to contact the researcher if they wish. It is hoped that since people who attend DAFNE courses do so voluntarily, attempting to establish better control of their diabetes, that they will be keen to talk further about their everyday experiences of diabetes. All participants on DAFNE courses are people with type 1 diabetes. NHS ethical approval is being sought for this part of the project.

Respondents for the online survey will be recruited from various diabetes websites and forums. The researcher will initially contact the moderator of the website or forum, explaining the project and asking permission to post an electronic version of the information sheet and a link to an online questionnaire on the website. The research will keep track of all the websites and forums on which information is posted in order to monitor any questions that users of the sites have regarding the project. Posting information on the website may also lead to other interviews, however this may not be feasible in online respondents do not live in Glasgow or surrounding areas. However the researcher will be prepared to travel to interviewees' locations should the situation for a promising interview to be conducted arise and the distance is reasonable. It is likely that many of the users of these websites and forums do not have type 1 diabetes but another type, the most common being type 2. Although the researcher wishes to focus primarily on type 1 the insights of those with other types will not be discarded as much of the experiences, such as restricted eating, stigma, the experience of simply having diabetes will be similar.

Consent, for interviewees, will be gained from respondents signing consent forms. These forms will only be given to respondents after they have read and understood the information sheet, an acknowledgement of which will also be the first question of the consent form. The forms will be clearly written and not contain unnecessary jargon. The purpose and format of the consent form will also be explained by the researcher to respondents in order to avoid confusion. The online survey will contain an introductory page that will serve as an information sheet and will indicate that by completing and submitting the survey to the researcher they are agreeing that their information can be used. Both forms of information sheet and consent forms will contain the researcher's email address so that respondents can request clarification and further information. I have included a sample copy of the consent form."

FIMS9: "The research aims, methods and design as described throughout this application are in accord with the ESRC Framework of Research Ethics."

FIMS10: "The names of all respondents will be changed in order to ensure their anonymity. Any names the respondents mention will also be changed. Some respondents through the online questionnaire may wish to choose pseudonyms when replying anyway, but the names here will also be changed to ones of the researcher's choosing, as often pseudonyms chosen by online respondents can be traced to various online accounts. Other details that could identify individuals will be used carefully or changed, such as changing place names, hospital names. Details that cannot be changed without corrupting the data to an unusable extent will only be used with the express permission of the relevant respondent. All electronic data such as audio recording of interviews and online survey responses will be held on a password protected computer that is reserved for use only by the researcher, within the grounds of the University of Glasgow or a password protected

computer within the home of the researcher, again only used by the researcher. On occasions where information must be transferred between computers this will be done using the researcher's personal portable USB drive and data will be deleted from this drive after the transfer is complete. Hard copies of any data, such as interview notes and transcripts will be held in a secure location the University of Glasgow (specifically a filing cabinet, or locked drawer for which only the researcher has a key) or a secure location in the researcher's home. All audio recordings, interview transcripts and survey responses will be listened to and read only by the researcher. Information gathered will be kept for 5-10 years following completion of the thesis in order to present evidence should any academic publication be challenged. The data will be stored securely either by the researcher or the researcher's supervisors at The University of Glasgow, should the researcher move on to non-academic employment in the future. "

FIMS11:"The proposed starting date for the empirical research of the project is 1st February 2012."

FIMS12:"Scotland, specifically Glasgow and surrounding areas."

FIMS13:"The email address of the researcher will be made available on information sheets and consent forms, both on the hard copies and the electronic ones for the online questionnaire and respondents will be encouraged to contact if they have any questions or would just like an update on the project. Respondents can also request contact details for the researcher's academic supervisors should they wish to talk to someone other than the researcher about the research processes or the project as a whole. Given the use of semi-structured interviews and open text boxes for the online questionnaire, respondents will be able to comment of the project as a whole and the specific questions they are asked throughout the research process. All respondents will also be sent a series of progress reports, at significant times of the research process, such as the initiation of the 'write up' period or the final submission of the thesis. The reports will be written in clear language and invite respondents to reply with their thoughts and opinions. These reports will be sent by a method of the respondent's choosing such as mail, or email. Respondents will be able to opt out of these reports if they do not wish to receive them. A website will also be constructed later in the research process detailing the project and its progress so that respondents can check it at their leisure."

Information Sheet [redacted] pdf

application/pdf 95601

Consent Form [redacted]

application/pdf 69926

The Everyday Geographies of Living With Diabetes

Information Sheet

(To be given to potential interviewees).

Hello [redacted] you have been given this information sheet because you may interested in social science research I am conducting at the University of Glasgow for my PhD, investigating the *Everyday Geographies of Living With Diabetes*. The research is funded by the Economic and Social Research Council (ESRC) and explores the ways in which diabetes affects the day-to-day life of a person, for instance when at home, at work, out with friends or family, travelling on public transport and the many other situations that occur during day-to-day life.

The aim of the project is to compile these experiences and present a picture of the way that a person with diabetes moves through, and interacts with the world. Hopefully this research will give many people the opportunity to talk about the day-to-day struggles, stresses, difficulties and issues that living with diabetes can cause. Much of the academic literature concerning people with diabetes has noted that there is often a frustration among people with diabetes as they have no means to express these experiences.

This will involve interviewing individuals with diabetes, about their everyday experiences of living with diabetes. Interviewees will be sought from participants, former participants or future participants of the DAFNE (Dose-Adjustment for Normal Eating) courses at the Southern General Hospital. The interview, rather like a structured conversation, will be about 45 minutes long. The interviewee will be able to talk about things that they feel are important and that are not necessarily asked by me, the interviewer. However there will still be some guidance to the interview, with themes including:

- The experience of being diagnosed.
- Routines, such as management, eating, testing etc…and how you fit these into your life.
- Experiences of hypoglycaemia or hyperglycaemia.
- Identity and diabetes
- Managing diabetes
- Places and living with diabetes.
- Talking about diabetes
- Public awareness of diabetes.

These questions are simply guidelines so you do not have to discuss them if you do not want to and if you feel there is something else you want to talk about please feel free to bring it up during the interview.

[redacted]
Email: [redacted]
Correspondence Address: [redacted] East Quadrangle, The University of Glasgow, Scotland, G12 8QQ

There is also an online questionnaire available. If you prefer to complete this first or instead of an interview, this can be emailed to you and you can have a look at it and complete it in your own time.

It is hoped that the results of this research will also provide a useful reference for the organisers of the DAFNE courses, as health professionals often do not have the time to carry out this type of research. An extra question in the interview will then be asking you about your experience of the DAFNE course. The DAFNE organisers are keen to know about the findings of this research and your responses could therefore benefit future DAFNE participants.

It is important that you know that this research is being undertaken as part of a social science project, at the University of Glasgow, and in no way affects your continued care from the NHS or GP services. Your participation is entirely voluntary, and any interview or meeting with me will occur at a time and place of your choosing. For instance after your work at a nearby café you often visit. These interviews are intended to be informal and relaxed so please do not be apprehensive about them. Nobody will pressure you in to taking part and it is entirely up to you to contact me if you wish to be involved.

Any personal details you give during the interview such as names, telephone numbers or email addresses will be held confidentially by me and no-one else will have access to them. It is intended to record interviews, with the interviewee's permission and any recordings or written transcripts of interviews will be held confidentially by the researcher and stored securely on password protected computers or locked filing cabinets. When using information in the thesis all names of interviewees will be changed and any names of other people that interviewees mention will also be changed. Names of places, such as hospitals or GP's offices, will also be changed.

Formal university and NHS ethics regulations will require you to sign a Consent Form before conducting an interview.

If you would like to meet for an interview please contact me using the contact details below. If you would like to be informed of the progress of the project or have any other questions, please do not hesitate to contact me and I will be more than happy to oblige.

Please also contact my supervisors at the University of Glasgow if you have any queries about the project.
Professor Chris Philo – Chris.Philo@ges.gla.ac.uk
Doctor Hester Parr – Hester.Parr@ges.gla.ac.uk

Thank you for taking the time to read this information sheet.

[redacted]
Email: [redacted]
Correspondence Address: [redacted] East Quadrangle, The University of Glasgow, Scotland, G12 8QQ

SAMPLE FOR ETHICS COMMITTEE

The Everyday Geographies of Diabetes

Thesis Consent Form

Researcher's Name: [redacted]

Consent Form

I would be grateful for your consent to allow me to interview you and to use the interview material for my PhD thesis. A pseudonym will be used to protect your identity. Any other contact information you give me will be held securely and accessed only by me. Information will only be used subject to you giving your permission with this Consent Form.

Yes **No** *(please tick)*

[ ][ ] Have you read and understood the Information Sheet?

[ ][ ] Have you been given the opportunity to ask questions about the study?

[ ][ ] Do you feel you now have enough information about this study?

[ ][ ] Do you understand that your participation is voluntary?

[ ][ ] Do you understand that you are free to withdraw from this study at any time without giving a reason?

[ ][ ] Do you agree that the interview may be audio recorded?

[ ][ ] Do you understand that these recording may be transcribed by the researcher?

[ ][ ] Do you understand that these recordings and transcriptions will be destroyed after the research is complete?

[ ][ ] Do you agree to be part of this study and have your information used in the thesis?

You may contact me at any time to withdraw your consent for your information to be used.

Signed: Date:

[redacted]
Email: [redacted]
Correspondence Address: [redacted] East Quadrangle, The University of Glasgow, Scotland, G12 8QQ

REPORT ON ETHICS PROPOSAL
REF# CSE00975 (Version 1)
TITLE: Audio-Visual Emotion integration and functional connectivity
SUBMITTED BY: [redacted], Visiting researcher
FROM THE: Psychology
REVIEWERS: Alessandro Vinciarelli, Paddy O'Donnell, Simon D. Rogers

1. DESCRIBE THE BASIC PURPOSES OF THE PROPOSED RESEARCH

This fMRI study aims to examine the integration of emotional information presented by auditory (voices) and visual (faces) stimuli. Additionally, the project will assess the impact of degrading the visual stimuli as well as the congruency of the audio and visual stimuli on the functional connectivity between critical nodes of the underlying network. The face and voice stimuli will represent either happy or angry emotional valence, and in the critical task, will be presented simultaneously, either congruently or not. This study will provide insights into the neural mechanisms by which information regarding emotion from the face and voice are integrated.

2. INDICATE WHO IS FUNDING THE RESEARCH (IF COMMERCIALLY FUNDED, ENSURE THAT PARTICIPANTS ARE INFORMED).

This experiment is not currently funded.

3. DESCRIBE THE DESIGN OF YOUR EXPERIMENT (E.G. CONDITIONS, NUMBER OF PARTICIPANTS, PROCEDURE AND EQUIPMENT WHERE APPROPRIATE) SEE BPS ´§2 & ´§8

This study is a "standard fMRI study".
The proposed project will recruit 20 normal adult volunteers for participation. Participants will be fitted with fMRI compatible headphones, and will be scanned while they are simultaneously presented with human voice and human face stimuli. The proposed project will use dynamic face-voice stimuli from unique morphed video stimuli that allow for parametric modulation of the face and voice information independently. The faces and voices will portray either happy or angry emotional valence, and participants will be asked to make a forced-choice (happy or angry) speeded response. On 50% of trials the emotion form both modalities with be congruent (C) and on 50% they will be incongruent (I). Furthermore, on 50% of trials the visual stimuli will be degraded (VD) and on 50% they will be intact (VI). Thus four conditions arise, namely, C-VD, C-VI, I-VD and I-VI. On half the trials participants will be asked to respond based on the voice stimuli and on half the trails they will respond based on the face stimuli. Each participant will be scanned in one session that lasts for approximately 1 hour. We will compare functional connectivity between multimodal integration areas (specifically the superior temporal sulcus (STS)) and regions involved in voice (Temporal Voice Area) and face (Fusiform Face area) processing. We expect connectivity between the STS and face and voice areas to modulate based on the congruency between the face and voice information, as well as the integrity of the visual information.

4. DESCRIBE HOW THE PROCEDURES AFFECT THE PARTICIPANTS

Cf. â•œStandard fMRI studiesâ•š

5. STATE WHAT IN YOUR OPINION ARE THE ETHICAL ISSUES INVOLVED IN THE PROPOSAL (SEE BPS ALL SECTIONS)

Cf. â•œStandard fMRI studiesâ•š

6. SPECIFY THE NATURE OF THE PARTICIPANTS. INDICATE IF THE RESEARCH INVOLVES CHILDREN OR THOSE WITH MENTAL DISABILITIES OR HANDICAP (SEE BPS ´§3) IF SO, EXPLAIN THE STEPS TAKEN TO OBTAIN PERMISSION FROM L.E.A.S, HEADTEACHERS, PARENTS, ETC... GIVE A BRIEF DESCRIPTION HERE AND FILL IN THE CHILDREN RESEARCH ETHICAL PLAN. THE FORM MUST BE UPLOADED TOGETHER WITH THE CONSENT AND INFORMATION FORMS.

No.

7. STATE IF PAYMENT WILL BE MADE TO SUBJECT

A standard payment of ´£6 per hour will be made to subjects.

8. DESCRIBE THE PROCEDURES FOR ADVERTISING, FOR RECRUITING PARTICIPANTS, AND FOR OBTAINING CONSENT FROM PARTICIPANTS (SEE BPS ´§3)

Cf. â•œStandard fMRI studiesâ•š

9. STATE WHETHER THE PROPOSAL IS IN ACCORD WITH THE BPS CODE OF CONDUCT OR THE ESRC FRAMEWORK OF RESEARCH ETHICS

"Standard fMRI studies" are in accord with the BPS code of conduct.

10. DESCRIBE HOW THE PARTICIPANTS' ANONYMITY AND CONFIDENTIALITY WILL BE MAINTAINED
(SEE BPS ´§7)

Cf. â•œStandard fMRI studiesâ•š

11. DATE ON WHICH PROJECT IS EXPECTED TO BEGIN AND END

fMRI scanning will start at CCNi after Jan 1st, 2012.

12. LOCATION AT WHICH THE PROJECT WILL BE CARRIED OUT

Cf. â•œStandard fMRI studiesâ•š

Ł COMMENT FROM SIMON D. ROGERS: Presumably CCNi?

13. DESCRIBE HOW PARTICIPANTS WILL BE DEBRIEFED AT THE END OF THE EXPERIMENT (THIS MUST INCLUDE THE OPPORTUNITY TO CONTACT THE EXPERIMENTER - OR SUPERVISOR - FOR FEEDBACK ON THE GENERAL OUTCOME OF THE EXPERIMENT) (SEE BPS ´§5 & ´§10)

Cf. â•œStandard fMRI studiesâ•š

Study Information Sheet - MRI

Title of Project: Audio-visual emotion integration and functional connectivity

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. If there is anything that is not clear or if you would like more information, please ask us. Take time to decide whether or not you wish to take part.
Thank you for reading this.

What is the purpose of this study?
This study will use functional magnetic resonance imaging (fMRI) to take pictures of the activity of your brain while you are simultaneously presented with voice and face information. The voice and face information will portray a happy or sad emotional expression. Sometimes the emotion from the face and the voice will be the same (congruent) and sometimes they will be different (incongruent). You will be asked to respond which emotion you think is portrayed in the stimulus. In addition, sometimes the face or the voice information will be degraded. We are interested in how emotional information from audio (voice) and visual (face) information is integrated in the brain, and how this process is affected by (in) congruency and the degrading of visual information.

Why have I been chosen?
You have been chosen because you have already volunteered to participate in the Centre for Cognitive Neuroimaging Research Panel, coordinated at Psychology Department, or you volunteered to participate in research studies using functional magnetic resonance imaging.

Who is organizing this study?
This study is organized by Pascal Belin and [redacted]

What will happen to me if I take part?
Before you take part a member of staff will ask you some questions to ensure that you have no metal within you before you enter the strong magnetic field of the MRI scanner. You may be asked to remove coloured contact lenses and to change (we provide training suits in case there is metal on your clothes). You will then be asked to lie in the scanner and the scanning will start. The scanning can be noisy so we shall give you headphones or earplugs to reduce this noise. If you are very claustrophobic, that is if you feel very uncomfortable in small closed environment, then it may not be appropriate for you to be scanned.
During the scan you will be asked to decide if the emotion portrayed by the face and voice is happy or angry by pressing a button. You will be fitted with headphones, through which you will hear auditory stimuli and a response pad with which you will indicate your response. Whatever the nature of the task, it will always be explained to you before you sign the consent form, and will never involve any painful stimulation. We will repeat the instructions before each task. At all time you will remain in contact with us through the intercom and you will have a buzzer in your hand, in case you want us to stop the scan and come in the scanner room. We will ask you in all cases to try to keep your head as still as possible. To help you do so, we

will place foam pads under your neck and on the side of your head.
The scanning session will take about one and a half hours, although you will not actually be scanned for more than 60 minutes of this time.

What is the device involved?
We can learn a great deal about how the brain works by looking at the blood flow to different parts of the brain whilst the brain performs different tasks. We measure brain function using images taken with a magnetic resonance imaging scanner. This scanner uses a strong magnetic field to create detailed images of brain structure and function. By taking a series of images whilst you perform a task we can build up a picture of the brain areas activated by this type of task. The scan does not involve any injections or X-rays.

What are the possible risks/side effects of taking part?
The scanner can be loud when it takes images, and you will be given earplugs and/or headphones to block out some of the sound. Also, the scanner space is quite reduced, and people who are uncomfortable in small or confined spaces may not be able to participate. If this applies to you, remember that you may withdraw from the study at any time without explaining why. MRI is generally thought to be a safe, non-invasive imaging technique. There are no known risks or side effects, except that in less then 5% of people the scanning might induce a peripheral nerve stimulation (felt as small twitches); this is not dangerous but might induce discomfort. In some very rare cases, being in the magnetic field may also trigger vertigo (dizziness). In the unlikely case you experience one of these feelings, please alert us and withdraw from the study, should you wish to do so. Although there is no evidence of danger, as a natural precaution we do not wish to include any women who may either be pregnant or have any reason to believe they may be pregnant.

What are the possible benefits of taking part?
We will reimburse you for your time and travel, and you will have the pleasure of knowing that you have made a contribution to our understanding of the relationship between brain and behaviour. However, there will be no direct benefits accruing in terms of your treatment.

What happens at the end of the study?
The results of this study may be published in a journal or used for teaching purposes. The results may also be presented at scientific meetings, or in talks at academic institutions. Results will always be presented in such a way that data from individual volunteers cannot be identified.

Confidentiality - who will have access to the data?
The data will be stored on a secure network and only members of the Centre for Cognitive Neuroimaging (CCNI) of the Psychology Department at University of Glasgow will have access to the data. It is possible that the data may be used by researchers working with CCNi for other similar ethically approved research protocols, where the same standards of confidentiality will apply. In all cases your name will not be used and your data will be identified only by a 5 digit code.

Will my General Practitioner (GP) be informed?
This is not a diagnostic scan. Your GP will not be routinely informed if your participation in this study has been as a normal volunteer. Brain images will NOT be routinely examined for abnormalities by a trained neuro-radiologist. Like faces, brains come in all shapes and sizes, however, so that there are many normal variations of what the scan shows. There is a chance of less than 1:100 that your scan may, by chance, show a significant abnormality of which you are unaware.
There is no guarantee that abnormalities will be picked up. It is possible, however, that an abnormality is detected, by chance, in the scan of a normal volunteer by the radiographer or

one of the investigators. This is referred to as incidental finding. If this happens, your brain scan will be examined by a trained neuro-radiologist who will provide an expert opinion on the importance of the incidental finding for your health, and on the potential health benefit of disclosing this information to you. There are three possible cases:

- Unlikely net benefit: If the incidental finding is a condition not likely to be of serious importance for your health, or whose likely health importance cannot be ascertained, that finding will not be disclosed to you or your GP.
- Possible net benefit: If the incidental finding consists of a nonfatal condition that could possibly be grave or serious but that cannot be avoided or improved, then when you are likely to deem that information important, that finding will be disclosed to you with appropriate guidance. You may also choose not to be informed should such an unlikely finding apply to you. In that case, please tick the appropriate box on the consent form.
- Strong net benefit: In the very unlikely case of a life threatening condition or a condition likely to be grave and that can be treated or improved, this information will be disclosed to you and you will be appropriately advised. Further action will be decided which could involve further imaging and/or a discussion between you and your GP or an appropriate clinician.

What if new information becomes available?
If the new information pertains specifically to the health of the volunteer, the volunteer may be informed (see previous paragraph). Otherwise, new information will be published through traditional scientific channels (journal articles, conference presentations).

What will happen to the study results?
In accordance with good research practice, they will be kept securely for a minimum of 10 years and possibly indefinitely in the CCNi data archive.

Will I receive a financial compensation?
Yes; You will receive £6 per hour for your participation in this study.

Can I ask questions about the research project?
Yes; We will answer all questions you may have that are related to the research project to which you agree to participate (see contact details below)

Can I withdraw from the study?
Yes. You participation to this research project is voluntary, and you may withdraw from the research at any time and for any reason, without explaining why, and this will not affect your medical care or legal rights.

Can the investigators interrupt the study?
The research may be interrupted by the researchers at any time, and for several possible reasons such as new requirements for the selection of participants, for example.

Are there compensation arrangements if something goes wrong?
In the unlikely event of anything untoward happening, the University of Glasgow provides insurance for claims.

This research study has been approved by the Ethics Committee of the Faculty of Information and Mathematical Sciences at University of Glasgow.

Contact details
Name
Address

Telephone Email

Thank you for considering taking part in this study. Our research depends entirely on the goodwill of potential volunteers such as you. If you require any further information, we will be pleased to help you in any way we can.

STUDY INFORMED CONSENT - MRI
(This form must be completed prior to any scanning)

Study title:

☐ I confirm that I have read and understood the Study Information Sheet provided to me for the above study and have had the opportunity to ask questions.

☐ I understand the risks and contraindications including pregnancy.

☐ I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason, without my medical care or legal rights being affected,while being entitled to my per/hour payment.

☐ I understand that this is not a diagnostic scan but that should, by chance, something abnormal be noticed, an expert neuro-radiologist will examine my scans. There is no guarantee, however, that if there is an abnormality, it will be detected.

☐ I do not wish to be informed if a nonfatal condition likely to be grave or serious but that cannot be avoided or ameliorated is discovered in my brain (non mandatory for participating).

☐ I understand that the research data may be accessed by researchers working at or in collaboration with the CCNi in similar ethically approved studies but that at all times my personal data will be kept confidential in accordance with data protection guidelines.

I have initialled the above boxes myself and I agree to take part in the study.

_____
SIGNATURE OF VOLUNTEER

Name: _____ Date: _____

_____
SIGNATURE OF WITNESS

Name: _____ Date: _____

Subject ID _____

Centre for Cognitive Neuroimaging
Institute of Neuroscience and Psychology
University of Glasgow
58 Hillhead street, Glasgow G12 8QB

Tel: +44 (0)141-330 5089, email: info@psy.gla.ac.uk

REPORT ON ETHICS PROPOSAL
REF# CSE00978 (Version 1)
TITLE: Testing graphical user interfaces for neurofeedback
SUBMITTED BY: Aleksandra Vuckovic, lecturer
FROM THE: School of Engineering
REVIEWERS: Joemon Jose, Marie-Helene Grosbras, Vincent Macaulay

1. DESCRIBE THE BASIC PURPOSES OF THE PROPOSED RESEARCH

Biofeedback is the process of becoming aware of various physiological functions (muscular activity, body temperature, heart rate, brain activity) using instruments that provide information on that activity, with a goal of being able to manipulate them at will. Neurofeedback is a special form of biofeedback in which brain waves are the chosen physiological function to be modulated. With the aid of neurofeedback individuals can train themselves to voluntarily control their brainwaves. For neurofeedback purposes, brainwaves are typically recorded using an electroencelphalograph (EEG)
Neurofeedback has been used by healthy people, such as musicians or sportsmen to improve their concentration and by different populations of patients ranging from children with attention deficit hyperactivity disorder to epileptics and alcoholics [Cantor 1999].
Although neurofeedback has been practiced since the sixties, a major obstacle for its widespread application was a fact that EEG signals have to be analyzed and visualized in real time. With the advent of Brain Computer Interface Technology [Wolpaw et al. 2002], which is designed to process and present EEG signals in real time, EEG devices become cheaper and accessible for a wide range of users.
There are two critical elements when designing a neurofeedback protocol:
1. Determining which brain wave features should be used for the neurofeedback training
2. Providing the right form of visual or audio feedback to users in order to maximise their awareness of the brain waves and to facilitate brain wave modulation.
The main purpose of this project is to compare two forms of a graphical user interface (GUI) which should provide a visual feedback of the brain activity for a neurofeedback training. The first, simpler one has been previously used in our laboratory. The second one has been developed but has never been tested and used.

2. INDICATE WHO IS FUNDING THE RESEARCH (IF COMMERCIALLY FUNDED, ENSURE THAT PARTICIPANTS ARE INFORMED).

This research is not funded, it is a part of a BEng final year project of [redacted]

3. DESCRIBE THE DESIGN OF YOUR EXPERIMENT (E.G. CONDITIONS, NUMBER OF PARTICIPANTS, PROCEDURE AND EQUIPMENT WHERE APPROPRIATE) SEE BPS ´§2 & ´§8

3.1 Description of the System

The system used for the neurofeedback training consists of a 16 channel EEG amplifier (Guger Technologies, Austria) and a computer. EEG signals will be processed in real time using Matlab Simulink (Mathworks, USA) and a Graphical User Interface (GUI) will be developed in LabView (National Instruments, USA).

3.2. Experimental Procedures

Experiment will be performed on three healthy volunteers and each volunteer will attend up to five experimental sessions, on five different days. Each neurofeedback session will last about 30 min, divided into 5min subsessions. Repeated sessions are necessary because most people need several sessions to learn how to use neurofeedback strategies Therapeutic neurofeedback treatments typically consist of 20-40 sessions.

At the beginning of each session, volunteerâ•Žs EEG in relaxed state will be recorded for 3min to determine â•Ÿnormativeâ•Ž EEG values which will be used to set parameters for neurofeedbcak learning (so called â•Ÿthreshold valuesâ•Ž).

After recording EEG in a relaxed state, volunteers will be asked to look at the GUI on a computer screen which will provide information about several brain wave features. These features are typically EEG amplitudes in a predefined frequency range, on a chosen electrode site. Volunteers will be asked to â•Ÿdo whatever is necessaryâ•Ž to keep these features above or under given threshold values. Three different GUI will be used to present the same brain wave features in three different ways. GUI1 will contain bar graph that can change a colour or a size. GUI2 will contain a video,screen, that can change size, run and stop depending on the EEG condition. Volunteers will practice neurofeedback with each GUI for 3 times 5 min on each session. Thus there will be 15 min practice sessions for each electrode site. Two recording sites, corresponding to the electrode location C4 will be used in each session. The reason for chosing these sites is that it has been previously used on our neurofeedback experiments. While patients normally experience an immediate relief of pain, it is likely that healthy volunteers will have no physical sensations. The order of presentation of the different GUI windows to the user will be semi-random, so that it never repeats during the five experimental sessions.

For each GUI the computer will measure how much time a volunteer was able to keep brainwave features above/under the threshold value. This time will be summed up over five sessions and the best GUI will be the one for which the volunteer was able to keep brainwave features in the desired range for the longest period of time. It is possible that different users will have different preferable GUI.

3.3. EEG Recording and Neurofeedback Strategies

The neurofeedack strategy adopted will be the same strategy used for treatment of neuropathic pain in paraplegic patients (NHS Ethic 10/S0704/49) because they are the intended users of the system . EEG will be recorded monopolarly from electrode location C4 for 30 min. Reference electrodes will be placed on the right ear and the group on the left ear. Sampling frequency will be 256samples/s.

Three frequency bands will be chosen: the dominant one and two auxiliary frequency bands, one of which will be under and the other one will be above the dominant frequency band. The task will be to keep the amplitude of the dominant frequency band above a predefined threshold and the amplitude of the auxiliary frequency bands under the predefined thresholds. For example, we can assume that the dominant frequency band is 9-12 Hz (SMR), and the auxiliary frequency bands are 4-8 Hz (theta) and 20-30 Hz (higher Beta). In this case, the task would be to keep the EEG amplitude of SMR above the threshold and the EEG amplitude of the theta and the lower beta band under their thresholds.

Threshold values will be determined based on the average Power spectral density in the chosen frequency band. For the dominant frequency band the threshold will be set to the value that is 10-20% higher than the average EEG in that frequency band. For the auxiliary frequency bands, the thresholds will be set 10-20% below the average amplitudes for these frequency bands.

3.4. Inclusion and exclusion criteria

Inclusion criteria:

1. Age between 18 and 50
2. Normal or corrected to normal vision

Exclusion criteria
1. Personal history of any neurological disorder

Ł COMMENT FROM VINCENT MACAULAY: A sample size of three seems very small to be able to say anything meaningful.

4. DESCRIBE HOW THE PROCEDURES AFFECT THE PARTICIPANTS

EEG is a safe recording technique and the EEG device has a CE certificate. There is a slight risk for subject with very sensitive skin to get a mild response to the abrasive gel applied on the site of the electrode contact. To minimize this risk, a small amount of gel will be applied to volunteersâ•Ž skin prior to the experiment to check for the skin reaction.
Neurofeedback is a method designed to alter brain activity and therefore if applied in a wrong way and over a long period of time, it might have side effects. In this study we will apply a standard protocol used by healthy people and for a relatively short period of time. Modulation of brain waves which might be noticed over these five sessions should produce the effect of improved concentration and is expected to be transient. If during a session participants notice a headache or drowsiness, the session will be stopped.

5. STATE WHAT IN YOUR OPINION ARE THE ETHICAL ISSUES INVOLVED IN THE PROPOSAL (SEE BPS ALL SECTIONS)

The ethical issues are minor. All participants will be familiarized with risk and will be clearly informed that they are free to withdraw from the experiment at any time with no penalty.
Possible inconvenience is that participants should wash they hair after the experiment. We have adequate shower and toilet facilities close to the lab. The other inconvenience is that volunteers would have to attend 5 sessions that can be considered as time consuming.

6. SPECIFY THE NATURE OF THE PARTICIPANTS. INDICATE IF THE RESEARCH INVOLVES CHILDREN OR THOSE WITH MENTAL DISABILITIES OR HANDICAP (SEE BPS ´§3) IF SO, EXPLAIN THE STEPS TAKEN TO OBTAIN PERMISSION FROM L.E.A.S, HEADTEACHERS, PARENTS, ETC... GIVE A BRIEF DESCRIPTION HERE AND FILL IN THE CHILDREN RESEARCH ETHICAL PLAN. THE FORM MUST BE UPLOADED TOGETHER WITH THE CONSENT AND INFORMATION FORMS.

Inclusion criteria:
1. Age between 18 and 50
2. Normal or corrected to normal vision

Exclusion criteria
1. Personal history of any neurological disorder

7. STATE IF PAYMENT WILL BE MADE TO SUBJECT

no

8. DESCRIBE THE PROCEDURES FOR ADVERTISING, FOR RECRUITING PARTICIPANTS, AND FOR OBTAINING CONSENT FROM PARTICIPANTS (SEE BPS ´§3)

Because only 3 volunteers will be recruited, no special document 'call for volunteers' will be generated. We will ask colleagues/graduate students from the lab, who are not under the PIâ•Žs supervision to participate in the study and [redacted] will seek volunteers among his friends. Participants will be approached by email and will be given a week to make a decision. Participants will be given a written information for the volunteers

9. STATE WHETHER THE PROPOSAL IS IN ACCORD WITH THE BPS CODE OF CONDUCT OR THE ESRC FRAMEWORK OF RESEARCH ETHICS

yes

10. DESCRIBE HOW THE PARTICIPANTS' ANONYMITY AND CONFIDENTIALITY WILL BE MAINTAINED
(SEE BPS ´§7)

Personal data will be kept on password protected university computers and in locked file cabinets and will be available only to named researchers
Results of the study will be a part of the BEng final year proejct but subject identity will not be revealed. Photographs of experimental setup may be taken, but only with participantâ•Žs consent.

11. DATE ON WHICH PROJECT IS EXPECTED TO BEGIN AND END

10.02.2012

12. LOCATION AT WHICH THE PROJECT WILL BE CARRIED OUT

Centre for Rehabilitation Engineering, room 647 School of Engineering, University of Glasgow, James Watt building (south).

13. DESCRIBE HOW PARTICIPANTS WILL BE DEBRIEFED AT THE END OF THE EXPERIMENT (THIS MUST INCLUDE THE OPPORTUNITY TO CONTACT THE EXPERIMENTER - OR SUPERVISOR - FOR FEEDBACK ON THE GENERAL OUTCOME OF THE EXPERIMENT) (SEE BPS ´§5 & ´§10)

personal contact with the experimenters

UNIVERSITY
of
GLASGOW

Study Title: Developing and Testing a Graphical User Interface for Neurofeedback Training

Investigators: Dr Aleksandra Vučković, [redacted] ,
[redacted]

[1]Centre for Rehabilitation Engineering, School of Engineering, University of Glasgow

1. Invitation: You are invited to take part in a research study. It is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

2. Purpose of the study: *Biofeedback* is the process of becoming aware of various bodily functions (muscular activity, body temperature, heart rate, brain activity) using instruments that provide information on that functions, with a goal of being able to manipulate them at will. *Neurofeedback* is a special form of biofeedback in which brain waves are a chosen physiological function to be modulated. With the aid of neurofeedback individuals can train themselves to voluntarily control their brainwaves. For neurofeedback purposes brainwaves are typically recorded by use of an electroencephalograph (EEG)

Neurofeedback has been used by healthy people, such as musicians or sportsmen to improve their concentration, and by different population of patients ranging from children with attention deficit hyperactivity disorder to epileptics and alcoholics.
There are two critical elements when designing a neurofeedback protocol:

1. Determining which brain wave features should be used for the neurofeedback training.
2. Providing the right form of visual or audio feedback to the person in order to maximise their awareness of the brain waves and to facilitate voluntary change of the brain waves..

The main purpose of this project is to design and test different forms of a graphical user interface (GUI) in order to provide a visual feedback of the brain activity for a neurofeedback training.

3. Selection of participants: Subject of both sexes, aged between 18 and 55 with normal or corrected to normal vision will be included in the study. The exclusion criterion is personal history of neurological disorder.

4. Do you have to take part? Taking part in the research is entirely voluntary. It is up to you to decide whether or not to take part. If you do decide to take part then you will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without penalties.

5. Procedures: The study will take place in the Laboratory at the Centre for Rehabilitation Engineering, Department of Mechanical Engineering, University of Glasgow. The laboratory is situated in the James Watt Building (south), third floor, room 647.

Each individual will be asked to participate in 5 experimental session, on five separate days. Each session, including EEG preparation, will last about 35 min. The same procedure will be repeated for each experimental session

We will record your brain activity using an electroencephalograph (EEG), similar to the one shown in Figure 1. With EEG we record the electrical activity of your brain that occurs in the microvolt (μV) range. An electroencephalograph consists of a signal amplifier, a cap (placed on your head) and electrodes which record your brain activity. The electrodes connect the cap with the amplifier. In order to record your EEG you will be wearing an EEG cap and a pair of electrodes will be attached to the cap. To insure a good contact between the electrodes and your skull we will apply a small amount of abrasive contact gel to your skin, so you might wish to wash your hair after the experiment. We have a bathroom near the lab, so if you wish, you can wash your hair immediately after the experiment. The EEG setup will last about 10 min. We will record your brain activity with two electrodes only.

Once the EEG electrodes are in place we will ask you to relax, think of nothing particular and during that time we will record your EEG for 3 min. This is our baseline recording which we need to setup the experimental conditions After that we will ask you to sit in front of a computer screen and look at the Graphical User Interface (GUI) . We will explain to you the purpose of 'virtual instruments' shown on the screen. You will be instructed to control values on the instruments (in form of scales, digital displays, bars etc) using your brain waves. There will be no particular instructions, you will be told to 'do whatever is necessary' to keep the parameters shown on the virtual instruments under or above a predefined threshold value.

We will show you two different GUIs. Each GUI will present the same brain wave features, but display different virtual instruments. We will test your ability to control your brainwaves using different GUIs to define your preferable GUI. This training will last 15 min per GUI and we will record your EEG with 2 electrodes.

For neurofeedback training we will use a protocol developed for patients suffering from the neuropathic pain. .While the patients feel an immediate relief of pain, you might not have any sensations.

The same procedure will be repeated on each experimental session.

Figure 1. EEG system used for neurofeedback.
Photo taken from 'Guger Technology, Austria , www.gtec.at/products/g.BCIsys/bci.htm

6. Possible Risks: Some people are hypersensitive to electrode gel. To minimise possibility of skin reaction we will apply a small amount of EEG gel on your skin prior to the experiment. If you feel uncomfortable while using the EEG (headache, dizzy) please report that to us and we will stop the experiment.

7. What if something goes wrong? The potential risks involved in your participation in the study have been outlined above. If you are harmed by taking part in this research project, there are no special compensation arrangements. If you are harmed due to someone's negligence, then you may have grounds for a legal action but you may have to pay for it.

8. Complaints: Any complaints about the study may be directed to the principal investigator Dr Aleksandra Vučković.

9. Publication of Results: Results of the study will be a part of a BEng Final year project report, but your identity will not be revealed. Photographs of experiments may be taken, but only with your consent. If you agree to photos being taken, you do so on the understanding that they may appear in publications or on websites describing research results.

10. Who has reviewed this study?: This study has been reviewed and approved by the The study was reviewed by Ethics Committee of the College of Engineering and Computing Sciences for non-clinical research involving human subjects, material or data.

11. Contact for Further Information:

If you would like further information, or if you would like to discuss any aspect of the study, please do not hesitate to contact the investigator listed below:

Dr Aleksandra Vučković
School, of Engineering
University of Glasgow
Glasgow G12 8QQ
Tel: 0141 330 3251
Email: aleksandra.vuckovic@glasgow.ac.uk

Thank you very much for considering participation in this study.

Subjects will be given a copy of the Information Sheet and a signed Consent Form to keep.

University of Glasgow | Faculty of Biomedical & Life Sciences

Ethics Committee for Non Clinical Research Involving Human Subjects, Material or Data

Consent Form

Title of Project: Developing and Testing a Graphical User Interface for Neurofeedback Training

Name of Researcher: Dr Aleksandra Vuckovic, [redacted]

Please initial boxes

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions ☐

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason and with no consequences ☐

I AGREE TO TAKE PART IN THE ABOVE STUDY.

Name of Volunteer: _____

Signature: _____ Date: _____

Name of person taking consent (if different from researcher): _____

Signature: _____ Date: _____

Name of Researcher: _____

Signature: _____ Date: _____

Witness: _____ Date: _____

One copy for Volunteer. One copy for Researcher.

REPORT ON ETHICS PROPOSAL
REF# CSE00973 (Version 1)
TITLE: Evaluation of a Generic Model
SUBMITTED BY: [redacted] Student
FROM THE: Computing Science
REVIEWERS: Alessandro Vinciarelli, Joemon Jose, Marie-Helene Grosbras

1. DESCRIBE THE BASIC PURPOSES OF THE PROPOSED RESEARCH

The experiment intends to investigate the use of a generic model as an aid to understanding cases of rogue trading, and as a tool to identify potential rogue trading vulnerabilities in financial institutions. This experiment (in both the pre-study and full study) will assess the accuracy of assessment of various case studies with and without using the generic model, as well providing feedback on the usability of the generic model.

Ł COMMENT FROM MARIE-HELENE GROSBRAS: The participants should be able to keep the information sheet with them (so either duplicate or have the consent on a separate sheet).
You could be more specific about what kind feedback they are going to receive; i.e that it will be about the cases and not their individual performance (?)

2. INDICATE WHO IS FUNDING THE RESEARCH (IF COMMERCIALLY FUNDED, ENSURE THAT PARTICIPANTS ARE INFORMED).

Research is zero cost and hence requires no funding.

3. DESCRIBE THE DESIGN OF YOUR EXPERIMENT (E.G. CONDITIONS, NUMBER OF PARTICIPANTS, PROCEDURE AND EQUIPMENT WHERE APPROPRIATE) SEE BPS ´§2 & ´§8

The experiment aims to investigate the relationship between the use (or not) of the generic model when evaluating trading fraud incidents. Participants will be issued with several case studies, a list of possible causes/factors and a copy of the generic model (if appropriate). Due to the constraints of the pre-study it is not intended to use a control group, with the focus being on obtaining qualitative information on the usability of the model, as well as helping to refine the experimental procedure.

Participants will first be provided with information on the experiment, then asked to complete a consent form. They will also be asked to complete a brief demographics form, relevant to the experimental topic â•f for example, have they worked in the financial sector, or do they read financial news regularly ?

Participants will be given time to read and consider the case studies, and will be asked to identify relevant factors for each study. These results will then be checked against the relevant factors chosen by an expert, and the net amount of correctly chosen factors is the metric used to quantify understanding of the case study.

Afterwards they will be asked to complete a short questionnaire on the usability of the generic model and

the case studies, before being debriefed.

It is hoped that it will also be possible to implement this experiment online, with the experimental materials presented via a web browser and online survey. Otherwise, the online version will use the same materials and follow the same procedure as the paper-based version.

NOTE: A draft case study and draft model guide have been supplied with this application as additional files.

4. DESCRIBE HOW THE PROCEDURES AFFECT THE PARTICIPANTS

The procedures do not affect in the participants in any way above the normal factors of office-type activity.

5. STATE WHAT IN YOUR OPINION ARE THE ETHICAL ISSUES INVOLVED IN THE PROPOSAL (SEE BPS ALL SECTIONS)

I do not believe there are any significant ethical issues raised by this proposal.

6. SPECIFY THE NATURE OF THE PARTICIPANTS. INDICATE IF THE RESEARCH INVOLVES CHILDREN OR THOSE WITH MENTAL DISABILITIES OR HANDICAP (SEE BPS ´§3) IF SO, EXPLAIN THE STEPS TAKEN TO OBTAIN PERMISSION FROM L.E.A.S, HEADTEACHERS, PARENTS, ETC... GIVE A BRIEF DESCRIPTION HERE AND FILL IN THE CHILDREN RESEARCH ETHICAL PLAN. THE FORM MUST BE UPLOADED TOGETHER WITH THE CONSENT AND INFORMATION FORMS.

Participants will be drawn from the Glasgow university student body, and possibly from the wider population as a whole. All participants will be over 18.

7. STATE IF PAYMENT WILL BE MADE TO SUBJECT

No.

8. DESCRIBE THE PROCEDURES FOR ADVERTISING, FOR RECRUITING PARTICIPANTS, AND FOR OBTAINING CONSENT FROM PARTICIPANTS (SEE BPS ´§3)

The experiment will be advertised and participants recruited by a range of methods, but expected to by primarily by the promoting the experiment online and direct to other computing science students. Informed consent will be obtained by explaining the experiment verbally to participants and providing them with a consent form (attached).

9. STATE WHETHER THE PROPOSAL IS IN ACCORD WITH THE BPS CODE OF CONDUCT OR THE ESRC FRAMEWORK OF RESEARCH ETHICS

This proposal is in accord with British Psychological Society Code of Conduct.

10. DESCRIBE HOW THE PARTICIPANTS' ANONYMITY AND CONFIDENTIALITY WILL BE MAINTAINED
(SEE BPS ´§7)

Personally identifiable information (name, contact details etc.) will be stored securely and separately from the experimental data, and the experimental data will be anonymised to the extent that it will not be possible to link it to individual participants.

11. DATE ON WHICH PROJECT IS EXPECTED TO BEGIN AND END

As soon as possible after receipt of ethical approval.

12. LOCATION AT WHICH THE PROJECT WILL BE CARRIED OUT

Office-type room, exact location as yet unconfirmed. May also be carried out online.

13. DESCRIBE HOW PARTICIPANTS WILL BE DEBRIEFED AT THE END OF THE EXPERIMENT (THIS MUST INCLUDE THE OPPORTUNITY TO CONTACT THE EXPERIMENTER - OR SUPERVISOR - FOR FEEDBACK ON THE GENERAL OUTCOME OF THE EXPERIMENT) (SEE BPS ´§5 & ´§10)

Participants will be given a debriefing form containing further information about the experiment, and providing appropriate contact details. They will also be asked if they wish to receive further information at the conclusion of the project.

Information Form: Investigating Trading Fraud Using a Generic Model

The aim of this experiment is to investigate the use of a generic model to reason about trading fraud incidents.

The experiment will take about an half an hour to complete.

At the start of the experiment several case studies will be presented, as well as a list of possible causes and factors. You will be asked to read these case studies, and attempt to determine which causes and factors played a role in allowing the events in the case studies to happen. Depending on your assigned experimental group you may also receive a copy of a generic model and a guide, which you should use to assist you in analysing the case studies.

At the end of the experiment, you will be asked to complete a questionnaire.

All results will be held in strict confidence, ensuring the privacy of all participants. No personal participant information will be stored with the data. Electronic data will be stored in a password protected computer account; paper data will be kept in secure storage.

A feedback email message will be sent to all interested participants, after the data has been analysed.

Your participation in this experiment will have no effect on your marks for any subject at this, or any other university.

You may withdraw from the experiment at any time without prejudice, and any data already recorded will be discarded.

I _____ further questions regarding this experiment, please contact:
[redacted]
S
[redacted]

I have read this information sheet, and agree to voluntarily take part in this experiment:
Name: _____ Email:_____
Signature: _____ Date: _____

This study adheres to the BPS ethical guidelines, and has been approved by the College of Science and Engineering ethics committee of The University of Glasgow (ref: XXXXXXX). Whilst you are free to discuss your participation in this study with the researcher if you would like to speak to someone not involved in the study, you may contact the chair of the College Ethics Committee (http://ethics.ims.gla.ac.uk/).

Participant Consent Form: Investigating Trading Fraud Using a Generic Model

The aim of this experiment is to investigate the use of a generic model to reason about trading fraud incidents.

The experiment will take about an half an hour to complete.

At the start of the experiment several case studies will be presented, as well as a list of possible causes and factors. You will be asked to read these case studies, and attempt to determine which causes and factors played a role in allowing the events in the case studies to happen. Depending on your assigned experimental group you may also receive a copy of a generic model and a guide, which you should use to assist you in analysing the case studies.

At the end of the experiment, you will be asked to complete a questionnaire.

All results will be held in strict confidence, ensuring the privacy of all participants. No personal participant information will be stored with the data. Electronic data will be stored in a password protected computer account; paper data will be kept in secure storage.

A feedback email message will be sent to all interested participants, after the data has been analysed.

Your participation in this experiment will have no effect on your marks for any subject at this, or any other university.

You may withdraw from the experiment at any time without prejudice, and any data already recorded will be discarded.

I _____ further questions regarding this experiment, please contact:
[redacted]
S
[redacted]

I have read this information sheet, and agree to voluntarily take part in this experiment:
Name: _____ Email:_____
Signature: _____ Date: _____

This study adheres to the BPS ethical guidelines, and has been approved by the College of Science and Engineering ethics committee of The University of Glasgow (ref: XXXXXXX). Whilst you are free to discuss your participation in this study with the researcher if you would like to speak to someone not involved in the study, you may contact the chair of the College Ethics Committee (http://ethics.ims.gla.ac.uk/).

REPORT ON ETHICS PROPOSAL
REF# CSE00987 (Version 1)
TITLE: Starfish Co-Design Activities
SUBMITTED BY: Julie R. Williamson, RA
FROM THE: Computing Science
REVIEWERS: Alessandro Vinciarelli, Hester Parr, Lars Muckli

1. DESCRIBE THE BASIC PURPOSES OF THE PROPOSED RESEARCH

The purpose of this research is to incorporate end users into the design and development of a mobile health and wellbeing application called Starfish. User-centred design and co-design activities have been shown to greatly improve the usability and user experience of interactive technologies. During the design and development stages of the Starfish project, we will gather requirements and collect feedback as an iterative process through interviews, focus groups, and informal usability evaluations.

2. INDICATE WHO IS FUNDING THE RESEARCH (IF COMMERCIALLY FUNDED, ENSURE THAT PARTICIPANTS ARE INFORMED).

This research is funded by Bupa Foundation, a medical research charity. This will be included on all information and consent forms.

3. DESCRIBE THE DESIGN OF YOUR EXPERIMENT (E.G. CONDITIONS, NUMBER OF PARTICIPANTS, PROCEDURE AND EQUIPMENT WHERE APPROPRIATE) SEE BPS ´§2 & ´§8

In order to gather feedback from possible end users at different stages of development, this research will include interviews, focus groups, and usability evaluations with 5-10 participants over the span of 3 months. This research revolves around a mobile application for encouraging increased physical activity, called Starfish. This application will incorporate physical activity goals with social support in order to encourage a sustained increase in physical activity. The Starfish application will run on a smart phone and make use of the internal sensors such as accelerometers to gather information about step counts which will be displayed to small social groups in a fish tank visualization. An example of this visualization is attached. However, this application is in its very initial stages and this research aims to improve the design of Starfish by including end users in the process at this time.

This research will begin with 2-5 individual interviews in order to gather initial requirements. Example questions for individual interviews are attached to this application. These interviews will last no more than 60 minutes.

Once a basic prototype is completed, this will be evaluated in a focus group setting. This will include 1-2 focus groups of 2-3 participants. During each focus group, participants will be given a demo of the application and be asked to discuss how they imagine the features would work within their daily lives. Example questions for a group discussion are attached to this application. These focus groups will last no more than 90 minutes.

Finally, sophisticated prototypes will be evaluated in simple usability evaluations paired with interviews. These informal evaluations will explore the usability, practicality, and the qualitative experience of using

the starfish application in everyday life. This will involve 2-5 participants testing the application over the span for 5-7 days in their daily lives. Participants will be asked to use the application casually over this time in order to gain some experiences with the application and explore its usability in real world scenarios. We will provide them with all of the necessary equipment to complete this evaluation, such as a mobile phone, unlimited data plan, and phone charger. Participants will be provided with support during the informal testing via phone and email and be debriefed during a closing interview.

4. DESCRIBE HOW THE PROCEDURES AFFECT THE PARTICIPANTS

During interviews, participants will be asked about their opinions on mobile health and wellbeing applications.

During focus groups, participants will be given a demonstration of the Starfish application and asked to discuss this application as a group.

During informal usability studies, participants will be given a mobile phone running the application for use in their daily lives. The application will allow participants to set physical activity goals and measure the number of steps they make every day. This information will be displayed abstractly/anonymously in a fish tank visualization. After 5-7 days, we will complete the usability study with an interview and debriefing with the participants individually.

Audio will be recorded during the interviews and focus groups. No video recordings will be taken.

5. STATE WHAT IN YOUR OPINION ARE THE ETHICAL ISSUES INVOLVED IN THE PROPOSAL (SEE BPS ALL SECTIONS)

The main ethical issue with this application is that participants are likely to be interested in the final outcome of the applications that we have co-designed with them. However, our co-design participants will be excluded from future longitudinal evaluations of the completed application to limit bias. In order to address this concern, participants will be provided with the researcher contact details and a website where all the final details of the application and future research will be made available. If appropriate, downloads for the final application will also be made available here.

Another ethical issue is the collection and visualization of physical activity data. All the data collected during the study will only be presented in an anonymous way and stored securely on dcs.gla.ac computers. Participants will be made aware of the purpose of the data collected and informed consent will be essential to participation in this study.

Finally, participants will be asked to increase their physical activity, which could lead to tiredness or exhaustion. It will be made clear to participants both within the information sheet/consent form and within the Starfish application itself that if at ANY time they will tired or unwell to immediately stop participating in this user study and contact their GP if necessary. Although this is not a significant or likely problem since the physical activity we are looking at is simple walking and our population will only include healthy older adults, it will be made clear throughout this research that at no time should walking be difficult or dangerous. Additionally, we will ask participants to only walk in areas or places where they usually walk and are familiar with.

6. SPECIFY THE NATURE OF THE PARTICIPANTS. INDICATE IF THE RESEARCH INVOLVES CHILDREN OR THOSE WITH MENTAL DISABILITIES OR HANDICAP (SEE BPS ´§3) IF SO, EXPLAIN THE STEPS TAKEN TO OBTAIN PERMISSION FROM L.E.A.S, HEADTEACHERS, PARENTS, ETC... GIVE A BRIEF DESCRIPTION HERE AND FILL IN THE CHILDREN RESEARCH ETHICAL PLAN. THE FORM MUST BE UPLOADED TOGETHER WITH THE CONSENT AND INFORMATION FORMS.

The participants will consist of healthy adults over the age of 65 who are interested in increasing their physical activity. We will not recruit any participants from vulnerable populations, such as disabled or sensory impaired persons.

7. STATE IF PAYMENT WILL BE MADE TO SUBJECT

Participants will be paid ´£6 per hour of participation, with a minimum payment of ´£6 for shorter participation sessions.

8. DESCRIBE THE PROCEDURES FOR ADVERTISING, FOR RECRUITING PARTICIPANTS, AND FOR OBTAINING CONSENT FROM PARTICIPANTS (SEE BPS ´§3)

Recruitment will be done using emails and flyers within the local community. Consent will be gained in person before the beginning of each research activity.

9. STATE WHETHER THE PROPOSAL IS IN ACCORD WITH THE BPS CODE OF CONDUCT OR THE ESRC FRAMEWORK OF RESEARCH ETHICS

This proposal is in accord with the BPS Code of Conduct.

10. DESCRIBE HOW THE PARTICIPANTS' ANONYMITY AND CONFIDENTIALITY WILL BE MAINTAINED
(SEE BPS ´§7)

No names, email addresses, or other personally identifying information will be associated with the data collected. No single participantâ s data will be used in isolation or associated in any way with the original participant.

11. DATE ON WHICH PROJECT IS EXPECTED TO BEGIN AND END

This research will begin on 1st March, 2012.

12. LOCATION AT WHICH THE PROJECT WILL BE CARRIED OUT

The interviews and focus groups will take place using conference rooms in the SAWB. Usability studies will be completed in locations of the participantsâ choice.

13. DESCRIBE HOW PARTICIPANTS WILL BE DEBRIEFED AT THE END OF THE EXPERIMENT (THIS MUST INCLUDE THE OPPORTUNITY TO CONTACT THE EXPERIMENTER - OR SUPERVISOR - FOR FEEDBACK ON THE GENERAL OUTCOME OF THE EXPERIMENT) (SEE BPS ´§5 & ´§10)

In each of these co-design activities, participants will be provided with the researchers contact details and

a project website they can visit if they are interested in the results of this research. All debriefing sessions will also include a short discussion of the future directions and goals of the project as a whole.

Starfish Project – Information Sheet

Participant ID: _____

** This sheet will include a subset of the below sections as needed for different parts of this research

The purpose of this research is to incorporate end users into the design and development of a mobile health and wellbeing application called Starfish. User-centred design and co-design activities have been shown to greatly improve the usability and user experience of interactive technologies. During the design and development stages of the Starfish project, we will gather requirements and collect feedback as an iterative process through interviews, focus groups, and informal usability evaluations.

Contact Information

If at any point during this experiment you have a question or comment about this research, don't hesitate to contact us.

Julie Williamson
Room F131 Lilybank Gardens
julie@dcs.gla.ac.uk
0141 330 8430

Stephen Brewster
Room S131 Lilybank Gardens
Stephen.Brewster@glasgow.ac.uk
0141 330 4966

You can also get more information about this work, our goals, and the results of this project at:

http://www.dcs.gla.ac.uk/~julie/starfish

Interviews

In order to gather information about how we should design technology for health and wellbeing, we'll ask you some questions about how you currently manage your physical activity and have a discussion about different ways we could use mobile technology to make this easier. These interviews will be recorded if you are comfortable with us recording audio.

Focus Groups

In order to understand how we can improve the design of our mobile application for health and wellbeing, we want to have a discussion with you as a group about how we should improve this application. We'll start by giving you a demonstration of this application and give you a chance to try it out if you want to see how it works. We'll go on to have a group discussion about how this might work in everyday life, which aspects of the application you like or dislike, and how we could improve this application. These discussions will be will be recorded if you are comfortable with us recording audio.

User Studies

We would like to understand how our application might actually be used in real life by giving you the chance to try our application informally. We will give you a

demonstration of the application and give you a chance to try this out with us and ask any questions you may have. Then, we would like to you to try this out over the span of a week and see how you might use this in everyday life. After you have a chance to try this out, we'll complete a short interview to see how you felt about the application.

The Starfish Application

This research revolves around a mobile application for encouraging increased physical activity, called Starfish. This application incorporates physical activity goals with social support in order to encourage a sustained increase in physical activity. The Starfish application runs on a smart phone and makes use of the internal sensors such as accelerometers to gather information about step counts which will be displayed to your participant group in a fish tank visualization. You will be provided with all the necessary equipment to participate in this study.

The Fish Tank

In the fish tank visualization, you are represented by one of the fish in the fish tank (simply tap the screen to see which fish you are). The color of your fish indicates how close you are to your fitness goal (more information about the indication of the colours based on the results of our previous activities). The bubbles on the screen represent the activity of the group over the past day (more information about how to interpret to bubbles based on our previous activities).

Fitness Goals

You can view or update your physical activity goals in the Starfish application. (More information about how to configure physical activity goals based on our previous activities).

Fitness and Safety

If at any point you feel tired or unwell in any way, please cease participation immediately and contact the researchers listed above or your GP if necessary. At no point during this experiment should you do any physical activity which you find difficult or puts you and any danger of any kind.

When completing any walking or physical activity, please only walk in places which are safe and familiar to you. Do not watch the fish tank while you are walking as this could be dangerous and distracting.

Data Collection

During this experiment, we will be collecting data about the usage of the application and take audio recordings of our discussions. This data will all be anonymized so that no one can link any of the data back to you. Please ask us any questions you have about this data before you give consent to participate.

Funding

This project is funded by the Bupa Foundation, a medical research charity. For more information, please contact us for visit:

http://www.bupafoundation.co.uk/

Starfish Project – Consent Form

Participant ID: _____

After you have read through the information sheet, please ask us any questions you have about this research **before** filling out this consent form. Once you are satisfied with our answers, please tick the boxes below to indicate that you consent to participate in this research.

This form should be entirely anonymous, so please do not write you name or initials on this sheet.

_____ I have received an information sheet about this research and have had all my questions about participation answered.

_____ I consent to participate in this research.

_____ I understand I may withdraw this consent at any time or decline from participating in any part of this experiment.

_____ I understand that I am not required to do any level of physical activity that puts me in any of kind of danger.

_____ I consent to audio recordings during this experiment.

_____ I consent to recording of application usage data while I am participating in this experiment.

General Information

Please feel out the following information if you are comfortable answering these questions.

Gender: _____ Age: _____

How much physical activity do you currently complete in a typical day?

_____

Is there any reason that increased physical activity could be harmful to your health?

_____

REPORT ON ETHICS PROPOSAL
REF# CSE00986 (Version 1)
TITLE: Study Investigating Bimanual Interaction on Tablet Devices
SUBMITTED BY: [redacted], Student
FROM THE: Computing Science/GIST
REVIEWERS: Christoph Scheepers, Joemon Jose, Vincent Macaulay

1. DESCRIBE THE BASIC PURPOSES OF THE PROPOSED RESEARCH

The purpose of this research is to apply Kinematic Chain (KC) Theory to the design of bimanual interactions for tablet devices. Currently, to use a tablet device a user has to either dedicate the non-dominant hand (NDH) to the task of holding the device and interact with the device only using the dominant hand (DH) and the touch screen, or lay the device on a surface and interact bimanually with the touchscreen, thus reducing the flexibility of the device afforded by its hold-able form factor. By using KC Theory to inform the design of tablet interactions we may be able to support bimanual use of the device while it is in the userâ•Žs hands.

The proposed technique involves using both a combination of pressure input and physical dial or touch in order to scroll through a list of data such as an EPG or media library. The interaction will take place with the collections being displayed on a tablet device. The pressure sensor with the NDH will control the rate at which the menu will be scrolled and the physical dial or touch with the DH will control the scrolling.

Ł COMMENT FROM VINCENT MACAULAY: Remove reference to FIMS in the documentation.

2. INDICATE WHO IS FUNDING THE RESEARCH (IF COMMERCIALLY FUNDED, ENSURE THAT PARTICIPANTS ARE INFORMED).

The research is partly funded by Bang & Olufsen.

3. DESCRIBE THE DESIGN OF YOUR EXPERIMENT (E.G. CONDITIONS, NUMBER OF PARTICIPANTS, PROCEDURE AND EQUIPMENT WHERE APPROPRIATE) SEE BPS ´§2 & ´§8

The experiment will be a 2x3 (Scrolling Mode x Pressure Mode) within subjects design so that participants complete three dial and three touch conditions using each of the pressure modes: Dial-No Pressure, Dial-Brake, Dial-Accelerator, Touch-No Pressure, Touch-Brake, Touch-Accelerator. Conditions will be counterbalanced using a Latin square. During the experiment, participants will be asked to select an item from an alphabetically ordered collection of 200 artists in a music library. The independent variables will be the Scrolling Mode (Touch or Dial) and the Pressure Mode (None, Brake, Accelerator), the dependant variables will be the Total Movement Time, Number of Target Crossings and Some Measure of how well utilised the pressure control was. For the study we aim to recruit between 16-25 participants.

The tasks will be carried out using a ViewSonic Viewpad 10 touch screen tablet computer. The dial is a Griffin Technology PowerMate that will be connected to the tablet via usb. The pressure sensor is an Interlinks Electronics force-sensing resistor model 400 and is connected to the tablet over usb via an SAMH Engineering SK7-ExtGPIO01 input/output module. Both the dial and the pressure sensor will be

securely fixed to the tablet in such a way that it allows the participants to comfortably hold the device in both hands while being able to reach the dial and sensor easily.

During the experiment you will be asked to locate and select items from an alphabetically ordered list of musical artist names using several different interaction techniques. You will be given time to familiarise yourself with the techniques before you begin each task.

During the experiment, a box will appear on the screen showing the name of the target artist. The participants will then have to locate that artist in the list and select it by touching the screen. The next artist name will appear automatically when they have selected the answer, or after a time-out period. This process will continue until all artist names have been presented.

Participants will be required to hold the device in both hands without resting it on the table. They will be free to rest their arms on either the table or your legs for comfort. Between conditions they will be given an opportunity to put the device down and rest.

The experiment will take about an hour to complete.

4. DESCRIBE HOW THE PROCEDURES AFFECT THE PARTICIPANTS

Care will be taken to minimise any strain on the participants arms that may be caused by holding the device during the conditions. As outlined above, participants will be able to rest their arms on the table or their legs while carrying out the task (this will be made clear on the information sheet) and will also be given time between conditions to put the device down and rest.

5. STATE WHAT IN YOUR OPINION ARE THE ETHICAL ISSUES INVOLVED IN THE PROPOSAL (SEE BPS ALL SECTIONS)

The ethical issues in this experiment include ensuring the anonymity of participants, ensuring they are properly informed of the nature of the experiment and give proper consent to take part.

Anonymity of participants will be ensured by assigned each participant an ID that will be used when collecting any data, by keeping any paper documents in a locked office and by keeping all digital data on a password protected PC in a locked office.

6. SPECIFY THE NATURE OF THE PARTICIPANTS. INDICATE IF THE RESEARCH INVOLVES CHILDREN OR THOSE WITH MENTAL DISABILITIES OR HANDICAP (SEE BPS ´§3) IF SO, EXPLAIN THE STEPS TAKEN TO OBTAIN PERMISSION FROM L.E.A.S, HEADTEACHERS, PARENTS, ETC... GIVE A BRIEF DESCRIPTION HERE AND FILL IN THE CHILDREN RESEARCH ETHICAL PLAN. THE FORM MUST BE UPLOADED TOGETHER WITH THE CONSENT AND INFORMATION FORMS.

The study will recruit students and staff from the university.

7. STATE IF PAYMENT WILL BE MADE TO SUBJECT

Yes.

8. DESCRIBE THE PROCEDURES FOR ADVERTISING, FOR RECRUITING PARTICIPANTS, AND FOR OBTAINING CONSENT FROM PARTICIPANTS (SEE BPS ´§3)

On being granted ethical approval, permission will be sought to advertise the study over university mailing lists.

Consent will be obtained from participants by getting them to sign a consent form (attached) on which it will be made clear that participants may withdraw at any time without prejudice.

9. STATE WHETHER THE PROPOSAL IS IN ACCORD WITH THE BPS CODE OF CONDUCT OR THE ESRC FRAMEWORK OF RESEARCH ETHICS

The proposal is in accord with the BPS Code of Conduct.

10. DESCRIBE HOW THE PARTICIPANTS' ANONYMITY AND CONFIDENTIALITY WILL BE MAINTAINED
(SEE BPS ´§7)

All participants, upon giving consent to take part, will be assigned an ID. This ID will be used when collecting any data during the experiment. Any paper documents will be kept in a locked office and any digital data will be stored on a password protected PC in a locked office.

11. DATE ON WHICH PROJECT IS EXPECTED TO BEGIN AND END

The project is scheduled to commence week beginning 27th Feb.

12. LOCATION AT WHICH THE PROJECT WILL BE CARRIED OUT

Usability Lab, School of Computing Science, Sir Alwyn Williams Building

13. DESCRIBE HOW PARTICIPANTS WILL BE DEBRIEFED AT THE END OF THE EXPERIMENT (THIS MUST INCLUDE THE OPPORTUNITY TO CONTACT THE EXPERIMENTER - OR SUPERVISOR - FOR FEEDBACK ON THE GENERAL OUTCOME OF THE EXPERIMENT) (SEE BPS ´§5 & ´§10)

Contact details for the experimenter will be given to each participant after the study is complete. Participants will also be given the opportunity to request an overview of the general results obtained in the experiment.

Information Sheet: Bimanual Interaction Study

The aim of this experiment is to investigate the effectiveness of bimanual interaction techniques on a tablet device.

The experiment will take about an hour to complete.

During the experiment you will be asked to locate and select items from an alphabetically ordered list of musical artist names using several different interaction techniques. You will be given time to familiarise yourself with the techniques before you begin each task.

During the experiment, a box will appear on the screen giving the name of the target artist. You will then have to locate that artist in the list and select it by touching the screen. The next artist name will appear automatically when you have selected your answer, or after a time-out period. This process will continue until all artist names have been presented. Please try and answer the questions as accurately as possible. You are required to hold the device in both hands without resting it on the table. You are, however, free to rest your arms on either the table or your legs for comfort. Between conditions you will be given an opportunity to put the device down and rest.

At the end of the experiment you will receive a reward of £6.

All results will be held in strict confidence, ensuring the privacy of all participants. No personal participant information will be stored with the data. Online data will be stored in a password protected computer account; paper data will be kept in a locked office.

Your participation in this experiment will have no effect on your marks for any subject at this, or any other university.

Please note that it is the interaction techniques, not you, that are being evaluated. You may withdraw from the experiment at anytime without prejudice, and any data already recorded will be discarded.

If you have any further questions regarding this experiment, please contact:

[redacted]
School of Computing Science
[redacted] Lilybank Gardens
[redacted]

This research is partly funded by Bang & Olufsen.

This study adheres to the BPS ethical guidelines, and has been approved by the ethics committee of The University of Glasgow (ref: XXXXXX). Whilst you are free to discuss your participation in this study with the researcher, if you would like to speak to someone not involved in the study, you may contact the chair of the FIMS Ethics Committee (http://ethics.ims.gla.ac.uk/).

Participant Consent Form: Bimanual Interaction Study

The aim of this experiment is to investigate the effectiveness of bimanual interaction techniques on a tablet device.

The experiment will take about an hour to complete.

During the experiment you will be asked to locate and select items from an alphabetically ordered list of musical artist names using several different interaction techniques. You will be given time to familiarise yourself with the techniques before you begin each task.

During the experiment, a box will appear on the screen giving the name of the target artist. You will then have to locate that artist in the list and select it by touching the screen. The next artist name will appear automatically when you have selected your answer, or after a time-out period. This process will continue until all artist names have been presented. Please try and answer the questions as accurately as possible. You are required to hold the device in both hands without resting it on the table. You are, however, free to rest your arms on either the table or your legs for comfort. Between conditions you will be given an opportunity to put the device down and rest.

At the end of the experiment you will receive a reward of £6.

All results will be held in strict confidence, ensuring the privacy of all participants. No personal participant information will be stored with the data. Online data will be stored in a password protected computer account; paper data will be kept in a locked office.

Your participation in this experiment will have no effect on your marks for any subject at this, or any other university.

Please note that it is the interaction techniques, not you, that are being evaluated. You may withdraw from the experiment at anytime without prejudice, and any data already recorded will be discarded.

If you have any further questions regarding this experiment, please contact:

[redacted]
School of Computing Science
[redacted] Lilybank Gardens
[redacted]

I have read this information sheet, and agree to voluntarily take part in this experiment:

Name: _____ Email:_____

Signature: _____ Date: _____

If you would like to receive an overview of the results obtained in this experiment, please tick here ☐

This study adheres to the BPS ethical guidelines, and has been approved by the FIMS ethics committee of The University of Glasgow (ref: XXXXXX). Whilst you are free to discuss your participation in this study with the researcher (contactable on 330 4484), if you would like to speak to someone not involved in the study, you may contact the chair of the FIMS Ethics Committee (http://ethics.ims.gla.ac.uk/).

REPORT ON ETHICS PROPOSAL
REF# CSE00998 (Version 1)
TITLE: The Invisible college
SUBMITTED BY: Dr Hayden Lorimer, Reader
FROM THE: GES
REVIEWERS: Christoph Scheepers, Hester Parr, Paddy O'Donnell

1. DESCRIBE THE BASIC PURPOSES OF THE PROPOSED RESEARCH

â THE INVISIBLE COLLEGE: BUILDING COMMUNITIES OF CREATIVE PRACTICEâ
To hold three day-long workshops involving academics, policy makers, artists, activists, and local people, in a programme of arts-based activities (walking, surveying, mapping and recording) in an outdoor landscape setting (the Kilmahew woodlands, near Cardross, Dumbartonshire). The site, and peopleâ s reactions to it, experiences and memories of it, will be documented using audio-visual media. The precise mix of media used will be determined by the participants and the equipment they bring with them, but will include audio recording and photography, and may also to include videos and drawings. One of the outputs of the project will be an audiowork using a range of recorded sounds that will be made available to future visitors to the project site as an aid to site interpretation.

2. INDICATE WHO IS FUNDING THE RESEARCH (IF COMMERCIALLY FUNDED, ENSURE THAT PARTICIPANTS ARE INFORMED).

Arts and Humanities Research Council

3. DESCRIBE THE DESIGN OF YOUR EXPERIMENT (E.G. CONDITIONS, NUMBER OF PARTICIPANTS, PROCEDURE AND EQUIPMENT WHERE APPROPRIATE) SEE BPS ´§2 & ´§8

Around 40 participants will attend each of the three workshops. Participants will be invited to work in small groups on directed tasks (walking, surveying, mapping, recording, photographing, digging). The equipment necessary for undertaking these site-specific tasks will be supplied by the academic research project team.

4. DESCRIBE HOW THE PROCEDURES AFFECT THE PARTICIPANTS

The research is likely have beneficial effects arising from undertaking healthy, communal activities in an attractive out-of-door setting.

5. STATE WHAT IN YOUR OPINION ARE THE ETHICAL ISSUES INVOLVED IN THE PROPOSAL (SEE BPS ALL SECTIONS)

Informed consent will need to be obtained from all workshop participants confirming their willingness for audio-visual data arising from the workshops (e.g. sound recordings, video, photographs) to be collected and used in the research outputs. This is particularly important because these media have different implications in relation to anonymity than more traditional qualitative research methods.
All participants will also need to be made aware of the project aims, and the respective roles of academic project team members, and the project partner organisation (NVA, a registered public arts charitable

organisation).

6. SPECIFY THE NATURE OF THE PARTICIPANTS. INDICATE IF THE RESEARCH INVOLVES CHILDREN OR THOSE WITH MENTAL DISABILITIES OR HANDICAP (SEE BPS ´§3) IF SO, EXPLAIN THE STEPS TAKEN TO OBTAIN PERMISSION FROM L.E.A.S, HEADTEACHERS, PARENTS, ETC... GIVE A BRIEF DESCRIPTION HERE AND FILL IN THE CHILDREN RESEARCH ETHICAL PLAN. THE FORM MUST BE UPLOADED TOGETHER WITH THE CONSENT AND INFORMATION FORMS.

The participants at the workshops will include:

(1) Local residents from the area surrounding our chosen site, particularly the towns are Cardross and Renton.
(2) Invited visitors, including academics, artists, architects, writers and stakeholders from public and third sector organisations.
Given the nature of the site â an outdoor woodland location with limited on-site amenities â the project does not have the resources to cater for those with disabilities or special access needs. Participation will be by invitation, and invitations will only be extended to people who are judged to be capable of full participation in the workshops, e.g. capable of understanding and carrying out the planned activities; fit and able to access the site, bearing in mind the terrain, access routes and distance to nearby amenities. For these reasons, participants will not include children or those with mental difficulties or handicap.

7. STATE IF PAYMENT WILL BE MADE TO SUBJECT

No payment will be made for participation. Participation will be on a voluntary basis.

8. DESCRIBE THE PROCEDURES FOR ADVERTISING, FOR RECRUITING PARTICIPANTS, AND FOR OBTAINING CONSENT FROM PARTICIPANTS (SEE BPS ´§3)

Recruitment for participation will take place through direct invitation, based on existing contacts or links established by either the project team members, or earlier involvement of the project partner organisation (NVA) in the local communities of Cardross and Renton, Dumbartonshire. For each workshop, participantâ s informed consent will be obtained using (i) an information sheet, sent out before the workshop, explaining the purpose and intention of the event, and the project teamâ s plan to record the event usual sound and visual technologies, and (ii) a consent form, handed out at the start of the workshop, along with further copies of the information sheet for those who wish to re-read it, and project staff verbally reiterating that consent is voluntary, and offering to answer any questions. Where deemed necessary for ensuring informed consent, these processes will be supplemented by verbal discussions with prospective participants prior to the workshop, either face-to-face or over the telephone, to reinforce the written information and offer an opportunity to ask questions. This may be particularly useful with members of the local communities, who are likely to be unfamiliar with this kind of research approach and may therefore benefit from some additional discussion beforehand.

9. STATE WHETHER THE PROPOSAL IS IN ACCORD WITH THE BPS CODE OF CONDUCT OR THE ESRC FRAMEWORK OF RESEARCH ETHICS

The proposal is in accord with the ESRC framework of research ethics

10. DESCRIBE HOW THE PARTICIPANTS' ANONYMITY AND CONFIDENTIALITY WILL BE MAINTAINED
(SEE BPS ´§7)

The mix of media that will be used for the project documentation mean that anonymity in research outputs cannot be offered to those who consent to be documented. In advance of each workshop all participants will be fully informed, via the information sheet, consent form and surrounding verbal discussions, about the nature of the planned documentation, the likely outputs and uses of this documentation, and the fact that they may be identifiable within it. Participants will be informed that they may be identifiable if they opt to appear in documentation, and will be invited to discuss any concerns that they may have about this. The consent process, including the consent form and surrounding discussions, will make explicit the full range of possible future uses of the media (e.g. for publication, hosted online, in exhibitions and so on) and participants will have the opportunity to opt in or out of each aspect, with a list of â yes/noâ questions on the consent form. These agreements will then be used to shape the recording of data (avoiding recording participants who have not given consent) and the editing and presentation of data (ensuring that participants who have opted out do not appear in any outputs; for example, if they have been photographed accidentally, they will either be cropped out or the photo will be erased). In this way, participants who wish to preserve their anonymity will still be able to take part in the project.
Participants will also be offered a copy of any data collected in which they feature, so that, if they wish, they will be able to see and hear how they have been recorded. In these cases, participants will be invited to express any concerns that they have. For example, if they feel, retrospectively, that the data compromise their privacy, and that they wish to withdraw their consent, then those data will be erased from the project data set.
The project concerns the past, present and future of a site, and is unlikely to create data that are particularly sensitive or about which privacy will be a major concern. Ultimately, however, if at the recruitment stage a participant expresses significant concerns about anonymity and confidentiality, such that even the provisions above do not provide reassurance, then non-participation will be the best solution: we will politely withdraw the invitation, and not pursue that personâ s involvement in the project.
Event documentation (photographs; film; sound recordings) for which consent for use has been secured will be made available through the dedicated websites of two project partner organisations (www.nva.org.uk ; www.rgs.org.uk). Both websites are managed and controlled solely by organisation staff, and material for website content will be supplied only by the project research team.
In order to maintain contact, the personal details of workshop attendees will be retained. To ensure security of these data they will be stored only on a password protected main PC (and back-up hard drive) located in the University office of the project P-I.

11. DATE ON WHICH PROJECT IS EXPECTED TO BEGIN AND END

23rd March 2012.

12. LOCATION AT WHICH THE PROJECT WILL BE CARRIED OUT

The grounds of the former Kilmahew Estate, near Cardross (Argyll and Bute).

13. DESCRIBE HOW PARTICIPANTS WILL BE DEBRIEFED AT THE END OF THE EXPERIMENT (THIS MUST INCLUDE THE OPPORTUNITY TO CONTACT THE EXPERIMENTER - OR SUPERVISOR - FOR FEEDBACK ON THE GENERAL OUTCOME OF THE EXPERIMENT) (SEE BPS ´§5 & ´§10)

The research project is intended to foster and cultivate on-going relations with workshop participants after each workshop event. Participants will be asked to complete a short event evaluation questionnaire, which will be used for the project team to undertake their own self-evaluation exercise after workshops 1, 2 and 3.
Ongoing contact with participants will be maintained via an email network of all participants (with the option for people to opt out if they wish). This will be used to circulate information about research outputs as they unfold. Feedback on these outputs will be actively sought from participants, at both draft and final stages. This will help to ensure that the research represents participants in ways that they are happy with. Participants will be invited to contact the team if they are unhappy with how they have been portrayed, and appropriate actions can then be taken accordingly, e.g. apologies issued and data deleted or edited to reflect participantsâ concerns.

THE INVISIBLE COLLEGE
kilmahew / ST PETER'S

INFORMATION SHEET

The Invisible College

What is this project about?

The Invisible College is a research project. It involves the Universities of Glasgow, Edinburgh and Strathclyde, arts charity NVA and the Royal Geographical Society.

NVA wants to give a new lease of life to the Kilmahew woodlands and St. Peter's Seminary. Over the last two years, NVA has been working with people who are interested in the site to plan for its future, such as local residents, architects, academics and funders.

The Invisible College project is the next stage of these activities.

Three one-day workshops will be held at the site during 2012. The workshops will bring together people who live near to Kilmahew, and invited guests with an interest in the site, such as academics, artists, architects and writers from the UK and overseas.

The workshops will give people a chance to spend time at the site, discuss it, learn more about it, and think about what its future should be.

The Invisible College is funded by the Arts and Humanities Research Council.

What is involved?

If you come to one of the workshops, you will be invited to take part in creative activities such as walking, surveying, mapping, photographing, sound recording and digging. You are invited to bring equipment to document these activities (e.g. camera, sketchbook, notepad, camcorder, GPS). Members of the research project team, and NVA staff, will also document the workshop activities using cameras and sound recording equipment.

The recordings may be used for:

- books and other publications
- In public exhibitions, such as in museums or galleries
- In talks or presentations
- In performances or art works
- For teaching, such as in schools or universities
- On the internet, on websites
- For radio, TV or in newspapers
- For DVDs, CDs or MP3s

What are my rights and responsibilities?

At the start of the workshop, you will be given a form on which you can tell us whether or not you are willing to be recorded, and for what purposes. If you wish to opt out of all or some of the recording, you are free to do so. It is up to you.

It at the start of the event another participant(s) have expressed a wish not to be recorded, you must respect this in your own documentation of the workshop. If you accidentally record someone who does not wish to be recorded, you must delete your recordings.

We ask that, at the end of the workshop, you give copies of any documentation you have created to the research team. This may be used in the research project outputs, such as publications or on websites. You will retain copyright on anything you have created. Documentation will be shared under a Creative Commons license. This means that, in any future use, you will be credited, but will not be entitled to receive payment.

Are there any risks?

The workshops will take place outdoors, in woodlands.

The biggest risk is from the weather. If you come to a workshop, we ask that you bring warm, fully waterproof clothing. The site is often muddy so you will need to bring strong waterproof footwear such as wellies or walking boots.

Some of the buildings in the woods are ruined, and care is needed. We will explain the risks involved and the necessary safety precautions at the start of the workshop, and you will be expected to follow the instructions given. We will provide appropriate safety equipment for those who wish to enter the Seminary buildings, and you must use this equipment as instructed.

Accidents can sometimes happen in outdoor environments. We ask you to take care when moving around the site. We will have a trained first aider and first aid kit on hand at the site should the need arise.

Who is NVA?

NVA is a registered Scottish arts charity. NVA makes large outdoor public artworks and performances. These invite people to actively engage with landscapes in new ways. Public and community engagement is at the heart of NVA's work.

Further details about NVA can be found on their website:

http://www.nva.org.uk

Who can I contact about the research project?

If you would like more information, you can contact Dr Hayden Lorimer, University of Glasgow, at: Hayden.Lorimer@glasgow.ac.uk or Dr Michael Gallagher, University of Glasgow, at: Michael.Gallagher@glasgow.ac.uk

THE INVISIBLE COLLEGE
kilmahew / ST PETER'S

The Invisible College: Consent Form

We would like you to take part in a research project. It is being run by the University of Glasgow. If you take part, you may be recorded using photographs, sound recording or video.

You do not have to take part. It is your choice.

If you decide to take part, you have the right to change your mind later. If you wish, we will give you a copy of any recordings that we make of you. If there are parts you don't like then we will delete them.

For this project, are you happy to…
(next to each part please tick for yes ✓ or cross for no ×)

- Be photographed?
- Have your voice recorded?
- Be recorded on video?
- Be written about?
- Have your name used?

Are you happy for recordings of you to be used:

- In books and other publications?
- In public exhibitions, such as in museums or galleries?
- In talks or presentations?
- In performances or art works?
- For teaching, such as in schools or universities?
- On the internet, on websites?
- For radio, TV or in newspapers?
- For DVDs, CDs or MP3s?

Name: _____

Signature: _____

Date: _____

If you have any questions, you can contact Michael Gallagher. He is one of the researchers on the project. Email Michael.Gallagher@glasgow.ac.uk or phone 0131 553 5263

Thankyou!

REPORT ON ETHICS PROPOSAL
REF# CSE00988 (Version 1)
TITLE: Validation of Experimental, Clinical and Naturalistic Measures of Prospective Memory
SUBMITTED BY: [redacted] PhD Student
FROM THE: Psychology Sch & Academic Unit of Mental Health
REVIEWERS: Helen C. Purchase, Simon Garrod

1. DESCRIBE THE BASIC PURPOSES OF THE PROPOSED RESEARCH

The purpose of this research is to examine the validity of a computerised laboratory task of prospective memory (PM) that has been designed to be suitable for use in conjunction with EEG recording. This computerised task is being currently used in our laboratory (ETHICS-CSE00821). Assessment of prospective Memory will be performed through table-top neuropsychological assessments, questionnaires and computerised PM task.

2. INDICATE WHO IS FUNDING THE RESEARCH (IF COMMERCIALLY FUNDED, ENSURE THAT PARTICIPANTS ARE INFORMED).

Self Funding.

3. DESCRIBE THE DESIGN OF YOUR EXPERIMENT (E.G. CONDITIONS, NUMBER OF PARTICIPANTS, PROCEDURE AND EQUIPMENT WHERE APPROPRIATE) SEE BPS ´§2 & ´§8

The experiment will be conducted in the School of Psychology in Hillhead Street. 24 healthy adults, between 18 and 40 years old, are expected to take part in the study (∝=0.05, 1-β = 0.9, using effect size calculated based on previous similar studies).
A set of clinical and questionnaire PM tests and a computerised PM task will be completed by the participants in 2 sessions of up to 90 minutes each. In the first session, the computerised PM task will be applied, followed by the Cambridge Prospective Memory Test, CAMPROMPT. In the second session, participants will complete the second part of the computerised PM task and the PM questionnaire, PRMQ (attached). Each computerised task lasts 40 minutes. The CAMPROMPT and the PRMQ each last 20 to 30 minutes on average.

Ł COMMENT FROM HELEN C. PURCHASE: Does each session really have to be 90 minutes long?

4. DESCRIBE HOW THE PROCEDURES AFFECT THE PARTICIPANTS

There are no major risks associated with this study. It is not anticipated that participants will experience any significant stress or discomfort as a result of participating. Participants will receive clear information about the instructions of the test and will by guided during the process.

5. STATE WHAT IN YOUR OPINION ARE THE ETHICAL ISSUES INVOLVED IN THE PROPOSAL (SEE BPS ALL SECTIONS)

We do not see any ethical issues are involved in this experiment.

Ł COMMENT FROM HELEN C. PURCHASE: I think 2 x 90 minutes is a significant demand on the participants

6. SPECIFY THE NATURE OF THE PARTICIPANTS. INDICATE IF THE RESEARCH INVOLVES CHILDREN OR THOSE WITH MENTAL DISABILITIES OR HANDICAP (SEE BPS ´§3) IF SO, EXPLAIN THE STEPS TAKEN TO OBTAIN PERMISSION FROM L.E.A.S, HEADTEACHERS, PARENTS, ETC... GIVE A BRIEF DESCRIPTION HERE AND FILL IN THE CHILDREN RESEARCH ETHICAL PLAN. THE FORM MUST BE UPLOADED TOGETHER WITH THE CONSENT AND INFORMATION FORMS.

Healthy adults volunteers, the majority of whom will be University students.

7. STATE IF PAYMENT WILL BE MADE TO SUBJECT

A standard payment of ´£6 per hour will be made to subjects.

Ł COMMENT FROM HELEN C. PURCHASE: Please make sure that the participants are informed in the information sheet and consent form that they will still be paid per hour even if they decide to withdraw midway during the experiments

8. DESCRIBE THE PROCEDURES FOR ADVERTISING, FOR RECRUITING PARTICIPANTS, AND FOR OBTAINING CONSENT FROM PARTICIPANTS (SEE BPS ´§3)

Participants will be recruited by adverts detailing the purpose and duration of the study. Information sheets will be given to each participant. Written informed consent will be obtained from participants prior to the study.

9. STATE WHETHER THE PROPOSAL IS IN ACCORD WITH THE BPS CODE OF CONDUCT OR THE ESRC FRAMEWORK OF RESEARCH ETHICS

This study is in accord with the BPS code of conduct.

10. DESCRIBE HOW THE PARTICIPANTS' ANONYMITY AND CONFIDENTIALITY WILL BE MAINTAINED
(SEE BPS ´§7)

All data will be coded using an ID number so that participant names will not be recorded. Electronic data will be stored on a password protected University of Glasgow computer server and physical data will be stored in a locked filing cabinet. The data of this study will be only accessible by the research team of the project.

11. DATE ON WHICH PROJECT IS EXPECTED TO BEGIN AND END

February 2012

12. LOCATION AT WHICH THE PROJECT WILL BE CARRIED OUT

Department of Psychology, University of Glasgow, 58 Hillhead Street.

13. DESCRIBE HOW PARTICIPANTS WILL BE DEBRIEFED AT THE END OF THE EXPERIMENT (THIS MUST INCLUDE THE OPPORTUNITY TO CONTACT THE EXPERIMENTER - OR SUPERVISOR - FOR FEEDBACK ON THE GENERAL OUTCOME OF THE EXPERIMENT) (SEE BPS ´§5 & ´§10)

At the end of the experiment the investigator will give any necessary information to complete the participantâ•Žs understanding of the purpose, procedures or any other aspect of the research. Participants will be given the opportunity to make questions. Participants will receive payment at the end of the experiment, and they will be asked to sign a receipt. They will be given contact details of the investigator and supervisors on the Participant Information Sheet (attached), as well as details of someone no directly involved in the research.

REPORT ON ETHICS PROPOSAL
REF# CSE00988 (Version 2)
TITLE: Validation of Experimental, Clinical and Naturalistic Measures of Prospective Memory
SUBMITTED BY: [redacted] PhD Student
FROM THE: Psychology Sch & Academic Unit of Mental Health
REVIEWERS: Helen C. Purchase, Marie-Helene Grosbras, Simon Garrod

1. DESCRIBE THE BASIC PURPOSES OF THE PROPOSED RESEARCH

The purpose of this research is to examine the validity of a computerised laboratory task of prospective memory (PM) that has been designed to be suitable for use in conjunction with EEG recording. This computerised task is being currently used in our laboratory (ETHICS-CSE00821). Assessment of prospective Memory will be performed through table-top neuropsychological assessments, questionnaires and computerised PM task.

2. INDICATE WHO IS FUNDING THE RESEARCH (IF COMMERCIALLY FUNDED, ENSURE THAT PARTICIPANTS ARE INFORMED).

Self Funding.

3. DESCRIBE THE DESIGN OF YOUR EXPERIMENT (E.G. CONDITIONS, NUMBER OF PARTICIPANTS, PROCEDURE AND EQUIPMENT WHERE APPROPRIATE) SEE BPS ´§2 & ´§8

The experiment will be conducted in the School of Psychology in Hillhead Street at Glasgow University. A total of 24 healthy adults, aged between 18 and 40 years old, are expected to take part in the study (Sample size was calculated using ´μ=0.05 and 1-b = 0.9 reported in previous studies.

The participants will complete clinical prospective Memory assessments and a computerised PM task within 2 sessions of 1 hour each approximately, with one week between the sessions.

Description of Session 1: This session includes two parts, Computerised Task PM1 and CAMPROMPT. The total duration of session 1 will be approximately 65 minutes. The experiment descriptions are given below.
A. Computerised task PM1:
a. Duration: 35 minutes (considering instructions and breaks).
b. Specifications: This experiment includes two parts (baseline and PM blocks).
i. 8 Baseline Blocks of 20 trials. Approx. duration 5min (Each trial lasts 2 seconds).
ii. 30 PM blocks of 20 trials. Approx. duration 20min (Each trial lasts 2 seconds).
iii. Participants will have short breaks after every block.

B. Cambridge Prospective Memory Test assessment, CAMPROMPT:
a. Duration: 30 minutes
b. Specification: Before initiating this assessment participants will have 5 minutes of recovery to avoid fatigue. During the following 25 minutes participants will be asked to perform a number of paper and

pencil tasks (see attachment for a detailed description).

Description of Session 2: This session includes two parts, Computerised Task PM2 and PRMQ. The total duration of session 2 will be approximately 50 minutes. The experiment descriptions are given below.
A. Computerised task PM2:
a. Duration: 35 minutes (considering instructions and breaks).
b. Specifications:
i. 8 Baseline Blocks of 20 trials. Approx. duration 5min (Each trial lasts 2 seconds).
ii. 30 PM blocks of 20 trials. Approx. duration 20min (Each trial lasts 2 seconds).
iii. Participants will have short breaks after every block.

B. Prospective and Retrospective Memory Questionnaire, PRMQ:
a. Duration: 15 minutes.
b. Specification: Before initiating this assessment participants will have 5 minutes of recovery to avoid fatigue. This questionnaire takes 10 minutes approximately to be responded (see attachment).

4. DESCRIBE HOW THE PROCEDURES AFFECT THE PARTICIPANTS

There are no major risks associated with this study. It is not anticipated that participants will experience any significant stress or discomfort as a result of participating. Participants will receive clear information about the instructions of the test and will by guided during the process.

5. STATE WHAT IN YOUR OPINION ARE THE ETHICAL ISSUES INVOLVED IN THE PROPOSAL (SEE BPS ALL SECTIONS)

We do not see any ethical issues involved in this experiment.

6. SPECIFY THE NATURE OF THE PARTICIPANTS. INDICATE IF THE RESEARCH INVOLVES CHILDREN OR THOSE WITH MENTAL DISABILITIES OR HANDICAP (SEE BPS ´§3) IF SO, EXPLAIN THE STEPS TAKEN TO OBTAIN PERMISSION FROM L.E.A.S, HEADTEACHERS, PARENTS, ETC... GIVE A BRIEF DESCRIPTION HERE AND FILL IN THE CHILDREN RESEARCH ETHICAL PLAN. THE FORM MUST BE UPLOADED TOGETHER WITH THE CONSENT AND INFORMATION FORMS.

Healthy adults volunteers, the majority of whom will be University students.

7. STATE IF PAYMENT WILL BE MADE TO SUBJECT

A standard payment of ´£6 per hour will be made to subjects.

8. DESCRIBE THE PROCEDURES FOR ADVERTISING, FOR RECRUITING PARTICIPANTS, AND FOR OBTAINING CONSENT FROM PARTICIPANTS (SEE BPS ´§3)

Participants will be recruited by adverts detailing the purpose and duration of the study. Information sheets will be given to each participant. Written informed consent will be obtained from participants prior to the study.

9. STATE WHETHER THE PROPOSAL IS IN ACCORD WITH THE BPS CODE OF CONDUCT OR THE ESRC FRAMEWORK OF RESEARCH ETHICS

This study is in accord with the BPS code of conduct.

10. DESCRIBE HOW THE PARTICIPANTS' ANONYMITY AND CONFIDENTIALITY WILL BE MAINTAINED
(SEE BPS ´§7)

All data will be coded using an ID number so that participant names will not be recorded. Electronic data will be stored on a password protected University of Glasgow computer server and physical data will be stored in a locked filing cabinet. The data of this study will be only accessible by the research team of the project.

11. DATE ON WHICH PROJECT IS EXPECTED TO BEGIN AND END

February 2012

12. LOCATION AT WHICH THE PROJECT WILL BE CARRIED OUT

Department of Psychology, University of Glasgow, 58 Hillhead Street.

13. DESCRIBE HOW PARTICIPANTS WILL BE DEBRIEFED AT THE END OF THE EXPERIMENT (THIS MUST INCLUDE THE OPPORTUNITY TO CONTACT THE EXPERIMENTER - OR SUPERVISOR - FOR FEEDBACK ON THE GENERAL OUTCOME OF THE EXPERIMENT) (SEE BPS ´§5 & ´§10)

At the end of the experiment the investigator will give any necessary information to complete the participantâ•Žs understanding of the purpose, procedures or any other aspect of the research. Participants will be given the opportunity to make questions. Participants will receive payment at the end of the experiment, and they will be asked to sign a receipt. They will be given contact details of the investigator and supervisors on the Participant Information Sheet (attached), as well as details of someone no directly involved in the research.

University of Glasgow | School of Psychology

PARTICIPANT INFORMATION SHEET

Validation of an experimental computerised prospective memory task.

Invitation

You are being invited to participate in a research study. Before you decide, please read the following carefully. This sheet contains information about why the research is being done and the procedures that it will involve. If you have any questions or need any explanation do not hesitate to ask.
Thank you.

Purpose of the study

To remember what you have to do in the future is a central ability in our daily life. We frequently find ourselves in the situation where we cannot do something immediately, but have to do it sometime later. For example, perhaps whilst brushing your teeth in the morning you think, "I'm running out of toothpaste, I must go to the supermarket on the way back home". Perhaps you have to give a message to one of your friends and think, "I will write an email to my friend the next time I check my mailbox". These are all examples of 'Prospective Memory' or the ability to carry out an intended action after a delay. Although we all make errors in prospective remembering from time to time, brain injury and other neurological conditions increase the likelihood of making such errors, causing difficulties in everyday life. In order to better understand how prospective memory may become impaired, and how we might rehabilitate people with deficits in prospective memory, we need a better understanding of how this cognitive process works normally.

This research is aimed at explore if a computerized experimental prospective memory task is able to resemble real situations in which prospective memory is used. The computerized task will therefore study the cognitive processes that underlie prospective memory.

Why have I been chosen?

Healthy adults between the ages of 18 and 40 years of age with no history of brain injury have been invited to take part in the study.

Do I have to take part?
Taking part is voluntary. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. This will not affect your medical care or legal rights.

What is involved if I decide to take part?
You will be asked to be involved in some simple tests and tasks. For the computer task you will make a judgment about whether an item you are seeing is similar to a previous item. Responses will be given by pressing a button on a response pad. For the tests you will be invited to solve a series of quizzes and puzzles while new specific task are introduced. Finally you will answer a memory questionnaire about everyday life.

The experiment will be completed in two sessions of 90 minutes. Each session will include a computerized task, memory test and questionnaires. You can always omit questions that you do not want to answer. The sessions will be scheduled according participants availability in a period of two weeks.

What are the possible risks/side effects of taking part?
There are no known or foreseeable risks or side effects associated with conventional computerized tasks. However, to avoid you feeling uncomfortable through needing to sit still throughout the experiment, we will ensure enough breaks which you can use to move around.

Benefits of taking part
We will reimburse you for your time and travel. There are no direct benefits to participating, but you will make an important contribution to the study of cognitive processes necessary for independent living. We hope this will help us to develop strategies aimed at helping people affected by brain injury or other neurological conditions.

What will happen to the results of the research study?
The information collected will form part of a doctoral (PhD) and Master (MSc) thesis at the University of Glasgow, may contribute to one or more publications and may be presented at conferences. It will not be possible to identify you from the data or from any reports or publications.

Will my taking part in this study be kept confidential?
Any information collected about you during this study will be kept strictly confidential. Your name or any other personal information will be removed and results will be coded and treated confidentially. If published, you will not be identifiable.

Can I ask questions about the research project?
You may ask more questions about the study at any time - before, during and after the study. The investigator(s) will provide their telephone number, so that they are available to answer your questions or concerns about the study. Please do not hesitate to ask the experimenter if there are any points about the study that remain unclear to you.

Can the investigators interrupt the study?
The research may be interrupted by the investigators at any time and for several possible reasons such as new selection criteria, for example.

Who is organizing and paying for the research?
This research study is organised by [redacted] and [redacted] a Master Research Student and Doctoral Research Student at the University of Glasgow, respectively. Professor Jonathan Evans and Dr Kerry Kilborn from the University of Glasgow supervise this research.

Will I receive a financial compensation?
You will receive compensation of £6 per hour for your participation to this study. This research study has been approved by the Ethics Committee of the Faculty of Information and Mathematical Sciences at University of Glasgow (ETHICS-CSE00988).

Contact for Further Information
If at any time you would like to ask a question about any aspect of the research or if you would like to receive more information, please contact

[redacted]

[redacted]

Professor Jonathan Evans Telephone: 0141 211 3978
E-mail: Jonathan.Evans@glasgow.ac.uk

Dr Kerry Kilborn Telephone: 01413304686
E-mail: kerry.kilborn@glasgow.ac.uk

If you would like to contact someone who is not directly conducting the study, please contact

Professor Thomas McMillan Telephone: 0141 211 3938
E-mail: Thomas.McMillan@glasgow.ac.uk

University of Glasgow | School of Psychology

PARTICIPANT INFORMED CONSENT FORM

Validation of an experimental computerised prospective memory task.

I confirm that I have read and understood the Information Sheet for the study declared in the header and have had the opportunity to ask questions.	☐
The study has been explained to me, and I understand the explanation given and what my participation will involve.	☐
I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reasons, without my medical care or legal rights being affected.	☐
I understand that the study is not a diagnostic and would have no potential for detecting an abnormality in my cognitive functions	☐
I confirm that I know that the information given in this experiment is confidential and If published, will not be identifiable	☐

I have initialled the above boxes myself and I freely agree to take part in the study.

_____

Signature of volunteer

Name: _____ **Date:**_____/_____/_____

_____

Signature of Investigator (Witness)

Name: _____ **Date:**_____/_____/_____

SIGNING THIS FORM DOES NOT COMMIT YOU TO THE STUDY.
You will be given a copy of the Patient Participant Information Sheet to take home with you. If at any time during the study you would like to ask a question about it, please contact [redacted] or [redacted]

REPORT ON ETHICS PROPOSAL
REF# CSE00990 (Version 1)
TITLE: A Functional Magnetic Resonance Imaging (fMRI) Study: Watching Dance.
SUBMITTED BY: Frank Pollick, Professor
FROM THE: Psychology
REVIEWERS: Aleksandra Vuckovic, Monika Harvey, Paddy O'Donnell

1. DESCRIBE THE BASIC PURPOSES OF THE PROPOSED RESEARCH

This is a standard fMRI study. The research will investigate the relationship between perceived aesthetics of dance and brain activity. There has been much activity in studying the aesthetic response to static images, however little is known about the brain processes for viewing dynamic displays.

2. INDICATE WHO IS FUNDING THE RESEARCH (IF COMMERCIALLY FUNDED, ENSURE THAT PARTICIPANTS ARE INFORMED).

The research is funded by the lab of Professor Frank Pollick with an additional contribution from the School of Psychology/ CCNI.

3. DESCRIBE THE DESIGN OF YOUR EXPERIMENT (E.G. CONDITIONS, NUMBER OF PARTICIPANTS, PROCEDURE AND EQUIPMENT WHERE APPROPRIATE) SEE BPS ´§2 & ´§8

The main fMRI experiment has 3 conditions which are each comprised of an 80 second video each showing a different style of ballet dance. All 18 participants will see every condition in a counterbalanced fashion. In addition control fMRI data will be obtained to aid in the interpretation of the effects of motion, eye movement and aesthetic preferences.

The entire fMRI experiment will last approximately 45 minutes.

Following the fMRI experiment participant will be given a behavioural experiment where they view the same 3 conditions again and are asked to report their aesthetic preferences using a slider task. This will last approximately 20 minutes.

4. DESCRIBE HOW THE PROCEDURES AFFECT THE PARTICIPANTS

Some effects are described in the standard fMRI procedure. In addition some participants do not find the task interesting and thus might have trouble completing the full session. Any participant who does not want to proceed will be allowed to discontinue participation.

5. STATE WHAT IN YOUR OPINION ARE THE ETHICAL ISSUES INVOLVED IN THE PROPOSAL (SEE BPS ALL SECTIONS)

Ensuring participants are comfortable in the scanner and are aware that they can withdraw at any time.

6. SPECIFY THE NATURE OF THE PARTICIPANTS. INDICATE IF THE RESEARCH INVOLVES CHILDREN OR THOSE WITH MENTAL DISABILITIES OR HANDICAP (SEE BPS ´§3) IF SO, EXPLAIN THE STEPS TAKEN TO OBTAIN PERMISSION FROM L.E.A.S, HEADTEACHERS, PARENTS, ETC... GIVE A BRIEF DESCRIPTION HERE AND FILL IN THE CHILDREN RESEARCH ETHICAL PLAN. THE FORM MUST BE UPLOADED TOGETHER WITH THE CONSENT AND INFORMATION FORMS.

Participants will be typical adults.

COMMENT FROM ALEKSANDRA VUCKOVIC: Please specify 'typical'

7. STATE IF PAYMENT WILL BE MADE TO SUBJECT

A standard payment of ´£6 per hour will be made to subjects.

8. DESCRIBE THE PROCEDURES FOR ADVERTISING, FOR RECRUITING PARTICIPANTS, AND FOR OBTAINING CONSENT FROM PARTICIPANTS (SEE BPS ´§3)

Participants will be recruited from the participant database.

COMMENT FROM ALEKSANDRA VUCKOVIC: Is this an existing database?

9. STATE WHETHER THE PROPOSAL IS IN ACCORD WITH THE BPS CODE OF CONDUCT OR THE ESRC FRAMEWORK OF RESEARCH ETHICS

Both the standard fMRI experiment and the behavioural experiment satisfy the BPS Code of Conduct

10. DESCRIBE HOW THE PARTICIPANTS' ANONYMITY AND CONFIDENTIALITY WILL BE MAINTAINED
(SEE BPS ´§7)

Participantsâ anonymity will be assured by only referring to a subject number during analysis. Records of personal details will only be kept if subjects agree (for example to contact them for other studies).

11. DATE ON WHICH PROJECT IS EXPECTED TO BEGIN AND END

16th of February 2012

12. LOCATION AT WHICH THE PROJECT WILL BE CARRIED OUT

The standard fMRI experiment will be performed in the fMRI suite of CCNi. The behavioural experiment will take place in room 414a. Both are in the Psychology Department building.

13. DESCRIBE HOW PARTICIPANTS WILL BE DEBRIEFED AT THE END OF THE EXPERIMENT (THIS MUST INCLUDE THE OPPORTUNITY TO CONTACT THE EXPERIMENTER - OR SUPERVISOR - FOR FEEDBACK ON THE GENERAL OUTCOME OF THE EXPERIMENT) (SEE BPS ´§5 & ´§10)

After the experiment participants will be briefed about the purpose of the research. They are given contact details of the investigator on the Study Consent Form (attached) for further questions and concerns. If

they are interested, they will be given a more detailed description of the experiment and its aims.

Study Information Sheet - MRI

Title of Project: A Functional Magnetic Resonance Imaging (fMRI) Study: Watching Dance.

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. If there is anything that is not clear or if you would like more information, please ask us. Take time to decide whether or not you wish to take part.
Thank you for reading this.

What is the purpose of this study?
This study will use functional magnetic resonance imaging (fMRI) to take pictures of the activity of your brain while viewing videos and images. We are interested in the brain mechanisms of how these displays are evaluated.

Why have I been chosen?
You have been chosen because you have already volunteered to participate in the Centre for Cognitive Neuroimaging Research Panel, coordinated at Psychology Department, or you volunteered to participate in research studies using functional magnetic resonance imaging.

Who is organizing this study?
This study is organized by Frank Pollick

What will happen to me if I take part?
Before you take part a member of staff will ask you some questions to ensure that you have no metal within you before you enter the strong magnetic field of the MRI scanner. You may be asked to remove coloured contact lenses and to change (we provide training suits in case there is metal on your clothes). You will then be asked to lie in the scanner and the scanning will start. The scanning can be noisy so we shall give you headphones or earplugs to reduce this noise. If you are very claustrophobic, that is if you feel very uncomfortable in small closed environment, then it may not be appropriate for you to be scanned.
During the scan you will be asked different things, for example you will be shown both images and videos and asked to view the actions taking place. While watching these visual displays we will monitor your eye movements. Following your time in the scanner we will take you to another room and ask you questions and perform a few additional simple experiments.

Whatever the nature of the task, it will always be explained to you before you sign the consent form, and will never involve any painful stimulation. We will repeat the instructions before each task. At all time you will remain in contact with us through the intercom and you will have a buzzer in your hand, in case you want us to stop the scan and come in the scanner room. We will ask you in all cases to try to keep your head as still as possible. To help you do so, we will place foam pads under your neck and on the side of your head.
The scanning session will take about one and a half hours, although you will not actually be scanned for more than 60 minutes of this time.

What is the device involved?

We can learn a great deal about how the brain works by looking at the blood flow to different parts of the brain whilst the brain performs different tasks. We measure brain function using images taken with a magnetic resonance imaging scanner. This scanner uses a strong magnetic field to create detailed images of brain structure and function. By taking a series of images whilst you perform a task we can build up a picture of the brain areas activated by this type of task. The scan does not involve any injections or X-rays.

What are the possible risks/side effects of taking part?

The scanner can be loud when it takes images, and you will be given earplugs and/or headphones to block out some of the sound. Also, the scanner space is quite reduced, and people who are uncomfortable in small or confined spaces may not be able to participate. If this applies to you, remember that you may withdraw from the study at any time without explaining why. MRI is generally thought to be a safe, non-invasive imaging technique. There are no known risks or side effects, except that in less then 5% of people the scanning might induce a peripheral nerve stimulation (felt as small twitches); this is not dangerous but might induce discomfort. In some very rare cases, being in the magnetic field may also trigger vertigo (dizziness). In the unlikely case you experience one of these feelings, please alert us and withdraw from the study, should you wish to do so. Although there is no evidence of danger, as a natural precaution we do not wish to include any women who may either be pregnant or have any reason to believe they may be pregnant.

What are the possible benefits of taking part?

We will reimburse you for your time and travel, and you will have the pleasure of knowing that you have made a contribution to our understanding of the relationship between brain and behaviour. However, there will be no direct benefits accruing in terms of your treatment.

What happens at the end of the study?

The results of this study may be published in a journal or used for teaching purposes. The results may also be presented at scientific meetings, or in talks at academic institutions. Results will always be presented in such a way that data from individual volunteers cannot be identified.

Confidentiality - who will have access to the data?

The data will be stored on a secure network and only members of the Centre for Cognitive Neuroimaging (CCNI) of the Psychology Department at University of Glasgow will have access to the data. It is possible that the data may be used by researchers working with CCNi for other similar ethically approved research protocols, where the same standards of confidentiality will apply. In all cases your name will not be used and your data will be identified only by a 5 digit code.

Will my General Practitioner (GP) be informed?

This is not a diagnostic scan. Your GP will not be routinely informed if your participation in this study has been as a normal volunteer. Brain images will NOT be routinely examined for abnormalities by a trained neuro-radiologist. Like faces, brains come in all shapes and sizes, however, so that there are many normal variations of what the scan shows. There is a chance of less than 1:100 that your scan may, by chance, show a significant abnormality of which you are unaware.

There is no guarantee that abnormalities will be picked up. It is possible, however, that an abnormality is detected, by chance, in the scan of a normal volunteer by the radiographer or one of the investigators. This is referred to as incidental finding. If this happens, your brain scan will be examined by a trained neuro-radiologist who will provide an expert opinion on the importance of the incidental finding for your health, and on the potential health benefit of disclosing this information to you. There are three possible cases:

- Unlikely net benefit: If the incidental finding is a condition not likely to be of serious

importance for your health, or whose likely health importance cannot be ascertained, that finding will not be disclosed to you or your GP.

- Possible net benefit: If the incidental finding consists of a nonfatal condition that could possibly be grave or serious but that cannot be avoided or improved, then when you are likely to deem that information important, that finding will be disclosed to you with appropriate guidance. You may also choose not to be informed should such an unlikely finding apply to you. In that case, please tick the appropriate box on the consent form.
- Strong net benefit: In the very unlikely case of a life threatening condition or a condition likely to be grave and that can be treated or improved, this information will be disclosed to you and you will be appropriately advised. Further action will be decided which could involve further imaging and/or a discussion between you and your GP or an appropriate clinician.

What if new information becomes available?
If the new information pertains specifically to the health of the volunteer, the volunteer may be informed (see previous paragraph). Otherwise, new information will be published through traditional scientific channels (journal articles, conference presentations).

What will happen to the study results?
In accordance with good research practice, they will be kept securely for a minimum of 10 years and possibly indefinitely in the CCNi data archive.

Will I receive a financial compensation?
Yes; You will receive £6 per hour for your participation in this study.

Can I ask questions about the research project?
Yes; We will answer all questions you may have that are related to the research project to which you agree to participate (see contact details below)

Can I withdraw from the study?
Yes. You participation to this research project is voluntary, and you may withdraw from the research at any time and for any reason, without explaining why, and this will not affect your medical care or legal rights.

Can the investigators interrupt the study?
The research may be interrupted by the researchers at any time, and for several possible reasons such as new requirements for the selection of participants, for example.

Are there compensation arrangements if something goes wrong?
In the unlikely event of anything untoward happening, the University of Glasgow provides insurance for claims.

This research study has been approved by the Ethics Committee of the Faculty of Information and Mathematical Sciences at University of Glasgow.

Contact details
Name
Address
Telephone Email

Thank you for considering taking part in this study. Our research depends entirely on the goodwill of potential volunteers such as you. If you require any further information, we will be pleased to help you in any way we can.

STUDY INFORMED CONSENT - MRI

(This form must be completed prior to any scanning)

Study title: A Functional Magnetic Resonance Imaging (fMRI) Study: Watching Dance.

☐ I confirm that I have read and understood the Study Information Sheet provided to me for the above study and have had the opportunity to ask questions.

☐ I understand the risks and contraindications including pregnancy.

☐ I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason, without my medical care or legal rights being affected,while being entitled to my per/hour payment.

☐ I understand that this is not a diagnostic scan but that should, by chance, something abnormal be noticed, an expert neuro-radiologist will examine my scans. There is no guarantee, however, that if there is an abnormality, it will be detected.

☐ I do not wish to be informed if a nonfatal condition likely to be grave or serious but that cannot be avoided or ameliorated is discovered in my brain (non mandatory for participating).

☐ I understand that the research data may be accessed by researchers working at or in collaboration with the CCNi in similar ethically approved studies but that at all times my personal data will be kept confidential in accordance with data protection guidelines.

I have initialled the above boxes myself and I agree to take part in the study.

_____

SIGNATURE OF VOLUNTEER

Name: _____ Date: _____

_____

SIGNATURE OF WITNESS

Name: _____ Date: _____

Subject ID _____

Centre for Cognitive Neuroimaging
Institute of Neuroscience and Psychology
University of Glasgow
58 Hillhead street, Glasgow G12 8QB
Tel: +44 (0)141-330 5089, email: info@psy.gla.ac.uk

REPORT ON ETHICS PROPOSAL
REF# CSE00996 (Version 1)
TITLE: Interaction methods
SUBMITTED BY: Helen Purchase, Senior Lecturer
FROM THE: Computing Science
REVIEWERS: Alessandro Vinciarelli, Lars Muckli, Monika Harvey

1. DESCRIBE THE BASIC PURPOSES OF THE PROPOSED RESEARCH

The aim of these experiments is to investigate whether task performance using common interface interaction methods is affected by the visual design of the interface. We are interested in whether visual features (e.g colour, font, shape of buttons, background image, positioning of objects) affect users' performance in doing interaction tasks. This is important because if we can determine that visual design does affect performance, then we can devise guidelines for interface designers that will assist them in creating effective and efficient interfaces.

2. INDICATE WHO IS FUNDING THE RESEARCH (IF COMMERCIALLY FUNDED, ENSURE THAT PARTICIPANTS ARE INFORMED).

No funding.

3. DESCRIBE THE DESIGN OF YOUR EXPERIMENT (E.G. CONDITIONS, NUMBER OF PARTICIPANTS, PROCEDURE AND EQUIPMENT WHERE APPROPRIATE) SEE BPS ´§2 & ´§8

Participants will perform common interface tasks (e.g choosing items from a drop-down list, choosing a number on a slider, pressing a botton, selecting radio buttons) - all these tasks are likely to be very familiar to users.

The visual design of the screen will be the different conditions: different colours, different fonts, different shapes, different background images, different shapes etc. We anticipate that several experiments will be conducted using this model, using a variety of different independent variables.

In all cases, the number of independent variables and number of conditions will not result in a set of tasks that will require that the total length of the experiment exceeds an hour (including preliminaries and post-experiment questionnaires).

The equipment will be a laptop that will be used for all participants, to ensure consistency in presentation of the visual stimuli.

4. DESCRIBE HOW THE PROCEDURES AFFECT THE PARTICIPANTS

The participants will be performing common interface tasks, so will not be affected by the procedure. The experiment will not take more than an hour.

5. STATE WHAT IN YOUR OPINION ARE THE ETHICAL ISSUES INVOLVED IN THE PROPOSAL (SEE BPS ALL SECTIONS)

The following safeguards will be taken:

* the number of tasks defined by the independent variables and conditions will not result in an experiment that will take longer than an hour

* so as to ensure that any images used are not of a sensitive nature, we will use those provided by Windows in their range of possible screen backgrounds, or, if we require images of a form that Windows does not provide, we will ensure that they are neutral.

* participants will be given the opporuntity of opting out of giving demogaphic information

6. SPECIFY THE NATURE OF THE PARTICIPANTS. INDICATE IF THE RESEARCH INVOLVES CHILDREN OR THOSE WITH MENTAL DISABILITIES OR HANDICAP (SEE BPS ´§3) IF SO, EXPLAIN THE STEPS TAKEN TO OBTAIN PERMISSION FROM L.E.A.S, HEADTEACHERS, PARENTS, ETC... GIVE A BRIEF DESCRIPTION HERE AND FILL IN THE CHILDREN RESEARCH ETHICAL PLAN. THE FORM MUST BE UPLOADED TOGETHER WITH THE CONSENT AND INFORMATION FORMS.

Participants will be not be children, or any vulnerable adult with disability or handicap. They are most likely to be students, but we hope that we will be able to extent our pool of participants by exploting personal contacts outside of the university - the more people and the wider variety, the better!

7. STATE IF PAYMENT WILL BE MADE TO SUBJECT

No

8. DESCRIBE THE PROCEDURES FOR ADVERTISING, FOR RECRUITING PARTICIPANTS, AND FOR OBTAINING CONSENT FROM PARTICIPANTS (SEE BPS ´§3)

We will recruit by word of mouth and by putting posters on noticeboards. We think it unlikely that we will need to use student email lists, but if we do, we will get permission from the Head of School/College as necessary in advance.

All participants will complete a consent form at the start of the experiment.

9. STATE WHETHER THE PROPOSAL IS IN ACCORD WITH THE BPS CODE OF CONDUCT OR THE ESRC FRAMEWORK OF RESEARCH ETHICS

Yes

10. DESCRIBE HOW THE PARTICIPANTS' ANONYMITY AND CONFIDENTIALITY WILL BE MAINTAINED
(SEE BPS ´§7)

No names will be stored, all data will be stored and processed anonymously.

11. DATE ON WHICH PROJECT IS EXPECTED TO BEGIN AND END

February 27th 2012

12. LOCATION AT WHICH THE PROJECT WILL BE CARRIED OUT

Mainly in the School of Computing Science, but also in personal locations using a laptop as appropraite - this is to help us to get as wide a variety of participants as possible.

13. DESCRIBE HOW PARTICIPANTS WILL BE DEBRIEFED AT THE END OF THE EXPERIMENT (THIS MUST INCLUDE THE OPPORTUNITY TO CONTACT THE EXPERIMENTER - OR SUPERVISOR - FOR FEEDBACK ON THE GENERAL OUTCOME OF THE EXPERIMENT) (SEE BPS ´§5 & ´§10)

The take-away information sheet gives the contact details of the experimenter. The participants will be debriefed on the purposes of the experiment at the end, and will have an opportunity to ask questions of the experimenter.

Information Sheet: Interaction methods

The aim of this experiment is to investigate the use of several interaction methods. The experiment will take not more than 45 minutes to complete.

At the start of the experiment, you will be given a demonstration of the different interaction methods to be used. These are all interaction methods often found in common interfaces: sliders, drop-down-boxes, check-boxes, text-input, buttons etc. You will be asked to demonstrate that you understand the experimental tasks associated with these interaction methods.

During the experiment, you will be presented with a series of these tasks on the computer screen.

You will be given as long as you like to complete each task, but **we ask that you try to complete them as quickly as you can.**

After each task, you will be shown a blank screen. You can then indicate when you are ready to start the next task.

The experimental software will collect information on the length of time you take for each task, and your accuracy in completing the tasks.

At the end of the experiment, you will be asked to rank different interface styles, and be asked to comment on the tasks and the interfaces that were used in the experiment.

We will ask for some demographic information at the end of the experiment (e.g. age, gender, experience, expertise etc.) You are not required to give this information if you do not wish to do so.

All results will be held in strict confidence, ensuring the privacy of all participants. No identifying personal participant information will be stored with the data. Online data will be stored in a password protected computer account; paper data will be kept in a single-occupant locked office.

Your participation in this experiment will have no effect on your marks for any course at this or any other university.

Please note that it is the interaction methods, not you, that are being evaluated. You may withdraw from the experiment at anytime without prejudice. If you do so, any data already recorded will be discarded

Please take this sheet away with you, and if you have any further questions regarding this experiment, or would like general feedback about its final outcomes, please contact:

Dr Helen C. Purchase
School of Computing Science
Room S104, Lilybank Gardens
helen.purchase@glasgow.ac.uk

This study adheres to the BPS ethical guidelines, and has been approved by the ethics committee of College of Science and Engineering at The University of Glasgow (ref: CSE00996). Whilst you are free to discuss your participation in this study with the researcher (330 4484), if you would like to speak to someone not involved in the study, you may contact the chair of the ethics committee of College of Science and Engineering at The University of Glasgow(marieh@psy.gla.ac.uk).

Consent form: Interaction methods

The aim of this experiment is to investigate the use of several interaction methods. The experiment will take not more than 45 minutes to complete.

At the start of the experiment, you will be given a demonstration of the different interaction methods to be used. These are all interaction methods often found in common interfaces: sliders, drop-down-boxes, check-boxes, text-input, buttons etc. You will be asked to demonstrate that you understand the experimental tasks associated with these interaction methods.

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We will ask for some demographic information at the end of the experiment (e.g. age, gender, experience, expertise etc.) You are not required to give this information if you do not wish to do so.

All results will be held in strict confidence, ensuring the privacy of all participants. No identifying personal participant information will be stored with the data. Online data will be stored in a password protected computer account; paper data will be kept in a single-occupant locked office.

Your participation in this experiment will have no effect on your marks for any course at this or any other university.

Please note that it is the interaction methods, not you, that are being evaluated. You may withdraw from the experiment at anytime without prejudice. If you do so, any data already recorded will be discarded

I have read this information sheet, and agree to voluntarily take part in this experiment:

Name: _____ Email:_____

Signature: _____ Date: _____

This study adheres to the BPS ethical guidelines, and has been approved by the ethics committee of College of Science and Engineering at The University of Glasgow (ref: CSE00996). Whilst you are free to discuss your participation in this study with the researcher (330 4484), if you would like to speak to someone not involved in the study, you may contact the chair of the ethics committee of College of Science and Engineering at The University of Glasgow(marieh@psy.gla.ac.uk).