

Research in Action

Portfolio of Competencies

Reflective Log

I highly anticipated the Research in Action (RIA) module. However, I felt equally enthusiastic and daunted when the fullness of the module was detailed during the Research Assistant (RA) Orientation. Paul, Ceri and Katie explained I would be allocated into a four student RA team. We were to design and implement two studies investigating whether pro-environmental behaviours can be modified. The task was not prescriptive; we had to conduct a systematic literature search (SLS) to identify appropriate methodologies for small-scale research studies. From the SLS findings, we had to design two studies, completing proposal forms for the principle investigators (PIs) and ethics forms for School Research Ethics Committee submission; the challenge brought apprehension and explicit anticipation.

I viewed my anticipatory thinking as positive as it has been suggested that explicit anticipation can encourage “rapid goal-directed processing” (Poli, 2010, p. 13). Additionally, apprehension can be a positive learning incentive if appropriate support is provided (McMillan et al., 2007). Thankfully, it was explained to us that we would be supported throughout the process; independence and professionalism were expected as we took on the role of RAs with Paul, Ceri and Katie being the PIs. That knowledge provided relief; independent learning benefits from structured support, especially when new skills are being developed (Thomas, Jones & Ottaway, 2015). Additionally, independent learning is a vital skill in preparing students for life-long professional development (Kingsbury, 2015). If I were to experience apprehension regarding a future new skill set, I would seek support and guidance.

I felt challenged to perform well; others in the team would depend on me. I have worked in team settings extensively (always to a high, conscientious standard) and understand the complexities of individual work ethic and self-efficacy affecting project success (Forrester & Tashchian, 2010). I started journaling the taught sessions and progress made on the project. I quickly realised that the standardised SLS methodology provides a structured and replicable literature review requiring pre-specified terminologies and techniques to reduce bias and summarise evidence (Sampaio & Mancini, 2007; Štrukelj, 2018). I completed a SLS which was subsequently used to guide one study. Reading around the subject before commencing the search served me well, and I would employ this technique again. Fundamental understanding of principles aids knowledge retention of new skills (Hebb & Donderi, 2013).

Two RA sub-teams were formed, each developing a study. While each team member was actively involved in both studies, my sub-team concentrated on a lab-based deception study to ascertain if pro-

environmental behaviour can be manipulated by either locally or globally focused information. It became obvious quite quickly that I needed to direct the sub-team. Differences in student engagement became apparent, as is often the case in student-team settings (Schippers, 2014), and I had to encourage my colleague to keep on task. Unfortunately, at times it felt like an uphill struggle. I was conscious (as an older “non-traditional” student [Gilardi & Guglielmet, 2011]) I did not want to come across as being dominant, something that could result in colleague overreliance (Dierdorff, Bell & Belohlav, 2011). In future teamwork scenarios, I will try to motivate other members; a suggested method is focusing on “goal priority” to encourage team cohesion (Dierdorff, Bell & Belohlav, 2011, p. 247).

Utilising identified literature we set about formulating a study proposal for PI presentation. The proposal was guided by Moussaoui and Desrichard (2016), and Bandura and Schunk (1981). Ethic form completion followed. I found the word-count limits challenging; trying to communicate essential information in a limited word count succinctly is an essential skill for psychologists (Smyth, 2004). In future, I will plan out approximate word counts in a “basic skeleton structure” as recommended by Smyth (2004, p. 128). Concurrently, I was acutely aware that there are standards of professionalism and ethics and I was determined to uphold the standards set out by the British Psychological Association (BPS) to ensure participant respect and well-being, scientific integrity and researcher professionalism (BPS, 2014; BPS, 2018).

A poor experience as a participant (in another study) prompted me to suggest piloting our study; piloting can highlight ambiguities (Coolican, 2014). Flaws were evident, and scrutinising our protocol resulted in a professional study that was coherent and clear; clarity is essential for experimental validity and replicability (BPS, 2018; Coolican, 2014). In the future, I will reflect and pilot studies *at every stage* to ensure clarity.

At times I struggled to keep up with the fast pace of the module. I have excellent time management skills, however, managing the volume of RIA work along with multiple assessment deadlines and external commitments was challenging. At times during the process, I felt overwhelmed and mentally exhausted. I formulated a planner with dates/priorities/deadlines, and this provided an effective scaffolding for my time management. In future, I will time-manage at project outset; time-management can reduce student stress and aid goal achievement (Häfner, Stock & Oberst, 2015).

I was initially apprehensive about working as part of a team. I am an excellent team player but was incipiently concerned regarding equitable collaboration and ability. One personal low point was when my sub-team colleague deleted a shared reference list I had been working on (after midnight, on the back of a busy day).

Unfortunately, this was due to a misinterpretation of the American Psychological Association formatting conventions and reignited my initial teamwork fear. In future collaborations, I will (tactfully) check that all colleagues (and I) are conversant with task specifications.

However, there was a willingness to contribute from my delete-clicking colleague, and the following morning he reinstated the reference list. It was incorrect, and I had to wholly re-compile the list, but the fact he had tried showed investment in the project and a willingness to engage. I am glad that I did not respond abruptly or negatively as member agreeableness promotes collaboration (Driskell, Goodwin, Salas, O'Shea & Gavan, 2006) and is positively correlated to team performance (Kong, Konczak & Bottom, 2015). Additionally, Paul and Katie's support were great encouragement. Support and positive transactions between student and teacher can improve student engagement (Zepke & Leach, 2010).

Subsequent engagement of my RA colleague improved dramatically (we worked well together), and I am pleased with the teamwork collaboration that produced two professional, replicable and enjoyable studies. Despite initial difficulties, as suggested by LePine, Methot, Crawford and Buckman (2012), collaboration forged new friendships and increased cooperation between team members. I will promote agreeableness in future collaborations.

I am pleased with the outcome and feel that RIA is a valuable asset in my psychology portfolio, furnishing me with the practical skills required for my work placement for the Psychology for Work module (please see Appendix).

Appendix. Work Placement Experience Concerning RIA; A Reflective Account.

Concurrent to the Research in Action (RIA) module, as part of the Psychology for Work module, I commenced a work placement in the role of a research analyst with CIS Gateways. CIS Gateway is a company specialising in research within the pharmaceutical and MedTech industries. RAISE Wales (a separate not-for-profit company) has been launched by CIS Gateway to promote the Life Sciences within Wales. I am working on a RAISE Wales project involving adolescents and emerging adults, investigating aspirations for future education and potential career pathways. This is an excellent work placement for a psychology student, and I can honestly say I would not have been equipped to perform the research analyst role to the appropriate level without the RIA module.

RIA has furnished me with the skills that I needed to perform the role of a research analyst professionally and with confidence. I have (literally) learned new skills in the university setting one day and applied them in practice the same or following week. In my placement, I have conducted participant observation and data collection (within comprehensive school settings), data analysis and empirical literature reviews. I have statistically analysed data (using SPSS) and have made a valued contribution to the project research. The company director has been most impressed with my skills and ability. I found statistical analysis a challenging element and found myself questioning whether I was performing SPSS correctly. As this is a real-world project (with potential real-world ramifications), I sought guidance from lecturers to ascertain if my data interpretation methodology was correct.

I was grateful for the support of my lecturers. I was experiencing “learning by doing” and found the process of journaling and reflecting on my work placement, considering the RIA module most beneficial (Gibbs, 1988, p. 8). Reflection was a new method of exploring my learning journey, and I found it enlightening. I was able to look back on the practical aspects of my work placement, the RIA module (and Research Methods II module which highly complimented the RIA module), and identify areas where additional consolidation was needed. It was apparent that my confidence in statistical analysis and the SPSS process could be improved, and over the Christmas 2019 break, I invested time in myself and formulated an action plan to improve my SPSS skills and knowledge to improve my research analyst capability.

I had already accessed the books SPSS for Psychologist (Brace, Kemp & Snelgar, 2012) and The SPSS Survival Manual (Pallant, 2016) and worked through practical elements within. I accessed an Open University book and online tutorial (The Open University, 2016) to practice my SPSS technique; I found the additional consolidation has helped me gain confidence in my abilities and increased my level of skill in SPSS analysis. I will aim to consolidate learning by putting into practice the “learning by doing” method in future skill acquisition (Gibbs, 1988, p.8). As a result of the reflective process, if I were to learn new skills for professional implementation in the future, I would like to give myself more time to practice and consolidate my learning, so I feel confident in every aspect of my role *before* real-world application. The Gibbs reflective learning cycle has encouraged me to continue self-reflection, as this is good professional practice (Gibbs, 1988; BPS, 2014). According to Gibbs (1988) “It is not sufficient to have an experience in order to learn. Without reflecting on this experience it may quickly be forgotten, or its learning potential lost” (p9).

In summary, the RIA module has developed my methodological skills by providing opportunities to experience practical psychological research; designing and conducting studies in a realistic context. RIA has provided me with the wherewithal to perform my work placement role of research analyst with competence and confidence. I have experienced all modules at level five to be structured to support learning across the discipline; Research Methods II, in particular, has complimented RIA greatly.

I am confident that the RIA module has ignited the beginning of a personal research journey. The module has inspired, challenged and equipped me to produce ethically robust, replicable and highly reliable psychological research in my psychological studies in university, my work placement and beyond. Although challenging, I am extremely pleased the RIA module was delivered at level five as I am sure it will be an invaluable asset to my understanding and practical skills when I am working on my dissertation next (academic) year.

Competency One:
Applied Research - Completion of Research
Proposal

RESEARCH PROPOSAL 2019-2020

Student(s) Name	[REDACTED]
Date submitted	

Title of Research (this must reflect the essence of your proposed research question, study design and study population and should be more specific than the broad topic area provided in the dissertation topics selection book).

Experimental observation; Does a) local or b) global environmental information positively affect pro-environmental behaviour more?

I was tasked with formulating a research title that would reflect the essence of the proposed research question succinctly. Several titles were proposed, and this title met APA standards, fulfilled criteria and gained team approval.

Please state your main research question(s) and hypothesis/hypotheses

Does the geographical proximity of environmental information (local or global information) affect individual student behaviours of pro-environmental behaviour (PEB)? The results from two independent variables will be measured and statistically analysed to investigate. This study aims to investigate whether there is any significant difference in student PEB when presented with either a) local or b) global environmental information. (I.e. Does geographical proximity of environmental information influence PEB).

The global issue of environmental pollution, sustainability and population impact on global resources and the environment is of growing national and international concern. For example, the global issue of plastic contamination of the world's oceans has reached international crisis point, being met with world leaders gathering to specifically offer financial and practical support in tackling the burgeoning pollution and environmental issues. Local and global environmental issues.

Global sustainability requires that individuals and contribute collectively to protect the planet, increasingly involved with developing sustainable from the individual, corporate, national and international levels.

There is growing empirical evidence that

PEB and perceived impact on global, long term (higher goal) actualisations such as 'saving the planet'. For example, an individual's day-to-day (grassroots) self-efficacy, attitudes and PEB have been found to be better

From the systematic literature search (SLS), we were able to formulate the main research question and hypothesis for the study. We then split into two sub-teams. I was in sub-team two. I was tasked with completing the proposal form for this study, and a team colleague (in sub-team one) took on the task of writing up the other study proposal.

information relating to the individual's locality as opposed to global (far-off/geographically removed) information relating to global issues.

It has been suggested that there is a disconnection of self-efficacy (the belief that one's actions can produce specific change/performance attainments) as to the effect on global ocean plastic pollution by individual recycling choice. For example, whether individual X places his/her plastic bottle in the recycling bin or general refuse bin has little effect on the global plastic crisis. Conversely, there is evidence that self-efficacy is positively affected when individual X is presented with local positive pro-environmental information that placing his/her plastic bottle in the recycling bin at work or school (for example) will help facilitate the work-place/school to meet their organisational recycling goals.

The primary aim of this study is to measure recycling choice rates dependant on the presentation of either a) local or b) global message. Pro-environmental behaviours will be measured in this experimental design.

The empirical literature suggests there will be less incentive to adopt PEB when presented with global (higher-level) goals compared to local (lower level) goals; it has been theorised that local (low level) pro-environmental information has a more significant effect in changing individual PEB.

The results from this study could indicate the value of proximal geographical, environmental information on policymakers within government; who could (for example) or councils to adopt either a global or local message work employees, facility users or local residents); or specific to a geographical locality.

SLS introduced a new methodology to me; aggregating literature using pre-specified terminologies and a standardised technique identified and critically appraised existing literature while reducing bias. I now comprehend how to conduct a SLS competently.

The hypothesis (based on findings from the systematic literature review) is that locally focused environmental information is more likely to result in higher levels of pro-environmental behaviour than globally focused environmental information.

What empirical evidence supports your research question? (Please provide a review of relevant psychological literature and theory and a minimum of eight references).

It is widely accepted that humanity collectively is contributing to global warming, climate change and detrimental environmental issues through a combination of lifestyle and anti-environmental behaviour choices (Unsworth, Dmitrieva, & Adriasola, 2013). PEB can be defined as environmentally positive, pro-active behaviour that intentionally aims to negate or reduce the negative impact of humanity's presence (or actions) on the natural world (Stern, Dietz, Abel, Guagnano, & Kalof, 1999).

To ensure the health and wellbeing of the planet, and in turn humanity, we must take care of the natural environment and ensure planet health for generations to come (Nisbet & Gick, 2008). The introduction, promotion and continued practice of PEB at the individual, local, trans-local and national level are imperative in ensuring a firm foundation for effective positive global-scale environmental change and sustainability (Moussaoui & Desrichard, 2016).

Moussaoui and Desrichard (2016) in the article entitled "Act local but don't think too global: The impact of ecological goal level on behavior" (p. 536) argue that a locally focussed, personally relevant, message relating to an institution, workplace, village, town or city is more effective at resulting in individual PEB change than a globally focused message. These findings are highly influential and argue that planned behaviour can be directly influenced by the presentation of the direct effect environmental issue on health.

The systematic literature search and subsequent review supported our research question. Our study was influenced by Moussaoui and Desrichard (2016) and Bandura and Schunk (1981).

Furthermore, Fritsche, Barth, Jugert, Masson and Reese (2018) describe large scale environmental crisis as a "collective phenomenon" (p.245); the product of collective behaviours. How these crises are socio-cognitively represented and collectively appraised is dependent on collective ideological interpretations (i.e. what is acceptable in one country/geographical region may be unacceptable in another). Fritsche et al., argue that understanding the collective identification and tailoring a pro-environmental message to an in-group (focusing on

the in-group's norms, goals and values) is key in establishing meaningful pro-environmental messages that will result in positive change in a given locality. Fritzsche et al., propose a "Social Identity Model of Pro-Environmental Action" (p.245) to promote positive group efficacy and appropriate public sphere environmental action; suggesting relevant personal and collective emotional motivations facilitate deliberate and automatic processing levels. This, Fritzsche et al., theorise this is an effective ingroup-relevant system of promoting PEB. Fritzsche et al., argue getting *the right message* to an in-group is key in the environmental battle.

There is growing empirical evidence that there is a disconnection between local, day-to-day (low goal) individual PEB and global, long term (higher goal) self-efficacy attitudes and beliefs (Bandura & Schunk, 1981; Moussaoui & Desrichard, 2016). The empirical literature suggests less incentive to adopt individual PEB when presented with high-level goals such as reducing ocean pollution or saving the planet (Bandura & Schunk, 1981; Moussaoui & Desrichard, 2016).

Bandura and Schunk (1981), argue that a proximal message mediates greater individual self-efficacy and suggest there is a huge gap between self-efficacy of individual small actions (such as individual pro-environmental action) and the "higher-level goals" (such as "Saving the planet") (p. 536). "Self-directedness" is promoted by cognitive function in perceiving, evaluating, encouraging, and moderating behaviour (p.586). Sawitri, Hadiyanto and Hadi propose a "social-cognitive theory perspective for understanding a variety of routes to promote pro-environmental behaviour" (2015, p.27). Sawitri et al., argue that individuals' demonstrating high self-efficacy perceptions result in higher levels of PEB engagement when directly compared with individuals demonstrating lower judgments of self-efficacy when presented with favourable contextual conditions. Sawitri et al., suggest PEB goals are most likely to be achieved when individuals experience contextual relevance (and low barriers).

PEB among employees (and other organisational facility users) is increasing rapidly and is recognised as a socially desirable organisational objective (Unsworth, Dmitrieva & Adriasola, 2013). Indeed, psychological conditions, and particularly the relevance to the individual of information presented to promote PEB, is argued to be key in promoting effective intervention (Unsworth, Dmitrieva & Adriasola, 2013).

Similarly, Schaffner, Demarmels, & Juettner (2015) explored the psycho-social determinant of PBH by examining communication strategies employed in pro-environmental campaigns. It was found that positive emotive information resulted in more significant pro-environmental response when compared to traditional informational strategies. Schaffner et al., conclude that policymakers and social marketers should use strategies that evoke positive emotion in combination with accurate advice required to illicit positive pro-environmental response from individuals. Contemporaneously, Baek, Yoon and Kim (2015) investigated the use of assertive language on the persuasiveness of impact on PEB. They found that assertive/positive messages produced more favourable attitudes and intention towards recycling when greater effort was involved in following recycling instructions. Conversely, they observed non-assertive messages were more effective for individuals who invested little effort into recycling. Baek et al., argue perceived effort, message assertiveness and investment of effort are all important to message effectiveness.

Unsworth and McNeill (2017) hypothesised that one possible method of increasing PEB among individuals is to ensure that individuals do not recognise individual PEB as a goal. Findings of Unsworth and McNeill suggest that if the personal goal is not environmental) is a possible method of increasing PEB.

There was much empirical evidence to read regarding pro-environmental behaviour (PEB) and theories regarding PEB change. I provided a review of relevant psychological literature and theory that directly influenced our study.

and important to argue that many tal crisis. en if the personal towards PEB.

Recent research, as outlined above, has been highly influential on personal action and PEB responses. Levine and Strube (2012) propose that environmental knowledge and explicit attitudes directly influence behaviour. It has been suggested that explicit attitudes may be influenced by the relevance of message presentation (Bandura & Schunk, 1981; Moussaoui & Desrichard, 2016) suggesting a multi-disciplinary approach to environmental attitudes (incorporating explicit attitudes, the relevance of message and environmental knowledge) may all have implications for future interventional strategies. Levine and Strube note level of individual/specific environmental knowledge is a strong predictor of future PEB. This study seeks to investigate the impact relevance of message (geographical relevance to a target audience) of psychology at The University of Wales Trinity Saint David (Swansea campus).

The environmental attitudinal scale of values of PEB will be ascertained using a Likert scale questionnaire with questions taken/adapted from Milfont and Duckitt (2010).

Systematic literature review:

Baek, T. H., Yoon, S., & Kim, S. (2015). When environmental messages should be assertive: Examining the moderating role of effort investment. *International Journal of Advertising*, 34(1), 135–157. Bandura, A., & Schunk, D. H. (1981). Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation. *Journal of Personality and Social Psychology*, 41(3), 586. Fritzsche, I., Barth, M., Jugert, P., Masson, T., & Reese, G. (2018). A social identity model of pro-environmental action (SIMPEA). *Psychological Review*, 125(2), 245. Levine, D. S., & Strube, M. J. (2012). Environmental attitudes, knowledge, intentions and behaviors among college students. *The Journal of Social Psychology*, 152(3), 308–326. Milfont, T. L., & Duckitt, J. (2010). The environmental attitudes inventory: A valid and reliable measure to assess the structure of environmental attitudes. *Journal of Environmental Psychology*, 30(1), 80–94. Moussaoui, Lisa S., & Desrichard, Olivier (2016). Act local but don't think too global: The impact of ecological goal level on behaviour. *Journal of Social Psychology*, Vol.156 (5), p.536-553. Nisbet, E. K., & Glick, M. L. (2008). Can health psychology help the planet? Applying theory and models of health behaviour to environmental actions. *Canadian Psychology/Psychologie Canadienne*, 49(4), 296. Sawitri, D. R., Hadiyanto, H., & Hadi, S. P. (2015). Pro-environmental behavior from a socialcognitive theory perspective. *Procedia Environmental Sciences*, 23, 27–33. Schaffner, D., Demarmels, S., & Juettner, U. (2015). Promoting biodiversity: Do consumers prefer feelings, facts, advice or appeals? *Journal of Consumer Marketing*, 32(4), 266–277. Stern, P. C., Dietz, T., Abel, T., Guagnano, G. A., & Kalof, L. (1999). A value-belief-norm theory of support for social movements: The case of environmentalism. *Human Ecology Review*, 6(2) 81–97. Unsworth, K. L., Dmitrieva, A., & Adriasola, E. (2013). Changing behaviour: Increasing the effectiveness of workplace interventions in creating pro- environmental behaviour change. *Journal of Organizational Behaviour*, 34(2), 211–229. Unsworth, K. L., & McNeill, I. M. (2017). Increasing pro-environmental behaviors by increasing self-concordance: Testing an intervention. *Journal of Applied Psychology*, 102(1), 88.

I produced the reference list in the American Psychological Association (APA) 6th Publication Manual (APA, 218) style and formatted it in the style of the example proposal form provided to the team by our principle investigators (PIs).

Please describe your participant group (including anticipated number of participants required) and any specific inclusion/exclusion criteria.

It is proposed that the participant group will consist of psychology student from levels four and six cohorts 2019/2020 at The University of Wales Trinity Saint David (UWTSD). Participants will be recruited via an

opportunity sample employing the UWTSD internal Experimental M... be incentivised by the distribution of a predetermined number of p... value. However, psychology students at UWTSD are required to o... eligible to use the psychology laboratories or EMS facilities for fina

This section was initially worked on by my sub-team colleague. We then discussed changes that were needed, and I made the necessary amendments. This section was a sub-team collaboration.

A power analysis was calculated. The estimated population size of... to access the EMS is 90 (estimating 30 students in each of the three undergraduate year's cohort). However, the cohort of Level five was discarded from the potential sample pool, as fellow level five students would expect PEB to be examined (as all students may be aware of the module assessment detail). To allow for a 5% margin of error and a 95% confidence level and considering the reported prior response distribution experienced by the PI in similar experimental studies is 60%, the minimum recommended participant group size is calculated to be 45. However, in consideration of time restraints, availability of participants (considering days in university and student absence, etc.) it was decided a recommended sample of 30 participants would be required for this study. This will equate to 15 participants in group one and 15 participants in group two. The sample size is based on participant population available and is limited by the time constraints of the study; level four and level six.

I calculated a Power analysis to ascertain the number of participants required for the study. However, it was decided that we would recruit a maximum of 30 participants due to study constraints.

Exclusion criteria; Level five psychology students will be excluded from the study as cohort members will be aware of the PEB studies being conducted; as such any information received from a level five participant would be invalid (as prior knowledge of study goals could potentially produce bias results or produce demand characteristics such as perceived desirability). Participants who do not complete the study in a relevant, honest manner (e.g., no credit points (or similar) the participant will be excluded). Participants who use drugs or alcohol will also be excluded from the study.

We initially omitted level five psychology and psychology and counselling student participation from the EMS recruitment. Level five students were aware the RIA module involved PEB research. The study had an element of deception involved (to observe PEB in as natural a context as possible) and relied on participants being unaware of the nature of the study.

Please provide brief details of the anticipated design (e.g., between, within, mixed, regression, focus groups, interviews, experimental, questionnaires) and main procedure for your study (it should be clear from this how you are actually planning to carry out your study, and what will be happening to your participants).

The proposed methodology is experimental and observational. The study has been designed with much consideration to numerous prior empirical studies.

The design is experimental observation; involving the manipulation of an independent variable. Behaviour following exposure to the two IVs will be recorded and statistically analysed.

This experimental study will be based on a between-subjects design as the experimental involves two groups of participants completing the same task with each group receiving a different independent variable (presented with either a) local or b) global environmental information). As the experiment is between-subjects, an independent samples t-test will be employed (using SPSS) to analyse the data.

The experiment will be designed to covertly observe participant behaviour. As participant choice may be influenced by demand characteristics and the true experimental observational element, participants will not be aware PEB is being observed.

We decided on the design of the study and appropriate statistical analysis for results as a team. My sub-team colleague and I worked on this section together using the Microsoft Teams app.

As such, participants will be under the impression that they are involved in a memory study. A guise or a Stroop test memory task will be presented to all participants. The ethical considerations of the deception and rationale for this decision are detailed in the 'ethical consideration' section of the proposal.

Participants will be randomly assigned to one of two groups. During the distraction task (detailed below) participant group one will receive locally focused environmental information designed to promote PEB and participant group two will receive globally focused information designed to promote PEB.

The experiment will be set out as follows:

- Participants will be invited to take part in a memory study via EMS
- All volunteer participants attending the study will be given consent forms and RA verbal instruction detailing the procedure of the task as follows:
 1. The experiment will commence with Stroop test 1.
 2. A distraction task will immediately follow Stroop test 1. You will be presented with information to read relating to either exercise, consumerism, education or environmental issues. You will be required to compile a written list (detailed in the distraction task) in one-minute. (However, all participants will receive information on environmental issues. The fictional presentation options are detailed to reduce suspicion that environmental behaviour is the area of interest of the study).
 3. (Clearly stated on the consent form **and** distraction task instruction sheet the following will be written): "The distraction task results **will not be required by or be seen by the research** assistant. Please discard the paper in the rubbish receptacle/bin placed in the booth once completed before moving onto Stroop test 2".
 4. A second Stroop test will now follow.
 5. The details of the aims of the study will be explained to you.

A guide protocol was formulated for the proposal. This was modified during the planning stage and evolved before getting to the ethics application stage.

The choice of refuse bin (recycling or general rubbish) will form the observational element of the experimental design. The results from the distraction task (I.e. what bin was chosen) for group one and group two will be measured and statistically analysed.

Participant group one will receive locally focused environmental information designed to promote PEB. Participant group two will receive globally focused information designed to promote PEB; care will be taken to ensure wording and use of adjectives are similar throughout the variable information, reducing the risk of confounding variables. It is suggested that this be independently checked (by the Principle Investigator (PI) or a third party (as decided by the PI/ethics committee)) to ensure no bias is present in either information presentations.

Immediately following the first Stroop test the participants will receive geographically differentiated environmental information. Group one will receive geographically local relevant environmental information (such as information relating to the City and County of Swansea, the SA1 vicinity, Swansea Bay or UWTSD). Group two will receive geographically global information (such as information on ocean plastic pollution, global climate change, world-wide pollution crisis etc.). Both participant groups will receive similarly worded/emotive content of information.

The distraction task materials will include a printout of environmental information, a pen, and a sheet of paper.

Participants will be reminded at this point that the RA will not need to see the distraction task and that the paper should be disposed of after the designated time allowed for the task. The distraction task will involve reading the printout and then writing a list of environmental personal concerns within a minute. The distraction task instructions will clearly reiterate the request to dispose of the unneeded paper.

If when the RA enters the room following the allowed time for the distraction task the paper has not been disposed of, the RA will prompt the participant again to dispose of the paper.

The aim of the distraction task is observational research- to ascertain the participant's choice to place the distraction task paper list (now waste paper) in either the recycling bin or the general rubbish bin. (This forms the observational part of the experiment). The aim is to observe if the recycling rate of participant group one (local information) differs from group 2 (global information).

Two bins will be present in the booth, presented next to each other at an equal distance from the participant's desk. The UWTSD SA1 campus bins are ideal for this purpose, as they are engineered in a way that both refuse options (recycle/general) are housed in the same unit. They are also present all around the campus and as such are a familiar sight to all UWTSD students. The bin chosen by the participant will form the experimental results. The independent variable is the information presented to the participants; group one (local information) or group two (global information). Exclusion criteria for this element would be if participants failed to dispose of the wastepaper (e.g. placed it in a pocket/bag) or left it on the table (after reminder/prompt). Additionally, if a participant asks if he/she is being observed (I.e. suspects observation of behaviour) the data from the individual will also be omitted from experimental results.

A debrief will take place, and the deception used in the experiment will be disclosed.

Participants will be reminded that all results are confidential. Participants will be reminded that all results are confidential and that they are free to withdraw from the study if they so wish.

This section of the form was challenging and was reworked several times to produce coherency.

What measures are you planning to use for data collection and how will this data be used in the analysis in order to answer your research question? (Be as specific as possible here – what type of data will you be obtaining, what specific topics/measures/scales/instruments will you be using and what will you do with this data?)

The proposed methodology is experimental and observational, and it has been designed with much consideration to several prior empirical studies (all detailed within this proposal form). The experiment is based on a between-subjects designs as the experiment involves two groups of participants (presented with either a) local or b) global environmental information). The study will use categorical measurements for the choice of 1) recycling receptacle or 2) General refuse receptacle. The categorical measurement of bin choice will be nominal.

What are the main ethical issues that you will need to address in this study? (Please note all students will need to complete the full ethics form prior to final approval for data collection being given).

Ethical data collection is of paramount importance; attitudes to environmental issues are deeply personal and all views will be respected. Individual participants may not be aware of implicit behaviours they will demonstrate in this experimental research and may experience feelings of regret or shame if they implicitly make choices in conflict to their attitudinal goals or desires. Additionally, the need for confidentiality is paramount, as individuals may wish their decisions on environmental choices be kept private and not disclosed to others. This is particularly prudent in the social science arena, as participants may potentially engage in PEB investigations, campaigns or employment following the attainment of a psychology degree.

Respect of all participants, competency of the whole research team, responsibility towards participants (and data) and the integrity of the experimental study and psychology as a discipline, will be adhered to at all time (British Psychological Society Code of conduct and Ethics, 2018).

To ensure complete confidentiality, all data collected will be stored in a secure and confidential manner. The PI will have full control over data and all RAs will follow UWTSD protocol and PI instruction regarding the storage and computer use of data. No raw (identifiable) data will leave the UWTSD psychology laboratories.

Confidentiality is of paramount importance to ensure individual responses and feedback to interviews questions remains confidential. Any identifiable information will be removed to ensure total anonymity of all participant interview data. Data will be known only by an EMS participant number and treated in the strictest of confidence and ensure anonymity), following UWTSD data protection policy (2018) and the BPS Code of Ethics and Conduct (2018) and the BPS ethical guidelines were adhered to throughout the study (BPS, 2014; BPS, 2018). All psychological research should consider ethical issues and adhere to ethical conduct and participant well-being. Participant protection and well-being (psychological or otherwise) was of paramount importance.

Only aggregated data will be reported in published findings; no identifiable features will be made publicly available. There will be no release of raw/identifiable data to anyone outside of the direct research team. Informed consent will be obtained from all participants and participants will be made aware at all stages that they have the right to withdraw at any point without penalty. All participants will be fully debriefed.

As deception based, covert observation forms part of the data collection methodology, participants will be asked if they are willing for the results of their participation to be included in the study. Participants may experience shame or regret at a non-recycling choice, and if this is the case the reminder that they are free to withdraw completely without penalty.

As the full scope of investigation will not be disclosed during consent process, an element of deception is present within the study. It is in no way the intention of the study to induce or elicit shame or guilt of participants if a non-recycling choice is made, and all RAs will be fully briefed and aware of the sensitivity when revealing the nature of the observational deception. Positive affirmation will be offered to participants if guilt or shame are apparent and the scope and hope that this study will help future decisions will be elaborated on. The RAs will be fully instructed on ensuring the participants leave the study in a positive frame of mind, even if anti-environmental behaviour is observed. Participants will be affirmed with the knowledge that this study could help inform policy makers and impact PEB positively. The right to withdrawal will always be available during the study data collection attendance and a set time (yet to be determined) following data collection. Participants will be made fully aware of the specifics of right to withdrawal at the time of debrief.

All participants will be fully debriefed, made aware of all aspects of overt observation and the aim for positive impact of PEB in the future. RAs will facilitate any participant requirements for further information or contact from PI. The PI will be contacted and asked for guidance and advice should any participant experience and divulge concerning distress, guilt or shame to a RA. All RAs will be made aware of the importance of support throughout this study.

The BPS ethical guidelines were followed stringently (BPS, 2014; BPS, 2018).

Reference list:

British Psychological Society (2014). Code of Human Research Ethics. Leicester: Author. British Psychological Society (2018). Code of Ethics and Conduct. Leicester: Author.

Competency Two:
Applied Research - Ethical Considerations-
Ethics Form Completion

APPLICATION FOR ETHICAL APPROVAL

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

Delete the Guidance Notes at the end of the form BEFORE submitting your application

SECTION A: About You (Principal Researcher)

Full Name:		[REDACTED]			
Tick all boxes which apply:		Member of staff:	☐	Honorary research fellow:	☐
Undergraduate Student	☒	Taught Postgraduate Student	☐	Postgraduate Research Student	☐
Faculty/School/Centre:		Psychology			
Campus:		Yr Arothfa Campus, SA1, Swansea			
E-mail address:		[REDACTED]			
Contact Telephone Number:		[REDACTED]			
For students:					
Student Number:		[REDACTED]			

I was assigned the task of completing the Application for Ethical Approval form for sub-team two.

Programme of Study:	BSc Psychology
Director of Studies/Supervisor:	Dr Paul Hutchings Dr Ceri Phelps Katie Sullivan

SECTION B: Approval for Research Activity

Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	YES	☒	NO	☐
			Date	
If Yes, please indicate source of approval (and date where known): Approval in principle must be obtained from the relevant source prior to seeking ethical approval	Research Degrees Committee	☐		
	Faculty Research Committee	☐		
	Other (write in) Psychology Faculty Staff Module Leaders	☒	21/10/19	

SECTION C: Internal and External Ethical Guidance Materials

Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines.	
UWTSD Research Ethics & Integrity Code of Practice	☒
UWTSD Research Data Management Policy	☒
British Psychological Society (2014). Code of Human Research Ethics British Psychological Society (2018). Code of Ethics and Conduct	☒

SECTION D: External Collaborative Research Activity

Does the research activity involve collaborators outside of the University?	YES	☐	NO	☒
If Yes, please provide the name of the external organisation and name and contact details for the main contact person and confirmation this person has consented to their personal data being shared as part of this collaboration.				
Institution				
Contact person name				
Contact person e-mail address				
The UWTSD Research Ethics & Integrity Code of Practice, UWTSD Research Data Management Policy and BPS ethical codes (2014; 2018) were adhered to.				
Has this individual consented to sharing their details on this form?	YES	☐	NO	☐
Are you in receipt of a KESS scholarship?	YES	☐	NO	☐
Is your research externally funded	YES	☐	NO	☐

Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	YES	☐	NO	☐
	Employed	YES	☐	NO	☐
Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)	If YES then the permission question below does not need to be answered.	YES	☐	NO	☐
Permission to undertake the research has been provided by the partner organisation	(If YES attach copy) If NO the application cannot continue	YES	☐	NO	☐

Where research activity is carried out in collaboration with an external organisation

Does this organisation have its own ethics approval system?	YES	☐	NO	☐
If Yes, please attach a copy of any final approval (or interim approval) from the organisation				

SECTION E: Details of Research Activity

Indicative title:	Experimental observation; The effect of geographical proximity (local or global) information on student pro-environmental behaviour.		
Proposed start date:	November 2019	Proposed end date:	January 2020
Introduction to the Research (maximum 300 words) Ensure that you write for a Non-Specialist Audience when outlining your response to the three points below: • Purpose of Research Activity • Proposed Research Question • Aims of Research Activity • Objectives of Research Activity Demonstrate, briefly, how Existing Research has informed the proposed activity and explain • What the research activity will add to the body of knowledge • How it addresses an area of importance.			
Purpose of Research Activity The present study aims to investigate the influence of environmental information and its relevance (specifically, in the form of geographical proximity) to an individual, on pro-environmental behaviour. It has previously been argued that global information relating to environmental crisis is less effective in affecting individual pro-environmental attitudes and values when compared to local information. It is suggested the perception of self-efficacy (ones' belief that one's actions are effective in making positive change) is lower when global (higher- level) goals are presented. Higher-level goals, it has been argued, are less likely to promote self-belief than local goals, when compared to a local message. By investigating the differences of pro-environmental information is manipulated (to either local or global pro-environmental information) the geographical relevance of environmental information is understood. The purpose of the research was detailed. To succinctly produce an introduction was challenging. Producing concise, detailed information is an important skill for psychologists (Smyth, 2004).			

Statistical differences in pro-environmental behaviour between message proximity will be analysed. Once completed, findings may have practical implications identifying the possible need of future larger-scale research into the effect of message context to assist in the global battle against anti-environmental behaviour.

Research Question

Experimental observation; Does a) local or b) global environmental information positively affect pro-environmental behaviour more?

Aims of Research Activity

To better understand the effect of geographical proximity of environmental information on pro-environmental behaviours.

Objectives of Research Activity

It is suggested that the findings from this small (pilot) study will provide necessary evidence for the possible need of future larger-scale research. If deemed necessary, future research could, in turn, assist informing policymakers regarding the adoption of geographically differentiated environmental information to tackle environmental issues specific to localities.

Proposed methods (maximum 600 words)

Provide a brief summary of all the methods that **may** be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed.

Experimentation involves two groups of randomly assigned participants presented with either a) local or b) global environmental information.

The experiment will observe waste-disposal-recept participant choice may be influenced by social exp deception and the experimental observation will b

Developing and constructing the methodology was challenging. The proposed methods for the research study were detailed. I condensed all information into 600 words.

Participants will be (colour-matching)

During the distrac information; partici Participants will be r

The experiment wi

Fictional scenarios were created to aid the deception element of our study. Participants would be led to believe that there were three possible distraction information sheets randomly distributed. However, all participants would receive information regarding environmental issues. Half of the participants (participant group A) would receive locally-focused environmental information, and half of the participants (participant group B) would receive globally-focused information.

; a 'Stroop test'

environmental information.

be presented to ted to the

- Consent pr complete a

participant. The research assistant (RA) will reinforce with verbal instruction detailing the procedure of the task as follows.

1. The experiment will commence with Stroop test 1.
2. *A distraction task will immediately follow Stroop test 1. You will be presented with information to read relating to either **exercise, consumerism, education or environmental issues. You will then be required to compile a written list (detailed in the distraction task) in one-minute".

*The distraction task materials will include a printout of environmental information, a pen, and a blank sheet of paper. Clearly stated on the consent form **and** distraction task

instruction sheet the following will be written: **"The distraction task results will not be required by or be seen by the research assistants, please discard the paper in the bin placed in the booth once completed before moving onto Stroop test 2"**.

** The fictional presentation options (exercise, consumerism and education) are detailed to reduce suspicion that environmental behaviour is the area of study; however, all participants will receive information on environmental issues.

The distraction task will involve reading information on either local (group 1) or global (group 2) environmental issues and proceeding to make a written list of personal concerns in one minute. Once the distraction task is completed the participant will place the (now waste) paper into a bin. There will be a recycling bin and a general refuse bin located within the laboratory booth equidistant from the participant.

If, when the RA enters the room following the allowed time for the distraction task, the paper has not been disposed of, the RA will prompt the participant again to dispose of the paper in a 'bin'.

3. A second Stroop test will now follow.

4. The details of the aims of the study will be explained to you and you will be fully debriefed.

- Participants will receive a debrief form (see Appendix B) with full disclosure details. All participants will be fully debriefed, made aware of all aspects of overt observation and the aim for positive impact of PEB in the future. The RAs will be fully instructed on ensuring the participants leave the study in a positive frame of mind, even if anti-environmental behaviour is observed. The right to withdrawal will always be available during the experimental study attendance and for a set time following data collection with no penalty.
- The experiment will follow a strict protocol (See Appendix C)

The recycling choices of groups one and two will be statistically analysed.

The aim is to observe if the recycling rate of participant group one (local information) differs from group 2 (global information).

The study relied heavily on deception to avoid "demand characteristics" and the investigator effect on refuse receptacle choice (Orne, 1962, p.776). Participants were under the impression that two Stroop tests were the experiment, and there was a distraction task involved. However, the distraction task was the actual experimental manipulation of interest.

Ethical considerations were made throughout the process; ensuring no harm to participants and ethical robustness were our priorities. We adhered to BPS (2014; 2018) ethical guidelines. Participants were to be fully debriefed and offered the right to withdraw with no fear of penalty.

Location of research activity

Identify all locations where research activity will take place.

The research will take place in the UWTSD Yr Athrofa, SA1 campus, Swansea. Specifically, within the Psychology Labs booths.

(this box should expand as you type)

Research activity outside of the UK

If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or vulnerabilities of participants.

(this box should expand as you type)

Use of documentation not in the public domain: Are any documents **NOT** publicly available?

NO

☒

YES

☐

If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with prevailing data protection law of the country in question and England and Wales.

(this box should expand as you type)

SECTION F: Scope of Research Activity

Will the research activity include:	YES	NO
Use of a questionnaire or similar research instrument?	☐	☒
Use of interviews?	☐	☒
Use of diaries?	☐	☒
Participant observation with their knowledge?		
Participant observation without their knowledge?		
Use of video or audio recording?		
Access to personal or confidential information without the participants' specific consent?	☐	☒
Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	☒
Performance of any acts which may cause embarrassment or affect self-esteem?	☐	☒
Investigation of participants involved in illegal activities?	☐	☒
Use of procedures that involve deception?	☒	☐
Administration of any substance, agent or placebo?	☐	☒

I completed the sections regarding the scope of the research activity. As deception was used in the study, this was documented on the ethics application.

Working with live vertebrate animals?	☐	☒
Other primary data collection methods, please explain in this box For example, 'focus groups'. Please indicate the type of data collection method(s) in this box and tick the accompany box.	☐	☒
Details of any other primary data collection method: (this box should expand as you type)		

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

Who are the intended participants:	YES	NO
Students or staff at the University?	☒	☐
Adults (over the age of 18 and competent to give consent)?	☒	☐
Vulnerable adults?	☐	☒
Children and Young People under the age of 8? (Consent from Parent, Carer or Guardian will be required)	☐	☒
Prisoners?	☐	☒
Young offenders?	☐	☒
Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	☒
People engaged in illegal activities?	☐	☒
Others (please identify specifically any group who may be unable to give consent) please indicate here and tick the appropriate box.	☐	☒
Other – please indicate here: (this box should expand as you type)		

Participant number estimates and sources were documented.

Participant numbers and source	
Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
How many participants are expected?	30 participants are expected for this study. This will equate to 15 participants in group one and 15 participants in group two. (this box should expand as you type)
Who will the participants be?	Participants will be volunteers from an opportunity sample of members from the cohort of UWTSD psychology students (SA1 campus) across two years of study; level four and level six.

	(this box should expand as you type)
How will you identify the participants?	The participant group will consist of psychology student from levels four and six cohorts 2019/2020 at UWTSD SA1 campus. Participants will be targeted and recruited via an opportunity sample employing the UWTSD internal Experimental Management System (EMS). Participation will be incentivised by the distribution of a predetermined number of participation credits (credits hold no monetary value. However, psychology students at UWTSD are required to obtain a set number of credits in order to be eligible to use the psychology laboratories or EMS facilities for final year projects). (this box should expand as you type)

Information for participants:	YES	NO	N/A
Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
Will you tell participants that their participation is voluntary?	☒	☐	☐
Will you obtain written consent for participation?	☒	☐	☐
Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
If the research is observational, will you ask participants for their consent to being observed?	☐	☒	☐
Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☐	☐	☒
Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
If NO to any of above questions, please give an explanation	Participant information was recorded. Ethical guidelines were considered throughout.		
The experiment is designed to covertly observe waste-disposal-receptacle (bin) choice (recycling or general refuse). As participant choice may be influenced by social expectations the experiment will rely heavily on deception and the true experimental observation will be disguised as a 'distraction task'. Participants will be under the impression that they are involved in a cognition study. A guise of a 'Stroop test' (colour matching) task will be presented to all participants. Participants will have the protocol procedures of the Stroop test and distraction task in advance, so they will know what to expect; however, participants will not be aware of the deceptive nature of the experiment. It would not be plausible to seek permission to observe pro-environmental behaviour as it would inevitably undermine the experiment, rendering results invalid for purpose. However, participants will be fully debriefed as to the nature of the study upon completion of the study. (this box should expand as you type)			

Information for participants:	YES	NO	N/A
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Will participants be paid?	☐	☒	☐
Is specialist electrical or other equipment to be used with participants?	☐	☒	☐
Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific study aims?	☒	☐	☐

If YES to any question, please provide full details

The experiment is designed to indirectly observe pro-environmental behaviour. As participant behaviour may be influenced by social expectations (demand the experiment will rely heavily on deception. The true experimental observation will be disguised as a 'distraction task'. Participants will be under the impression that they are involved in a cognition study. A guise of a 'Stroop test' (colour matching) task will be presented to all participants. Participants will have the instructions for the Stroop test and distraction task at the beginning of the study, so they will know what to expect; however, participants will not be aware of the deceptive nature of the experiment. Deliberately misleading participants in concealment of the observation of pro-environmental behaviour is essential to observe natural behaviour to test the hypothesis that local environmental information is more effective in eliciting pro-environmental behaviour (when compared to global information). If participants knew the true aim of the study, they may all exhibit socially positive pro-environmental behaviour and all resultant data would be invalid.

As such, it will not be feasible to seek permission to observe pro-environmental behaviour as it will undermine the experiment, rendering results invalid for purpose.

(this box should expand as you type)

The deception element of the study was disclosed throughout the ethics application form. Section F provided opportunity to detail the concealment of the specific study fully.

SECTION H: Anticipated Risks

Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them.

If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.

Full risk assessment completed and appended?	Yes	☐
	No	☒

Risks to participants

For example: emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information

Risk to Participant:

1. Attitudes to environmental issues are deeply personal. Individual participants may not be aware of implicit behaviours they will demonstrate in this experimental research and may experience feelings of regret or shame if they implicitly make choices in conflict to their attitudinal goals or desires.

How will you mitigate the Risk to Participant

1. It is in no way the intention of the study to induce or elicit shame or guilt of participants if a non-recycling choice is made, and all RAs will be fully briefed and aware of the sensitivity when revealing the nature of the observational deception. Positive affirmation will be offered to participants if guilt or shame are apparent and the scope and hope that this study will help future decisions will be elaborated on to all participants. All views will be fully respected, and RAs will be instructed to be non-judgmental regarding participant choice of recycling behaviour

All possible risks to participants, researchers and the university needed to be identified to take mitigating action to reduce the probability of risk or harm.

2. Once aware of full disclosure and the deception element of the experiment participants may wish to withdraw from the study.

The right to withdraw was always available to all participants throughout the experimental study.

Participants were made aware at consent, disclosure and debrief stages that they had the right to withdraw. It was decided that a suitable deadline for withdrawal was at the study debrief. Participants were made fully aware of this deadline.

3. Once aware of full disclosure and the deception element of the experiment, participants may leave the study in a negative frame of mind if non-recycling choice was made.

or environmental attitudes shown. The PI will be contacted and asked for guidance and advice should any participant experience and divulge concerning distress, guilt or shame to a RA. All RAs will be made aware of the importance of support towards the participant throughout this study.

2. The right to withdrawal will always be available during the experimental study attendance and a set time (yet to be determined) following data collection. Participants will be made fully aware of the specifics of right to withdrawal at the time of consent and debrief/disclosure of deception with absolutely no risk of penalty. As the experiment relies heavily on deception and covert observation, participants will be asked if they are willing for the results of their participation to be included in the study. Participants will be reminded that they are free to withdraw without fear of penalty.

As the full scope of investigation will not be disclosed during consent process, a large element of deception is present within the study. All participants will be fully debriefed, made aware of all aspects of overt observation and the aim for positive impact of PEB in the future. The RAs will be fully instructed on ensuring the participants leave the study in a positive frame of mind, even if anti-environmental behaviour is observed. Participants will be affirmed with the knowledge that this study could help inform policy makers and impact PEB positively. The right to withdrawal will always be available during the experimental study attendance and a set time (yet to be determined) following data collection. Participants will be made fully aware of the specifics of right to withdrawal at the time of consent and debrief/disclosure of deception with absolutely no risk of penalty.



4. Participants may be concerned regarding the confidentiality of results, especially if non-recycling choice was made.

The UWTSD protocol Research Data management Policy (RDM) was followed. No raw identifiable data would leave the psychological laboratory area; all data would be stored according to the RDM. Data security and confidentiality is of paramount importance. All RAs followed UWTSD protocol.

5. Participants may require further information or request to speak to the PI regarding elements or questions they have regarding the study.

(this box should expand as you type)

All RAs were aware that participants could contact the PIs should they wish. RA and PI contact details were provided on the debrief forms.

(this box should expand as you type)

4. All data collected will be stored in a secure and confidential manner. The PI will have full control over data and all RAs will follow UWTSD protocol Research Data management Policy (RDM) regarding the storage and computer use of data. No raw (identifiable) data will leave the UWTSD psychology laboratories. Confidentiality is of paramount importance to ensure individual responses remains confidential. Any identifiable information will be removed. Personal information will in no way be disclosed (participants are known only by an EMS participant number). UWTSD data collection regulations will be adhered to. The British Psychological Society (BPS) Code of Ethics and Conduct (2018) and the BPS Code of Human Research Ethics (2014) will be followed. Only aggregated data will be reported in published findings; no identifiable features will be made publicly available. There will be no release of raw/identifiable data. Informed consent will be obtained from all participants and participants will be made aware at all stages that they have the right to withdraw at any point without penalty. All participants will be fully debriefed.

5. RAs will facilitate any participant requirements for further information or contact from PI.

If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities

(this box should expand as you type)

Risks to investigator

For example: personal safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest

Risk to Investigator:

How will you mitigate the Risk to Investigator:



1. As deception techniques are being employed during the experimental data collection, it is a possibility that participants may experience anger at the deception. Emotional outburst may be directed towards the RA or PI, and the potential for such behaviour must be a potential considered risk. However, all participants will be UWTSD Psychology students and they will all be aware that deception techniques are necessary for some psychology research. As such, it is reasonable to expect a level of understanding from the participants for the need of deception. (I.E. Acceptance for the need of deception may be higher among psychology students than from the general public).

1. Experimental research with participants will only take place when more than one member of the research team is present within the psychology lab setting. If a participant becomes upset, angry or aggressive the RA conducting the study will reiterate the right to withdrawal and attempt to deescalate the situation. The importance of more than one member of the team present at all studies is paramount to researcher safety and all members of the team will be fully briefed and aware of this protocol.

The risk to the investigators was also considered, and appropriate mitigating action detailed in this section.

2. Participants may wish to contact RAs or PIs; however, there is always a potential risk to the RA and PI in providing RA and PI e-mail and contact details (such as in the debrief form). The contact details are necessary to facilitate communication should the participant have future questions or wish to withdraw within a stipulated time frame. However, negative participant backlash due to negative response of the deception involved the experimentation is a possibility.

2. Only UWTSD e-mail and contact details will be detailed on debrief forms. In the likelihood that any participants wish to contact the researcher as a result of queries or questions, the researcher's universities e-mail address will be provided to answer those queries. Only UWTSD will be disclosed to students and only UWTSD will be used when contacting participants.

All the guidance and protocols provided through UWTSD Research Ethics and Integrity Code of Practice, alongside the BPS Code of Ethics and Conduct will be followed stringently to comply with GDPR Guidelines.

Any personal meetings to discuss the study will be conducted within UWTSD facilities and if deemed appropriate/necessary additional RAs or PIs will be present at meetings. Threats to RAs will be immediately reported to PIs (Dr Paul Hutchings, Dr Ceri Phelps and Katie Sullivan) and university authorities as required.

(this box should expand as you type)

(this box should expand as you type)	
University/institutional risks For example: adverse publicity, financial loss, data protection	
Risk to University: 1. The reputation and integrity of the UWTSD and the discipline of Psychology could be endangered if RAs do not adhere to codes of set ethics agrees upon and experimental study protocols. 2. Data could be exposed, leaked or used for other purposes.	How will you mitigate the Risk to University: 1. The University Ethics and Integrity Code of Practice will be followed at every stage of the proposed study to minimise any potential risks to the Institution from arising. Professionalism will always be exhibited by all researchers. 2. The data collected will be stored in accordance with UWTSD Research Data Management (RDM) rules and only used for the intended purpose, in compliance with ethical guidelines set out by UWTSD Research Ethics & Integrity Code of Practice policy and British Psychological Society (BPS) code of ethics. To minimise any risk to UWTSD and the psychology department, all copies of scripts to be used in the experiment will be submitted to the PI for review and approval before experimentation is advertised on the EMS. 3. The experimental procedure will be reviewed by the PI to ensure unforeseen risk to UWTSD is kept to a minimum. RAs will be briefed to follow a set experimental script. 4. The study is being conducted under the close supervision of Dr Paul Hutchings, Dr Ceri Phelps and Katie Sullivan. Dr Hutchings is the Programme director BSc Psychology and senior lecturer in psychology. Dr Phelps is the head of the School of Psychology UWTSD. Dr Phelps and Dr Hutchings, two chartered Psychologists and chartered scientists. All PIs are very experienced in supervising psychology university student studies. The PIs will oversee the project to ensure all UWTSD standards are adhered to. Students have been taught how to conduct experiments and an 'open-door' policy is encouraged to promote student RAs approaching PIs when they need guidance.

The risk to the university was also considered. Steps to mitigate the risk to UWTSD were documented, and these steps were followed throughout the study.



5. Low level (minimal) fire risk from refuse receptacle in the laboratory booth.

The low level (minimal) risk of fire was considered, and mitigating actions were documented and observed.

5. Permission will be sought from Psychology Lab Management, PI, lecturing staff and Estate Management (if necessary) to place a refuse bin inside a laboratory booth.

The rubbish bin is an integral and necessary element of the materials needed for the experiment. Additionally, it will be essential for the experimental conditions that no rubbish is present in the bin at the start of the experiment (to ensure all variables are identical throughout the course of the study). Importantly, this will naturally eliminate any fire risk.

No combustible material will be present in the bin for longer than the period of one study. Only one single sheet of A4 paper will be in the bin at any one moment minimising fire risk. Additionally, the wastepaper will be removed at the end of every single experimental study thus again eliminating the risk of fire.

Importantly, there will be no additional flammable material in any booth than would normally be present (if the bin were not situated in the booth).

As a UWTSD psychology department safety measure, all RAs have already been fully briefed on how to effectively and safely use the fire extinguisher in case of fire.

The bin will be removed from the booth at the end of the experimental study. Should a 'break' occur where the RAs are not present in the lab, the bin will be removed from the labs and placed safely outside in the corridor (a UWTSD estates management designated area for bins).

(this box should expand as you type)

(this box should expand as you type)

Disclosure and Barring Service

If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
Does your research require you to hold a current DBS Certificate?	☐	☒	☐

SECTION I: Feedback, Consent and Confidentiality

Feedback

What de-briefing and feedback will be provided to participants, how will this be done and when?

Immediately following the experiment, a full debrief will take place, and the deception used in the experiment will be disclosed. The aim of the study will be fully explained during the debriefing procedure; to ascertain if the geographical relevance and proximity of the environmental information presented impacted their choice of the rubbish receptacle in which to place their wastepaper (either recycling bin or general refuse).

Written information will be provided in the debrief form explaining what the study is exploring, and why. The need for deception will be fully explained as detailed as will decision to utilise deception in this study.

Participants will be reminded that all results are confidential and that they are free to withdraw from the study if they so wish.

All participants will be invited to ask questions about the study.

Individual queries arising as a result of study participation; participants will be given the opportunity to contact the PI or request a summary of the research findings upon completion of the experimental study.

All contact information will be provided on the debrief form.

Participant debriefing and feedback was considered, and arrangements were documented.

(this box should expand as you type)

Informed consent

Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.

All participants will receive a brief outline of what will be required of them during the initial EMS invitation and initial sign up to the experimental study.

At the actual experimental study in the UWTS psychology labs, a detailed written form (the consent form) will be provided to all participants informing them of the nature of experimental tasks and the procedure of the experiment. The different stages will be explained fully.

However, the deceptive element of the experiment will not be revealed until debrief. A signature of consent will be captured on the consent form.

(this box should expand as you type)

Participant anonymity and confidentiality was considered and documented and adhered to throughout the study.

Confidentiality / Anonymity

Set out how anonymity of participants and confidentiality of data will be maintained. If anonymity is not being offered, explain why this is the case.

All participants' information will be anonymous. Participants are identifiable only by an EMS participant number; as such participant information will be kept anonymous.

To ensure complete confidentiality, all data collected will be stored in a secure and confidential manner. The PI will have full control over data and all RAs will follow UWTSD protocol and PI instruction regarding the storage and computer use of data. No raw (identifiable) data will leave the UWTSD psychology laboratories.

Confidentiality is of paramount importance to ensure individual responses remain confidential. Personal information will in no way be disclosed.

Only aggregated data will be reported in published findings; no identifiable features will be made publicly available. There will be no release of raw/identifiable data to anyone outside of the direct research team. Informed consent will be obtained from all participants and participants will be made aware at all stages that they have the right to withdraw at any point during the experimental stage without penalty. However, participants will be made aware that once leaving the study, and the designated time for withdrawal has lapsed, it will not be possible to retrieve their data to exclude it from the final aggregate data.

Participants will be reminded to only contact RAs and PIs with their individual, unique EMS identification number.

(this box should expand as you type)

Confidentiality was considered and measures to ensure this were documented and followed.

SECTION J: Data Protection and Storage

In completing this section refer to the University's Research Data Management Policy and the extensive resources on the University's Research Data Management web pages (<http://uwtsd.ac.uk/library/research-data-management/>).

Does the research activity involve personal data (as defined by the General Data Protection Regulation 2016 "GDPR" and the Data Protection Act 2018 "DPA")?	YES	NO
"Personal data" means any information relating to an identified or identifiable natural person ('data subject'). An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.	☐	X ☐
If YES, provide a description of the data and explain why this data needs to be collected:		
(this box should expand as you type)		
Does it involve special category data (as defined by the GDPR)?	YES	NO
"Special category data" means sensitive personal data consisting of information as to the data subjects' – (a) racial or ethnic origin, (b) political opinions, (c) religious beliefs or other beliefs of a similar nature, (d) membership of a trade union (within the meaning of the Trade Union and Labour Relations (Consolidation) Act 1992), (e) physical or mental health or condition, (f) sexual life, (g) genetics, (h) biometric data (as used for ID purposes),	☐	☐ X
If YES, provide a description of the special category data and explain why this data needs to be collected:		

The university's RDM was referred to for the completion of Section J.



(this box should expand as you type)

Will the research activity involve storing personal data and/or special category data on one of the following:	YES	NO
Manual files (i.e. in paper form)?	☐	☒
University computers?	☐	☒
Private company computers?	☐	☒
Home or other personal computers?	☐	☒
Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	☐	☒
"Cloud" storage or websites?	☒	☐
Other – specify:	☐	☒

For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of password protection, encryption, anonymisation and pseudonymisation:

Data will be stored on student One Drives and Microsoft Teams. However, any data shared or stored using Microsoft Teams, student email or individual student One Drive will be non-identifiable and untraceable back to individual participants. Data is safeguarded on these platforms and is a permissible and recommended communication tool approved by UWTSD psychology department.

No identifiable data will leave UWTSD psychology labs or lab computers.

All participants' information will be anonymous. Participants are identifiable only by an EMS participant number; as such participant information will be kept anonymous.

To ensure complete confidentiality, all data collected will be stored in a secure and confidential manner. RAs will follow UWTSD protocol Research Data Management (RDM) regarding the storage and computer use of data.

Information stored in the form of aggregate data on [redacted] is not traceable back to any individual participant.

Any data RAs used outside the labs was non-identifiable and untraceable back to participants. The university's RDM was followed.

(this box should expand as you type)

All Data Storage

Will the research activity involve any of the following activities:	YES	NO
Electronic transfer of data in any form?	☒	☐
Sharing of data with others at the University?	☒	☐
Sharing of data with other organisations?	☐	☒
Export of data outside the European Union or importing of data from outside the UK?	☐	☒
Use of personal addresses, postcodes, faxes, emails or telephone numbers?	☐	☒
Publication of data that might allow identification of individuals?	☐	☒
Use of data management system?	☐	☒

	☒	☐
Data archiving?		
If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and DPA (and/or any international equivalent):		
The data from this study will be archived in accordance to the University's policy as data will need to be kept until RA graduation. Unidentifiable data will be shared among RAs and PIs via the UWTSD email systems. Additionally, unidentifiable data will be shared and stored using Microsoft Teams. Data is safeguarded on these platforms and is a permissible and recommended communication tool approved by UWTSD psychology department. No identifiable data will leave UWTSD psychology labs or lab computers. <i>(this box should expand as you type)</i>		
List all who will have access to the data generated by the research activity:		
[REDACTED] [REDACTED] [REDACTED] [REDACTED] UWTSD Members of Staff who will have access to the data are: Dr Paul Hutchings Dr Ceri Phelps Katie Sullivan Examiners will have access to the data. Additionally, it is possible that other staff members attending an assessed presentation (in January 2020) may have access to the data, depending on the relevance of this study to the assessed presentation (mock interview). <i>(this box should expand as you type)</i>		
List who will have control of, and act as custodian(s) for, data generated by the research activity:		
UWTSD Members of Staff: Dr Paul Hutchings Dr Ceri Phelps Katie Sullivan <i>(this box should expand as you type)</i>		
Details of individuals who would have access to any data generated were documented.		
Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
Experimental results will be stored securely on cloud storage (Microsoft Teams), university computers one individual One Drive documents. Data will be untraceable back to individual participants and will be stored in accordance to UWTSD Research Data Management (RDM). The data recorded from this study will need to be archived in accordance to the University's policy as, at a minimum, data will be required to be stored until all students graduate. Data will be stored until at least July 2021, longer if retention regulations require. It is best practice that any data subsequently used to support published findings should be accessible for a minimum period of ten years following publication. Additionally:		

"In general, as specified in the RCUK 'Guidance on best practice in the management of research data' the UK Research Councils expect data that underpins findings in publications should be accessible for at least ten years after publication. Individual Research Councils' and other funders' data policies and good research practice guidance provide additional requirements and should be consulted and retention periods specified in each Research Data Management Plan. In many instances, researchers will resolve to retain research data and records for a longer period than the minimum requirement." (UWTSD, Research Data Management).

(this box should expand as you type)

Please indicate if your data will be stored in the UWTSD Research Data Repository (see <https://researchdata.uwtsd.ac.uk/>). If so please explain. *(Most relevant to academic staff)*

(this box should expand as you type)

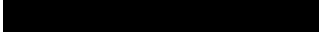
Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	☒
	NO	☐
Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	☒
	NO	☐

We confirmed that we had read the UWTSD guidance on data management.

SECTION K: Declaration

The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants.

In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's [Research Ethics and Integrity Code of Practice](#)

Signature of applicant:		Date: 28/10/2019
		
		
		

For STUDENT Submissions:

Director of Studies/Supervisor:	Dr Paul B. Hutchings	Date: 30/10/19
Signature:		

For STAFF Submissions:

Head of School/Assistant Dean:		Date:
Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

☒	I have read the guidance notes supplied before completing the form.
☒	I have completed ALL RELEVANT sections of the form in full.
☒	I confirm that the research activity has received approval in principle
☐	I have attached a copy of final/interim approval from external organisation (where appropriate)
☐	I have attached a full risk assessment (and have NOT completed Section H of this form) (where appropriate) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
☒	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☒	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Head of School.
☒	I have deleted the guidance notes before submitting the PG2 for consideration

RESEARCH STUDENTS AND STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name.

You will be informed of the outcome of your claim by email; therefore it is important that you check your University and personal email accounts regularly.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module leader.

This form is available electronically from the Academic Office web pages:

<http://www.uwtsd.ac.uk/academic-office/>

Application Process

All staff research projects and all research students must submit the Ethical Approval Form to the **University Ethics Committee** via the Academic Office (pgresearch@uwtsd.ac.uk). Staff research directly in relation to personal study for taught undergraduate or Masters programmes should be submitted via the Faculty procedures explained below.

Taught masters and taught undergraduate research Ethical Approval Forms are considered **within Faculties**. Faculties will provide details of the specific processes for this. Where the Ethical issues within any single ethical application are of particular concern the Faculty will refer these to the University Ethics Committee. Any student activity that involves the collection of primary data needs to undergo Ethical approval, this includes assignment work as well as dissertations.

Appendix A
(Consent form)

School of Psychology
SA1 Campus
Swansea



PRIFYSGOL CYM
Y Drindod
UNIVERSITY OF
Trinity Saint David
SWANSEA - ABERTYDDER
HEATH

Study Consent Form

Another team member created the study consent form. I assisted my colleague by rewording and restructuring areas that were lacking clarity. I was aware of the study protocol, and I assisted by making the form clearer for participants. Informed participant consent is essential (BPS, 2014; BPS, 2018).

*Demonstration of my Competency Three (Data Collection).

I understand that this research study is being carried out by a second year Psychology Student for their Research in Action module, and that taking part in this study will involve my time and involvement in a series of task. The task form part of a computer based task and a distraction task. The task will involve a Stroop test followed by a distraction task and then another Stroop test. This task will take approximately 15 minutes to complete. All instructions will be explained at the relevant point.

I understand that participation in this study is entirely voluntary and I am free to withdraw participation at any time without giving a reason. I am aware that if I have concerns about the study I can discuss these concerns with the researcher or academic supervisor at any time during or after the study.

I understand that the information provided by me will be held confidentially, with a code assigned in place of my name. These data will be stored indefinitely in accordance with the Data Protection Act.

I also understand that at the end of the study I will be provided with a debrief form and the opportunity to discuss any issues with the researchers.

I, _____ (PRINT NAME) consent to participate in the study conducted by _____
_____, School of Psychology, University of Wales Trinity Saint David, Swansea under the supervision of Dr Paul Hutching, Dr Ceri Phelps and Katie Sullivan.

Participant Signature: _____

Date: _____

Name and signature of researcher taking consent

School of Psychology

SA1 Campus

Swansea

Appendix
(Debrief for)



SWANSEA - ABERTAWE

I created the study debrief sheet. I was aware of the study protocol and the form provided clarity and full debrief for participants. It is ethically essential that participants are correctly and fully debriefed (BPS, 2014; BPS, 2018).

*Demonstration of my Competency Three (Data Collection).

Study Debrief Sheet

Experimental observation; Does a) local or b) global environmental information positively affect pro-environmental behaviour more?

Thank you for taking part in the study.

The aim of this study was to explore whether local environmental information can improve pro-environmental behaviour when compared to global environmental information. We specifically wanted to find out whether locally focused environmental information produces higher instances of pro-environmental behaviour (recycling the wastepaper) when compared to globally focused information.

Your choice of bin (recycling or general rubbish) to dispose of the wastepaper was observed and has been noted. The recycling choices of participants receiving either local or global environmental information will be statistically analysed.

The aim is to establish if the recycling rate of participants receiving local environmental information is higher than participants receiving global environmental information.

Deception for the aim of the study was necessary as had participants been aware of the true aim demand characteristics may have been exhibited (participants may have chosen the recycling option as they may have been aware this is a more environmentally friendly option). We understand that you may be uneasy with the fact that deception was used in this study, so please feel free to withdrawal from the study without penalty if you so wish.

If you wish to withdraw your data from the study, you must tell the researcher now. After this point, all your data will remain confidential and we will not trace it back to you.

If taking part in this study has raised any questions, please speak to the researchers

[redacted] or contact the academic supervisor Dr Paul Hutchings (paul.hutchings@uwtsd.ac.uk), Dr Ceri Phelps (ceri.phelps@uwtsd.ac.uk) or Katie Sullivan (katie.sullivan@uwtsd.ac.uk).

Thank you once again for taking time to participate in this study.

BSc Honours in Psychology
Level 5

Appendix C
(Study Protocol)

Study Protocol for:
Experimental observation; Does a) local or b) global environmental behaviour

I created the study protocol. It was essential to have a clear protocol that would promote the replicability of experimental studies to reduce extraneous or confounding variables or researcher bias.

The protocol was amended slightly following piloting. The finished version is presented in Competency Three (Data Collection).

Greet participant on arrival and thank them for coming

.

Ask participant to take a seat in the waiting area if labs are in use

.

Briefly outline that the participant will be required to complete two computer-based Stroop tests separated by a distraction task. Inform the participant that after the first Stroop test they will be required to call researcher who will then set up the distraction task.

.

Ask participant to complete a consent form if they are willing to take part

.

Ask participant to enter a booth and explain the process of the Stroop test. Ensure Stroop test 1 is ready to run

.

Tell participant that the instructions and directions on how to proceed will also be shown on screen, and that if they have any questions, the researcher will be outside the booth. Remind the participant to call the RA once Stroop test 1 is complete.

.

Allow the participant to complete the first Stroop test
(around 5 minutes)

.

If participant does pause during the study, provide any assistance needed or request further help from the Principal Investigator (PI). If participant seems distressed or upset, enquire if they are okay and request further help from the PI (Dr Paul Hutchings, Dr Ceri Phelps or Katie Sullivan)

.

When participant calls, the RA will inform the participant that a distraction task will immediately follow. The RA will set the computer to time the task. Participants will be instructed to press the spacebar to commence the timer.

The RA will read out the following statement:

“You will be presented with information to read relating to either exercise, consumerism, education or environmental issues. Please read as much of the information that you can within two minutes. A timer set on the computer will advise you when the two minutes is up. You will then have two minutes to compile a written list of issues that concern you in relation to the text that you have read. Again, a timer set on the computer will advise you when the two minutes is up. The distraction task results will not be required by or be seen by the research assistants and does not form part of the experiment. It is simply a method to distract you from the Stroop test. Please discard the paper in the BIN once the second timer indicates the end of the task”.

The participant will be asked to call the RA before moving onto Stroop test 2.

.

If when the RA enters the booth the distraction task has not been placed in the bin, the RA will set up the second Stroop test then say the following (as naturally as possible to avoid suspicion): “Before moving onto Stroop test 2. Please do not keep a copy of the distraction task, as the computer desk needs to be free of any clutter to avoid interference with the experiment. Please dispose of the distraction task in the bin”

The participant will be asked to complete the second (shorter) Stroop test and, again, call the RA once finished.

The participant will be fully debriefed. The deception and true aim of the experiment will be explained to the participant. It will be explained that as participant choice may be influenced by social expectations (demand characteristics) the experiment relied heavily on deception and the true experimental observation was disguised as a 'distraction task'.

Ask the participant if they are willing and happy for the data collected from their experimental input to be included in the study. Remind participants that they are free to withdraw without penalty at any point in the study (and the agreed designated time following data collection). Invite the participant to ask any questions. Ensure that participants are aware that it is in no way the intention of the study to induce or elicit shame or guilt of participants if a non-recycling choice is made.

Positive affirmation will be offered to participants if guilt or shame are apparent and the scope and hope that this study will help future decisions will be elaborated on to all participants. The PI will be contacted and asked for guidance and advice should any participant experience and divulge concerning distress, guilt or shame to a RA.

If not willing for data collected to be included in the study, the participant will be assured that this will in no way disadvantage them. They will still receive the credit/s for study participation.

Thank the participant again, provide them with a debrief form and confirm that they may contact the student researcher or Principal Investigator with any enquiries.

Say goodbye to the participant, again thanking them for time and contribution to the study.

All RAs followed the final protocol (presented in Competency Three data Collection) when conducting participant data collection. This aided validity and scientific integrity and ensured ethical guidelines were followed (BPS. 2014; 2018).

Competency Three: Data Collection

Study Consent Form

*(As detailed in ethics form PG2 / E1.)

I understand that this research study is being carried out by a group of second year Psychology Students for their Research in Action module, and that taking part in this study will involve two computer-based tasks and a distraction task. The task will involve a Stroop test followed by a distraction task and then another Stroop test. This study will take approximately 15 minutes to complete. All instructions will be explained at the relevant point.

I understand that participation in this study is entirely voluntary and I am free to withdraw participation at any time without giving a reason. I am aware that if I have concerns about the study, I can discuss these concerns with the researcher or academic supervisor at any time during or after the study.

I understand that the information provided by me will be held confidentially, with a code assigned in place of my name. These data will be stored indefinitely in accordance with the Data Protection Act.

I also understand that at the end of the study I will be provided with a debrief form and the opportunity to discuss any issues with the researchers.

I, _____ (PRINT NAME) consent to participate in the study conducted by _____
_____, School of Psychology, University of Wales Trinity Saint David, Swansea under the supervision of Dr Paul Hutching, Dr Ceri Phelps and Katie Sullivan.

Participant Signature: _____

Date: _____

Name and signature of researcher taking consent

I assisted on the completion of the consent form. I assisted my colleague by rewording and restructuring areas that were lacking clarity. I was aware of the study protocol, and I assisted by making the form clear for participants. Informed participant consent is essential (BPS, 2014; BPS, 2018).

Study Debrief Sheet

*(As detailed in ethics form PG2 / E1).

Ria_g4 Cognition Study/Experimental Observation;

Does a) local or b) global environmental information positively affect pro-environmental behaviour more?

Thank you for taking part in the study.

The aim of this study was to explore whether local environmental information can improve pro-environmental behaviour when compared to global environmental information. We specifically wanted to find out whether locally focused environmental information produces higher instances of pro-environmental behaviour (recycling) when compared to globally focused information.

Your choice of bin (recycling or general rubbish) to dispose of the wastepaper was observed and has been noted. The recycling choices of participants receiving either local or global environmental information will be statistically analysed.

The aim is to establish if the recycling rate of participants receiving local environmental information is higher than participants receiving global environmental information.

Deception for the aim of the study was necessary as had participants been aware of the true aim demand characteristics may have been exhibited (participants may have chosen the recycling option as they may have been aware this is a more environmentally friendly option). We understand that you may be uneasy with the fact that deception was used in this study, so please feel free to withdrawal from the study without penalty if you so wish.

If you wish to withdraw your data from the study, you must tell the researcher now. After this point, all your data will remain confidential and we will not trace it back to you.

If taking part in this study has raised any questions, please speak to the researchers [redacted] or contact the academic supervisor Dr Paul Hutchings (paul.hutchings@uwtsd.ac.uk), Dr Ceri Phelps (ceri.phelps@uwtsd.ac.uk) or Katie Sullivan (katie.sullivan@uwtsd.ac.uk).

Thank you once again for taking time to participate in this study.

BSc Honours in Psychology
Level 5

I created the study debrief sheet. The form provided clarity and full information and contact details for participants. It is ethically imperative that participants are correctly and fully debriefed, and they can contact researchers following the study should they wish to do so. The participant's right to withdraw was highlighted. (BPS, 2014; BPS, 2018).

This is the final protocol that I constructed for experimental research. The protocol demonstrates my data collection competency. I am competent to deliver materials essential for psychological research data collection.

Study Protocol:

Experimental observation; Does a) local or b) global environmental information positively affect pro-environmental behaviour more?

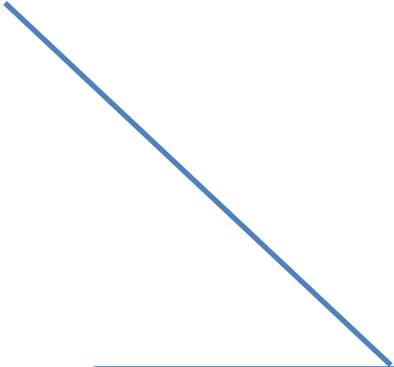
- Greet participant on arrival and thank them for coming.
- Ask participant to take a seat in the waiting area if labs are in use.
- Briefly outline that the participant will be required to complete two computer-based Stroop tests separated by a distraction task. Inform the participant that after the first Stroop test they will be required to call researcher who will then set up the distraction task.
- Ask participant to complete a consent form if they are willing to take part
- Ask participant to enter a booth and explain the process of the Stroop test. Ensure Stroop test 1 is ready to run
- Tell participant that the instructions and directions on how to proceed will also be shown on screen, and that if they have any questions, the researcher will be outside the booth. Remind the participant to call the RA once Stroop test 1 is complete.
- Allow the participant to complete the first Stroop test
- (around 5 minutes)
- If participant does pause during the study, provide any assistance needed or request further help from the Principal Investigator (PI). If participant seems distressed or upset, enquire if they are okay and request further help from the PI (Paul Hutchings, Katie Sullivan or Ceri Phelps)
- When participant calls, the RA will inform the participant that a distraction task will immediately follow. The RA will set time the task. Participants will be instructed to commence the distraction task.
- **The RA will read out the following statement:**
“You will be presented with information to read relating to either exercise, consumerism, education or environmental issues. Please read as much of the information that you can within two minutes. I will advise you when the two minutes is up. You will then have two minutes to compile a written list of issues that concern you in relation to the text that you have read. Again, I will advise you when the two minutes is up.”
- The participant will be asked to call the RA before moving onto Stroop test 2.
- The participant will be asked to complete the second (shorter) Stroop test and, again, call the RA once finished.
- When the second Stroop test has finished, the research assistant will ask the participant to place the discarded wastepaper in a bin (a recycling bin and general refuse bin will be present in the room).
- **The research assistant will say (as naturally as possible & to avoid suspicion):**
“I just need to get a debrief form. We don’t need to see the distraction task paper, please can you place it in the bin before I debrief you, Thanks.”
- Alone, the participant will place the paper in either the empty recycling or empty general refuse bin.
- The participant will be fully debriefed and given a debrief form. The deception and true aim of the experiment will be explained to the participant. It will be explained that as participant choice may be influenced by social expectations (demand characteristics) the experiment relied heavily on deception and the true experimental observation was disguised as a ‘distraction task’.
- Ask the participant if they are willing and happy for the data collected from their experimental input to be included in the study. Remind participants that they are free to withdrawal without penalty at any point in the study (and the agreed designated time following data collection). Invite the participant to ask any questions. Ensure that participants are aware that it is in no way the intention of the study to induce or elicit shame or guilt of participants if a non-recycling choice is made.

- Positive affirmation will be offered to participants if guilt or shame are apparent and the scope and hope that this study will help future decisions will be elaborated on to all participants. The PI will be contacted and asked for guidance and advice should any participant experience and divulge concerning distress, guilt or shame to a RA.
- If not willing for data collected to be included in the study, the participant will be assured that this will in no way disadvantage them. They will still receive the credit/s for study participation.
- Thank the participant again and confirm that they may contact the student researcher or Principal Investigator with any enquiries.
- Say goodbye to the participant, again thanking them for their time and contribution to the study.

Research should be designed and conducted in a way that promotes validity and reliability throughout data collection (BPS, 2018; Coolican, 2014). I was aware if data collection commences, then elements of the experiment are changed, validity and reliability are questionable (Coolican, 2014; Loftus & Palmer, 1974, as cited in Banvard and Gravson). The protocol was piloted and this resulted in changes being made and clearer instructions for participants and a streamlined study with a professional flow.

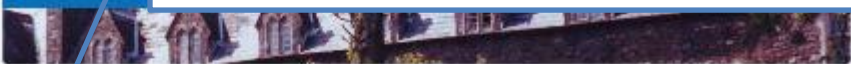
My contribution to the consent and debrief forms, and my sole input to the protocol demonstrate my competency in data collection material production.

Additionally, I set up the study on the web-based interface Experimental Management System (EMS) and created and managed sessions (timeslots) for the study. I credited participants following their attendance and participation to our study. Below is an example of my work on the EMS.



As a team, we decided that the protocol needed to be simple and straightforward. The protocol was amended several times to ensure the procedure and wording was transparent for RAs and participants. As the study had several elements, the study was piloted within our team before data collection commenced. I made the necessary amendments; flow and ease of study were improved by simplifying the protocol.

I set up the study on the web-based interface Experimental Management System (EMS) and created and managed sessions (timeslots) for the study. Below is an example of my input on the EMS



[Home](#) [My Studies](#) [All Studies](#) [Add New Study](#) [Prescreen Results](#) [My Profile](#) [Logout](#)

RIA Group 4 (Researcher)

Study Menu

Study Information

Study Name	SWAN_credit_ria_g4
Study Type	 Standard (lab) study This is a standard lab study. To participate, sign up, and go to the specified location at the chosen time.
Study Status	Visible to participants: Approved Active study: Appears on list of available studies
Duration	15 minutes
Credits	1 Credits
Abstract	This study is open to Level 4 and Level 6 students. Taking part in this study will involve two short computer based cognition tests and a short reading and note making exercise. In total the study will last approximately 15 minutes.
Description	Only level 4 and level 6 students are invited to take part in this cognition study. Taking part in this study will involve two short computer-based Stroop tests and a short reading and note-making exercise. In total, the study will last approximately 15 minutes. You will be awarded 1 credit for your participation. If you wish to cancel the study please do so at least 24 hours before your allotted time.

Restrictions

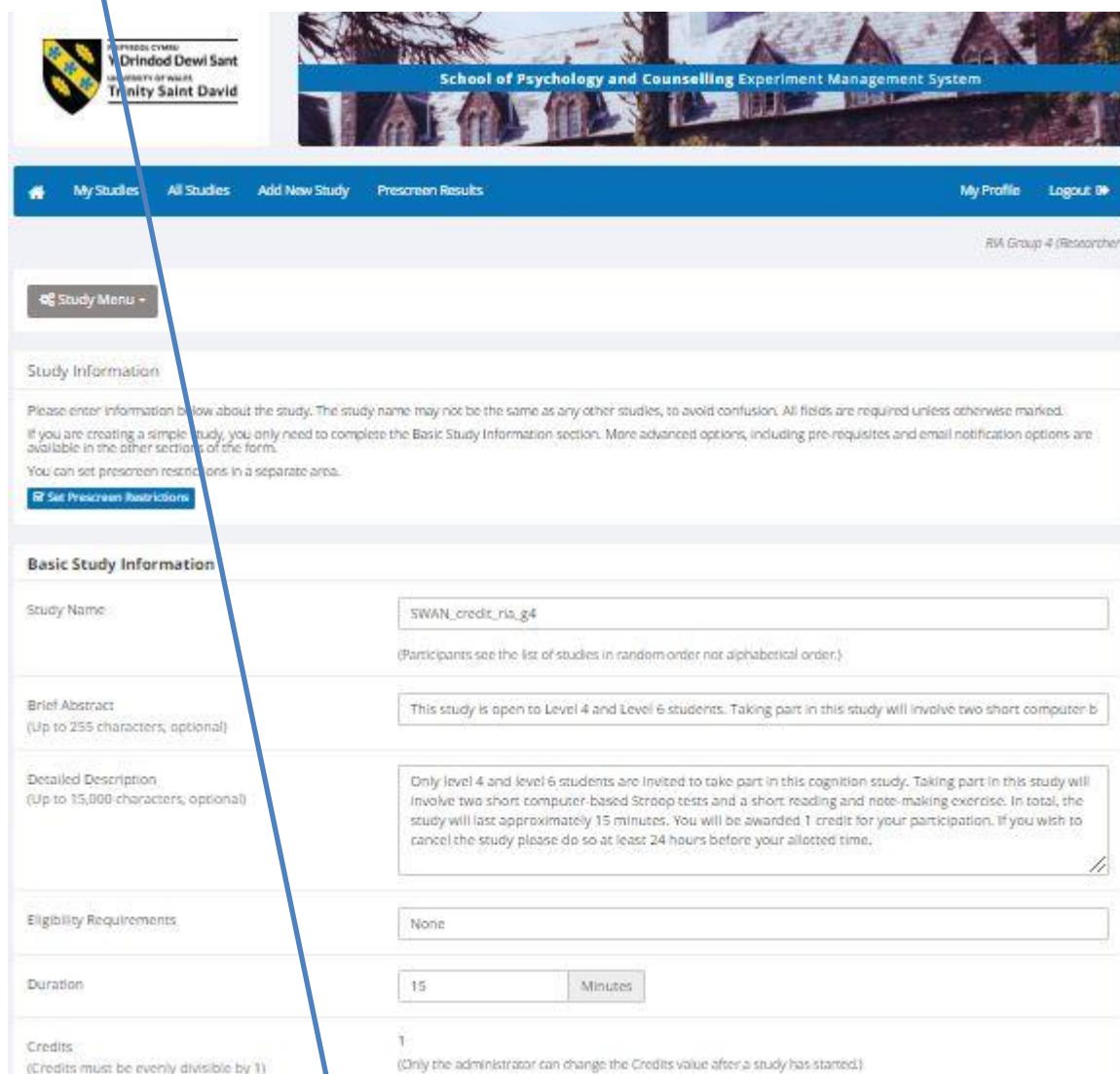
Prescreen Restrictions	No Restrictions View/Modify Restrictions
Course Restrictions	Participants must be in at least one of these courses: - Level 4 Swansea - Level 5 Swansea - Level 6 Swansea

Additional Study Information

Timeslot Usage Limit	100 hours (approximately 400 signups)
Participant Sign-Up Deadline	24 hours before the study is to occur
SREC Approval Code	SRECApprovalPBH
Direct Study Link	https://uwtsd-uk.sona-systems.com/default.aspx?p This is a direct URL for participants to access the study. You may use this in an email or study advertisement.
Date Created	25 November 2019

Researcher Information

Researcher	RIA Group 4
Principal Investigator	Paul Hutchings



Y Drindod Dewi Sant
UNIVERSITY OF WALES
Trinity Saint David

School of Psychology and Counselling Experiment Management System

My Studies All Studies Add New Study Prescreen Results My Profile Logout

RVA Group 4 (Researcher)

Study Menu

Study Information

Please enter information below about the study. The study name may not be the same as any other studies, to avoid confusion. All fields are required unless otherwise marked.
If you are creating a simple study, you only need to complete the Basic Study Information section. More advanced options, including pre-requisites and email notification options are available in the other sections of the form.
You can set prescreen restrictions in a separate area.

[Set Prescreen Restrictions](#)

Basic Study Information

Study Name:
(Participants see the list of studies in random order not alphabetical order.)

Brief Abstract (Up to 255 characters, optional):

Detailed Description (Up to 15,000 characters, optional):

Eligibility Requirements:

Duration:

Credits:
(Credits must be evenly divisible by 1) (Only the administrator can change the Credits value after a study has started.)

I populated the EMS with basic study information; a brief abstract and a detailed description. The team worked together to formulate the detailed description as there were conflicting ideas regarding content.

The wording of the description was a contentious issue. We compromised and worded the description in such a way that the element of deception would not be revealed.

I am now competent at following the EMS procedure and can populate studies and use the EMS as a student researcher. I would feel confident navigating the EMS in the future.

Timeslots for this study are listed below, with any sign-ups listed below the timeslot.

Search for available timeslots on:

Filter Status: [All](#) [Full](#) [Open Spaces](#)

Sunday, 12 January 2020

GO

Date	Participants Pool	Participants	Location	Modify
Monday, 2 December 2019 14:00 - 14:15	Signed Up: 0 Open Slots: 1 Total: 1		Psychometrics Lab (211b)	Modify
Monday, 2 December 2019 14:00 - 14:15	Signed Up: 0 Open Slots: 1 Total: 1		Interview Room (211c)	Modify
Monday, 2 December 2019 14:20 - 14:35	Signed Up: 0 Open Slots: 1 Total: 1		Psychometrics Lab (211b)	Modify
Monday, 2 December 2019 14:20 - 14:35	Signed Up: 0 Open Slots: 1 Total: 1		Interview Room (211c)	Modify
Monday, 2 December 2019 14:40 - 14:55	Signed Up: 0 Open Slots: 1 Total: 1		Psychometrics Lab (211b)	Modify
Monday, 2 December 2019 14:40 - 14:55	Signed Up: 0 Open Slots: 1 Total: 1		Interview Room (211c)	Modify
Monday, 2 December 2019 15:00 - 15:15	Signed Up: 0 Open Slots: 1 Total: 1		Psychometrics Lab (211b)	Modify
Monday, 2 December 2019	Signed Up: 0		Interview Room (211c)	Modify

The system is highly configurable and intuitive. I credited participants following their attendance and participation in our study. Additionally, I was able to access and update the study remotely.

Quantitative data collection. Study two: Experimental observation; Does a) local or b) global environmental information positively affect pro-environmental behaviour more?

I conducted quantitative experimental research studies within the labs with several participants. I collated the data for my team colleagues and provided the team with the collated information via Microsoft Teams. I statistically analysed the data. The analysis confirmed that there was no statistical difference between the two variables (locally or globally focused environmental information) in our study. I am competent in data collection materials production, conducting lab-based psychological studies with participants and analysing the data. Additionally, I am an excellent communicator during experimental studies (e.g. explaining instructions to participants) and communicating data to other team members.

Quantitative data collection. Study One: Simplified information and social influence: Their effects on pro-environmentalism at institutional level.

I was predominantly involved in sub-team two (and study two). However, I also worked with sub-team one. I assisted in practical quantitative data collection and collating information on study one.

Study One: Simplified information and social influence: Their effects on pro-environmentalism at institutional level

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