### ACADEMIC PROJECT SUBMISSION DETAILS:

**Supervisor/s:** Maryanne Garry  
**Project Title:** Developing an experimental analog for determining the fragmentation of traumatic memories  
**Field:** Cognitive psychology/clinical cognition  
**Division/School:** ALPSS - School of Psychology

### 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.
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:

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<th>Supervisors:</th>
<th>Maryanne Garry</th>
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<tr>
<td>Project Title:</td>
<td>Why do videos make people overconfident in their abilities?</td>
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<tr>
<td>Field:</td>
<td>Cognitive psychology</td>
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<td>Division/School:</td>
<td>ALPSS - School of Psychology</td>
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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:

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