# ACADEMIC PROJECT SUBMISSION DETAILS:

<table>
<thead>
<tr>
<th><strong>Supervisor/s:</strong></th>
<th>Maryanne Garry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Title:</strong></td>
<td>Developing an experimental analog for determining the fragmentation of traumatic memories</td>
</tr>
<tr>
<td><strong>Field:</strong></td>
<td>Cognitive psychology/clinical cognition</td>
</tr>
<tr>
<td><strong>Division/School:</strong></td>
<td>ALPSS - School of Psychology</td>
</tr>
</tbody>
</table>

## EXPECTED OUTCOMES:

1. Short review of the relevant literature
2. Polished materials for data collection
3. Collected and analysed data for a first study
4. Present first study to lab and wider school

## STUDENT TASKS:

1. Reading & Reviewing the literature
2. Designing Materials
3. Collecting Data
4. Analysing and presenting data
5. Attending lab meetings and project meetings

## REQUIRED SKILLS:

1. Good background in cognitive psychology (Ideally have taken PSYCH322 or similar)
2. Good understanding of statistics & quantitative research methods
3. Strong critical thinking skills
4. Proficient with computers (Excel, SPSS, etc.)
5. Dedicated, focused, careful, responsible work ethic

## PROJECT ABSTRACT:

Influential, but pseudoscientific, clinical theories would have us believe that memories for traumatic experiences are recalled out of order, with missing parts’ a consequence of an allegedly special mechanism by which the brain encodes only ‘shallow’ aspects of trauma, forgoing deeper conceptual processing. Our Marsden-funded experiments from last year and this year show that this claim is wrong. When we gather people’s most positive, negative, important, and traumatic memories, all four types look similar, and not fragmented.
**PROJECT ABSTRACT**

That is, there seems to be nothing special about traumatic memories relative to other memories with similar emotional intensity or impact.

We now propose to bring greater experimental control to our earlier work by using the well-established trauma film paradigm. We will create memories using two trauma films, and two positive, negative, and neutral films. Each subject will watch two films of the same valence, but will be randomly allocated to work at repeatedly recalling one over a series of, say, 5 days. We will measure the coherence of their memories before and after recall, as well as posttraumatic stress-like symptoms. This approach will also allow us to assess the extent to which people manufacture additional details about the film, resulting in changes to their memory reports over time.

Our research team comprises Maryanne Garry, Professor of Psychology and an internationally-regarded expert in human memory, trauma, and clinical cognition; Andrea Taylor, a PhD student working in the same field, as well as national and international colleagues.
**ACADEMIC PROJECT SUBMISSION DETAILS:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supervisor/s:</strong></td>
<td>Maryanne Garry</td>
</tr>
<tr>
<td><strong>Project Title:</strong></td>
<td>Why do videos make people overconfident in their abilities?</td>
</tr>
<tr>
<td><strong>Field:</strong></td>
<td>Cognitive psychology</td>
</tr>
<tr>
<td><strong>Division/School:</strong></td>
<td>ALPSS - School of Psychology</td>
</tr>
</tbody>
</table>

**EXPECTED OUTCOMES:**

1. Short review of the relevant literature
2. Finalised materials for data collection
3. Collected and analysed data for a first study
4. Present first study to lab and wider school

**STUDENT TASKS:**

1. Reading & Reviewing the literature
2. Designing Materials
3. Collecting Data
4. Analysing and presenting data
5. Attending lab meetings and project meetings

**REQUIRED SKILLS:**

1. Good background in cognitive psychology (Ideally have taken PSYCH322 or similar)
2. Good understanding of statistics & quantitative research methods
3. Strong critical thinking skills
4. Proficient with computers (Excel, SPSS, etc.)
5. Dedicated, focused, careful, responsible work ethic

**PROJECT ABSTRACT:**

People often overstate what they know and what they can do.

Why? Some research suggests that this 'overclaiming' is a form of social desirability, self-enhancement, or even narcissism. In other words, people 'overclaim' what they know or can do because they have some need to fake good things about themselves.

But it is possible that some overclaiming occurs because of a cognitive bias people are not even aware of. More specifically, when we process information, we are influenced by how easy or difficult it feels to do so.
PROJECT ABSTRACT:

We often interpret easy processing, or fluency, as evidence of understanding, even if that conclusion is not accurate. We hypothesise that people also use feelings of fluency when overclaiming about their knowledge and skills.

To address this issue, we will carry out an experiment investigating the role fluency plays when people predict how well they would be able to perform highly-technical skills, such as speaking a foreign language. Subjects will watch a clip of people speaking a foreign language; one version of the clip will contain English subtitles but the other will not. Everyone will then be asked to rate how confident they are in their own ability to globally understand the foreign language.

We predict that when people watch a clip with subtitles they will develop an inflated sense of confidence in their own ability to understand that language. If so this pattern of results will provide evidence for a formerly overlooked mechanism by which people become overconfident in their abilities. These results would then have implications for many fields including cognitive science and education.

Our research team comprises Maryanne Garry, Professor of Psychology and an internationally-regarded expert in human memory; Kayla Jordan, a PhD student working in the same field, as well as national and international colleagues.
### ACADEMIC PROJECT SUBMISSION DETAILS:

<table>
<thead>
<tr>
<th>Supervisor/s:</th>
<th>Maryanne Garry and Mevagh Sanson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Title:</td>
<td>Imagine that! Using behavioural science to prevent cybercrime</td>
</tr>
<tr>
<td>Field:</td>
<td>Clinical &amp; forensic cognitive psychological science</td>
</tr>
<tr>
<td>Division/School:</td>
<td>ALPSS – School of Psychology</td>
</tr>
</tbody>
</table>

### EXPECTED OUTCOMES:

1. Short written review of the relevant literature
2. Refined materials for data collection
3. Collected and analysed data for at least one study
4. Write up method & results from at least one study
5. Present results to lab and wider school
6. Probable publication and possible groundwork for external funding

### STUDENT TASKS:

1. Reading & Reviewing the literature
2. Designing Materials
3. Collecting Data
4. Analysing Data
5. Attending lab meetings and project meetings

### REQUIRED SKILLS:

1. Background in cognitive psychology (Ideally have taken PSYCH322 or similar)
2. Understanding of statistics & quantitative research methods
3. Strong critical thinking skills
4. Proficient with computers (Excel, SPSS, etc.)
5. Dedicated, focused, careful, responsible work ethic

### PROJECT ABSTRACT:

We recently discovered that when people imagine being robbed, nearly half believe the experience would cause them major emotional harm, such as posttraumatic stress disorder. But when people imagine losing money via cybercrime, only a third believe it would harm them. This discrepancy is puzzling: the objective financial loss is the same, and people expect to escape physical injury in either case. But something must be different about cybercrime that leads people to expect it will be less harmful.
PROJECT ABSTRACT:

We hypothesise this "something" is how people think about cybercrime. People imagine some scenarios full of concrete detail, while other scenarios are more abstract. For instance, we can picture someone stealing our wallet, but how do we picture a cybercriminal stealing our money? The answer is, we don't: we found people imagined cybercrime with little concrete detail. This more abstract way of thinking about cybercrime could be why people think cybercrime is less harmful. If so, leading people to think concretely about the very real threat of cybercrime should help them better protect themselves online.

Most approaches to reducing cybercrime focus on technological solutions that seek to make it more difficult for motivated criminals to succeed. Still others focus on the roles that service providers and website moderators can play. Yet the proximal cause of cybercrime is often some user's behaviour that enables it, which is why behavioural science has so much to contribute to reducing cybercrime. The relatively few approaches that focus on users' behaviour simply try to inform users about the dangers of cybercrime and how to prevent it. But decades of research in behavioural science show that such an approach is doomed to fail: after all, the world is filled with people who eat too much, or exercise too little, who know what they should do and why, yet rarely do it. Merely educating people about cybercrime is not the complete solution. Instead, the solution must also help users come to see cybercrime as a concrete threat to them, and to then form what behavioural scientists call 'implementation intentions.' That is, intentions to enact various, specific steps to accomplish some goal, such as avoiding cybercrime. Implementation intentions are strongly predictive of people's subsequent behaviour.

We are currently refining a paradigm that reliably makes thinking about cybercrime feel more concrete (versus more abstract) and more harmful. Next, we will determine how well thinking about cybercrime in a more concrete (versus abstract) way encourages people to better protect themselves against harm from cybercrime. Specifically, we will ask people to imagine being the victim of a specific cybercrime, and manipulate the scenario's level of concreteness. We will then measure the extent to which people intend to implement various specific steps to protect themselves online, and later enact those steps.

Our research team comprises Maryanne Garry, Professor of Psychology and an internationally-regarded expert in human memory, clinical cognition, and their application to forensic contexts; Mevagh Sanson, an early career researcher working in the same field, and international colleagues.
### ACADEMIC PROJECT SUBMISSION DETAILS:

<table>
<thead>
<tr>
<th>Supervisor/s:</th>
<th>Maryanne Garry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Title:</td>
<td>When and why do people (mis)judge autobiographical memories as unintended and intrusive?</td>
</tr>
<tr>
<td>Field:</td>
<td>Clinical/cognitive psychological science</td>
</tr>
<tr>
<td>Division/School:</td>
<td>Division of Arts, Law, Psychology and Social Sciences</td>
</tr>
</tbody>
</table>

### EXPECTED OUTCOMES:

1. Short written review of the relevant literature
2. Refined materials for data collection
3. Collected and analysed data for multiple experiments
4. Write up method & results from at least first study
5. Present results to lab and wider school
6. Probable publication and possible groundwork for external funding

### STUDENT TASKS:

1. Reading & Reviewing the literature
2. Designing Materials
3. Collecting Data
4. Analysing Data
5. Attending lab meetings and project meetings

### REQUIRED SKILLS:

1. Background in cognitive psychology (Ideally have taken PSYCH322 or similar)
2. Understanding of statistics & quantitative research methods
3. Strong critical thinking skills
4. Proficient with computers (Excel, SPSS, etc.)
5. Dedicated, focused, careful, responsible work ethic
When people want to retrieve something from their memory—such as a piece of information, or an experience they have had—they can do so deliberately. These memories people intend to retrieve are known as “voluntary memories.” But sometimes memories can instead pop into people’s minds spontaneously. These memories they did not intend to retrieve are known as “involuntary memories.” Both voluntary and involuntary retrieval are common and normal memory processes. But sometimes, if people experience involuntary memories that feel intrusive and unwanted—for instance, those about a traumatic experience—those memories can become distressing and impairing. It is therefore theoretically and practically important to examine normal and problematic involuntary memories. Indeed, they have been the focus of much psychological research. Of course, in order to discover when and why involuntary memories are retrieved, researchers must be sure that they are in fact studying involuntary memories. But our team recently discovered that when people are asked to judge if a given memory of theirs was involuntary—a common method used to determine which memories are involuntary—people have a tendency to misjudge their voluntary memories as involuntary when those memories were intended, yet came to mind with relatively little effort. In other words, our findings to date suggest that researchers do not have a reliable way to determine which memories are involuntary. We now seek to extend these findings by adapting our method to examine two related questions: [1] Do people tend to make the same misjudgement when the memories they are asked to judge are of experiences they have had, rather than pieces of information they know? [2] Do people tend to make other, related misjudgements about those memories—specifically, that voluntary yet effortless memories came to mind not only unintentionally, but intrusively? The findings from these experiments will yield crucial information about the mechanisms that give rise to these misjudgments and how researchers can minimise them to best study involuntary memories. Our research team comprises Maryanne Garry, Professor of Psychology and an internationally-regarded expert in human memory, trauma, and clinical cognition; Mevagh Sanson, an early career researcher working in the same field, and international colleagues.
### Academic Project Submission Details:

<table>
<thead>
<tr>
<th>Supervisor/s:</th>
<th>Dr Lynne Chepulis, Dr Jade Tamatea, Dr Ryan Paul</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Title:</td>
<td>Assessing the rate of screening for Diabetes in Pregnancy in Waikato women</td>
</tr>
<tr>
<td>Field:</td>
<td>Health / biomedical</td>
</tr>
<tr>
<td>Division/School:</td>
<td>ALPSS</td>
</tr>
</tbody>
</table>

| Project #:            | 77                                               |

### Expected Outcomes:

1. Using data provided by the Waikato DHB, determine what proportion of women who birthed during 2018 were correctly screening for diabetes in pregnancy (according to Ministry of Health Guidelines).

### Student Tasks:

1. Clean the dataset provided by the DHB (approx 4000 women), including checking erroneous values. This dataset includes information about pregnancy and delivery (ie date of delivery, gestation at delivery etc).
2. Liase with contacts at the Waikato birthing centres to collect data about women who birthed there during 2018 (including ethnicity, date of delivery, gestation at delivery).
3. Link provided pathlab laboratory data to the cleaned dataset (including HbA1c, and glucose tolerance test results and date of test).
4. Under supervision, run some basic analysis of this data to determine what proportion of women who birthed in the Waikato during 2018 i) had an HbA1c test before 20w gestation, and ii) had testing for gestational diabetes at 24-28w gestation.
5. Contribute to the larger project discussions (the larger project also includes qualitative interviews and surveys with women and midwives about their screening journey).
6. Time permitting, contribute to the dissemination of results.

### Required Skills:

1. Computer literacy skills, particularly with excel
2. Familiarity with heath data
3. Interest in, and basic understanding of heath, diabetes and pregnancy
4. Good personal skills, and a good communicator
5. Good time management abilities
6. Knowledge of basic statistics
PROJECT ABSTRACT:

Diabetes in pregnancy (DiP) is associated with complications for both mother and child, and current statistics suggest that 1 in 11 pregnancies in New Zealand are affected, including a disproportionate number of Māori. However, until recently in New Zealand screening for DiP has varied widely in opinion and practice, and current recommended guidelines are complicated with multiple steps, such that little is currently known about the adherence to these guidelines, nor what the barriers / enablers are that prevent / allow for screening and timely diagnosis.

To address the lack of DiP screening consistency within New Zealand, the Ministry of Health implemented new guidelines for the screening and diagnosis of DiP in 2014. To date, little is known about how well these guidelines are being adhered to, though a pilot study in the Waikato from 2017 indicated that only 25% of women were being screened according to the Ministry of Health screening pathway, with rates of screening much lower in Māori than in non-Māori women. In order to improve access to screening, more work is needed to understand what the enablers are, and what the barriers are to screening inside of these Ministry of Health timeframes, or indeed, to screening for DiP at any point during their pregnancy.

This study aims to comprehensively evaluate screening for DiP in Waikato women using a cohort of up to 5000 women who birthed during 2018, along with a series of semi-structured interviews with women and healthcare providers about their screening knowledge and experience. The proposed student project outlined here is to support the quantitative aspect of the study only.

This study is funded by the Waikato Medical Research Foundation, and ethics approvals have already been obtained.