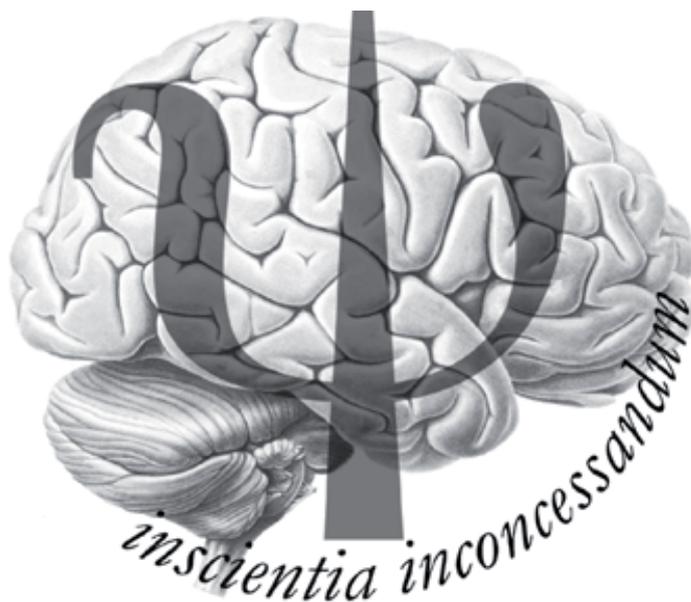


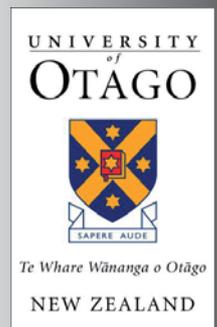
PSYCCOLLOQUY

2014

Department of Psychology
University of Otago



27 November 2014
Main Common Room
University College



Welcome to Psycolloquy 2014

This year we are pleased to have Associate Professor Nigel Dickson give the keynote address titled

Aspects of sexual health and behaviour in early childhood

Associate Professor Nigel Dickson initially trained and worked as a specialist paediatrician before undertaking further training in epidemiology and public health. Since 1990 he has worked with the AIDS Epidemiology Group – of which he is now the Director – in the Department of Preventive and Social Medicine, and been involved in the study of Sexual and Reproductive Health and Behaviour in the Dunedin Multidisciplinary Health and Development Study (DMHDS).

In addition, there will be presentations of research by students from within the Department of Psychology and a prize for the best student presentation.

Psycolloquy 2014 Committee

Julien Gross
Fiona Jack
Helena McAnally

Special thanks to

Michael Colombo
Cara Duffy
Department of Psychology Technicians

Psycolloquy 2014

8.30 am BREAKFAST

9.00 am **Shika Das and Amanda Clifford**

Elaborations, efficacy, and education: The relationship between elaborative reminiscing, parental self-efficacy and school readiness

9.15 am **Jessica Johnston**

Getting ready for school: From there to here and here to there

9.30 am **Abigail Pigden**

Does reading make you angry? Investigating the effects of violent literature on aggressive cognitions and prosocial tendencies

9.45 am **Mohamad Fairuz Yahaya**

Using gene transfer to combat Alzheimer's Disease

10.00 am **Thom Elston**

A dual loop hypothesis of schizophrenia

10.15 am **Emma Beeby**

Are pigeons' choices affected by the number of alternatives available?

10.30 am MORNING TEA

11.00 am KEYNOTE ADDRESS

Associate Professor Nigel Dickson, MD

Aspects of sexual health and behaviour in early adulthood

12.15 pm LUNCH

1.30 pm **David Barton**

The effect of liking on having a good or bad first name

1.45 pm **Kahla Redman**

Paperbacks and prejudice: Can reading fiction influence attitudes towards women?

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- 2.00 pm **Vahideh Karimirad**
Alcohol appraisals and their impact on remembering and predicting emotional response to alcohol
- 2.15 pm **Anna Barham**
Living with an invisible neurological condition: An interpretative phenomenological analysis
- 2.30 pm **Becky Harding**
A.B.C. links to reading: Associations between academic enabling skills, reading performance, and sleep-disordered breathing in children
- 2.45 pm **Sarah Maessen**
School performance in children before and after adenotonsillectomy: A case control study
-

3.00 pm AFTERNOON TEA

- 3.30 pm **Olivia Scobie**
The relationship between discrimination and belonging
- 3.45 pm **Bruno Aldaz**
The experience of cancer treatment: A qualitative study of patients' experiences during adjuvant treatment in New Zealand
- 4.00 pm **Ann Cronin**
Why not paint 1000 words? Drawing as an encoding tool
- 4.15 pm **Bridget Irvine**
"Of course I lied, mum asked me to!" The effect of cross-examination on children's responses when they have been coached to lie
- 4.30 pm **Celia Guido Mendes**
Is bilingualism an advantage? Evidence from the Simon Task
-

4.45 pm STUDENT PRIZE PRESENTATION

We would like to thank Continuing Education and the Department of Psychology for supporting Psycolloquy 2014, the Department's presentation day for students' research.

KEYNOTE ADDRESS

Aspects of sexual health and behaviour in early adulthood

Associate Professor Nigel Dickson, MD

Director of AIDS Epidemiology Group

Department of Preventive and Social Medicine, University of Otago

Information on sexual and reproductive health and behaviour has been asked of the participants in the Dunedin Multidisciplinary Health and Development Study (DMHDS) since the age 18 assessment in 1990/1991. This component of the study is now the longest running comprehensive cohort study of sexual behaviour. Nigel will briefly present on three separate analyses that explore aspects of sexual health, sexuality and the reporting of sexual behaviour over different age periods in early adulthood.

Elaborations, efficacy, and education: The relationship between elaborative reminiscing, parental self-efficacy and school readiness

S. Das, A. Clifford, E. Schaughency, S. Robertson, E. Reese and J. Johnston

Department of Psychology, University of Otago

Oral language provides the foundation for many areas of childhood development, including literacy acquisition, language development, and socio-emotional understanding. Elaborative reminiscing refers to parent-child conversation practices involving a focus on past shared and non-shared knowledge, in which utterances provide rich detail about the event. Elaborative reminiscing is thought to provide opportunities for the transmission of important ideas and practices that are valued by parents. Furthermore, elaborative reminiscing styles may be used to establish cause and effect, aid meta-cognitive processes, and strengthen social bonds. Recently, there has been a shift in focus on the role of parental psychological variables on reminiscing styles. Specifically, emerging parenting self-efficacy literature has found links between the strength of parental self-efficacy and early language and literacy skills. Given that the English language has evolved to capture the unique “Kiwi-isms” of NZ, our study aims to explore the similarities and differences in the underlying mechanisms and function of reminiscing on children’s socio-emotional, language and literacy development within the home environment. In addition, we wish to explore the role of parental self-efficacy on reminiscing practices.

As part of a wider school readiness intervention, “The Getting Ready For School” programme, 67 mother-child dyads were recruited through local kindergartens and childcare centres. These dyads were asked to record a reminiscing conversation about a positive event with their four-year-old children. Mothers were also asked to complete a domain-specific measure of self-efficacy and report how often they engaged in reminiscing practices across seven days. Preliminary findings revealed a link between parental self-efficacy and frequency of reported reminiscing practices. However, frequency did not appear to be linked to observed reminiscing practices or child language and literacy development.

Further analysis will explore the differing relationship between the quantity and quality of reminiscing practices, and the role of parental self-efficacy on child outcomes.

Getting ready for school: From there to here and here to there

J. Johnston, E. Reese, E. Schaughency and S. Das

Department of Psychology, University of Otago

Family involvement throughout early childhood is integral for scaffolding children's development and, ultimately, their academic success once they transition to primary school. However, many parents report that they do not feel adequately equipped to support their children's learning at home. To address this need, we developed and disseminated two evidence-based, preventive interventions that trained parents to read and talk about books with their preschoolers in ways that consolidate pre-academic skills. The primary aim of this study was to investigate the effectiveness of two methods in advancing children's vocabulary, narrative and phonological awareness, thus paving the way for future school achievement.

Methods. Two styles of reading and talking about books were tested: a meaning-based intervention called Rich Reading and Reminiscing (RRR) and a sound-based intervention called Strengthening Sound Sensitivity (SSS). Parents in both experimental conditions received a one-hour training session and were assigned 12 picture books over a six-week period. Families in an activity control condition received weekly activity packs over the same six-week period. A total of 70 families participated in three cohorts over 2013-2014, with the child participants pre- and post-tested using established language and literacy measures.

Results. Preliminary results showed no statistically significant growth in children's vocabulary or story comprehension over the six weeks. However, children's letter knowledge increased for both experimental groups compared to the control group. Phonological awareness also increased for the children in the SSS condition compared to RRR and the control.

Conclusions. The initial results are promising and we will continue to monitor the children's progress over the next year. Ultimately, these results will aid in the continued development of a comprehensive oral language intervention for parents of preschoolers.

Does reading make you angry? Investigating the effects of violent literature on aggressive cognitions and prosocial tendencies

A. R. Pigden, J. Todd, E. Reese and H. McAnally

Department of Psychology, University of Otago

Violent content in television, video-games, and music has been shown to increase aggressive thoughts and decrease pro-social behaviour. The aim of this research was to see if reading violent stories produces the same effects as exposure to other violent media. In the first study, 63 University of Otago students were randomly assigned to one of four conditions, in which they watched either a violent or nonviolent television clip, or read a violent or nonviolent corresponding literature extract, all of 20 minutes in length. All participants completed an Implicit Association Task, an Intent Attribution measure, several pro-social questionnaires and an engineered helping task. Results showed no significant effects of media condition on our outcome measures. In Study 2 we used a less complex source material for the media extracts, and shortened the exposure to ten minutes. We also used a word-prime task rather than the IAT, and added a no-media control condition. Participants were shown either a violent clip, asked to read a corresponding violent extract, or were not exposed to any media. Results showed no effect of media condition on our aggression measures. There was a significant effect for the helping task; participants in the no-media condition were significantly more helpful than those in either the literature or television conditions. Planned comparisons indicated that those exposed to the violent television were the least helpful, followed by those in the literature condition, and then by those in the no-media condition. These results indicate that violent literature decreases pro-social tendencies, but not to the same extent as violent television.

Using gene transfer to combat Alzheimer's Disease

M. F. Yahaya^{1,2,3}, **S. M. Hughes**^{2,3} and **W. C. Abraham**^{1,3}

Departments of ¹Psychology, ²Biochemistry, and

³the Brain Health Research Centre, University of Otago

Alzheimer's Disease (AD) is a progressive neurodegenerative disorder that mostly affects the elderly. It is the most common cause of dementia and generates enormous economic, social and healthcare costs. AD is characterised by excessive accumulation of the neurotoxic protein amyloid- β ($A\beta$) following the amyloidogenic processing of amyloid precursor protein (APP). To date there has been limited success in treating established AD cases. We hypothesized that established behavioural and electrophysiological deficits caused by amyloid accumulation could be mitigated or reversed by promoting secreted APP-alpha (sAPP α) production, a metabolite of APP. To test this, we used lentiviral gene transfer to overexpress sAPP α bilaterally in the hippocampus of 10-month-old mice engineered to express two human genes with mutations characteristic of familial AD (APP/PS1), and thus leading to the development of $A\beta$ deposition. The mice were behaviourally and electrophysiologically tested 2-3 months post-transduction. Surprisingly, our results showed no significant genotype differences in the open field, elevated plus maze, Morris water maze, Barnes maze or fear conditioning tasks, and thus the effects of sAPP α could not be evaluated. Subsequent electrophysiological in vitro field recordings in hippocampal slices revealed no group differences in basal synaptic efficacy or short-term plasticity. However, the magnitude of long-term synaptic plasticity (LTP) measured one hour post-induction in transgenic control mice (that received a non-sAPP α containing vector) was significantly reduced compared to litter-matched wild-type controls treated with the same control vector. But LTP was recovered to control levels in the transgenic mice overexpressing sAPP α . These results indicate that sAPP α overexpression using lentiviral gene transfer can reduce at least some of the neurotoxic effects of $A\beta$, even after plaque development.

A dual loop hypothesis of schizophrenia

T.W. Elston and D.K. Bilkey

Department of Psychology, University of Otago

We present here behavioural, electrophysiological, and neurochemical evidence that task-dependent neural activity in the medial prefrontal cortex, CA1 hippocampal region, and ventral tegmental area putatively form a dual loop, connecting the cortical, limbic, and basal brain areas and that this dual loop facilitates salience perception, working memory, and attentional selection aspects of cognition. We hypothesise that it is dysfunction in this dual loop that drives the cognitive symptoms of schizophrenia, a serious neuropsychiatric condition afflicting nearly 300 million people worldwide. Our thesis is that brain rhythms reflect the transfer and syntax of neural information and that when normal rhythmicity fails, pathology ensues. Our hope is that the ideas presented here will encourage rhythm-based perspectives on brain function, healthy and pathological, and will open the door to new therapeutic avenues.

Are pigeons' choices affected by the number of alternatives available?

E. Beeby and B. Alsop

Department of Psychology, University of Otago

While choice in general has been widely researched, very few studies have focussed on examining the effect of multiple (more than two) alternatives on choice. Mathematical models of choice behaviour predict that behaviour will not be affected when multiple alternatives are present. Early research supported the models, but more recent research has found violations. Five pigeons were presented with three simultaneously available alternatives using a concurrent schedule. These alternatives were assigned to one of three reinforcer ratios, 9:3:1. The reinforcer ratios' positions were counterbalanced across pairs of birds. In some conditions all three keys were available, and in others only two keys were available. There were no significant differences in behaviour between the two- and three-key conditions. Choice does not seem to be affected by the number of available alternatives. However, preference was more extreme for the pair of alternatives with the lower pairwise reinforcer rate (3:1) than the pair with higher rate (9:3), regardless of how many alternatives were available. This differs from previous findings and may be explained by the birds responding significantly less to the 9 alternative across all conditions.

The effect of liking on having a good or bad first name

D. N. Barton and J. Halberstadt

Department of Psychology, University of Otago

What makes a good or bad first name? This is an important question to ask because many of us may not put much thought into the names we assign people, animals or objects. Past research shows that names do exert powerful influences on our lives, a fact that should make us think twice before deciding on a name. Research has shown that people non-arbitrarily name shapes. This has become known as the 'bouba/kiki' effect. This effect has also been replicated in experiments with faces, where people prefer to name faces by matching round names to round faces (congruent match) rather than round names to unrounded faces (incongruent match). Hence, people non-arbitrarily name faces too. However, what the 'bouba/kiki' effect does not show, is whether people like the shapes more when they are named congruently versus when they are named incongruently. The present study aimed to examine this aspect with faces rather than shapes. In this study participants completed one of three conditions (positive prime, negative prime, and control). In the two priming conditions they were asked to name faces from a selection of names and then rate the person on how much they liked them. In the control condition they simply rated the person without naming them. Results showed that naming a person increases liking for them irrespective of the priming condition, but overall liking is higher for congruently named faces. This study supports the hypothesis that when you have a name that matches your face people will like you more than when your name and face are mismatched.

Paperbacks and prejudice: Can reading fiction influence attitudes towards women?

K. F. Redman and J. Halberstadt

Department of Psychology, University of Otago

Reading fiction has been associated with many positive benefits for social skills, empathy, and language development, but it is also a powerful method of persuasion. Prior research has shown that young children's gendered behaviour may be influenced by fiction stories that contain traditional or non-traditional gender roles, and that adults' beliefs about stigmatised groups (homosexual men, immigrants, Arab-Muslims) may be positively influenced through fiction reading. The present research aimed to investigate whether reading, in adult samples, can be a method to challenge sexism. A correlational study of 74 University of Otago Psychology undergraduates was conducted to assess reading habits and levels of sexism. Sexism was assessed through the Ambivalent Sexism Inventory, a measure of both hostile and benevolent sexism. A significant negative correlation between reading and sexism was found across the sample, after controlling for several measures (gender, age, need for cognition, ability to be 'transported' into text, empathy, and resistance to persuasion). It was concluded that reading more overall was related to lower levels of stereotypical beliefs about women. Future research is indeed justified in examining reading interventions for sexism.

Alcohol appraisals and their impact on remembering and predicting emotional response to alcohol

V. Karimirad^{1,2}, T. Patterson¹, H. Hayne², and J. Gross²

Departments of ¹Psychological Medicine and ²Psychology, University of Otago

Appraisals, that is people's thoughts and attitudes about a certain category, determine their consequent behaviours toward that category. These appraisals are not formed only in one stage of life and only within one context such as family, but they develop over time and within different contexts. Appraisals are not stable, rather they change over time and these changes influence remembering and predicting relevant emotional responses. The overall aim of our study is twofold. First, we will examine individuals' alcohol appraisals, how they develop in three different contexts (family, peer relationship and the university orientation day), and how these appraisals relate to current drinking behaviour. Second, we will examine whether changes in alcohol appraisals impact on remembering and predicting emotional response to alcohol. In the first experiment 39 university students were interviewed using a semi-structured interview protocol about their views on alcohol and their experiences with alcohol during their childhood, peer relationship and university orientation day. To examine the relationship between alcohol appraisals and drinking behaviour, the interviews will be transcribed and thematically analysed to identify common themes in alcohol appraisal and how they relate to drinking behaviour. In the second experiment, participants' alcohol appraisals will be ascertained via explicit and implicit questionnaires. We will also ascertain their past emotional experience with alcohol, their forecasted emotional reaction to a future alcohol relevant experience, and then attempt to manipulate their alcohol appraisal via an alcohol related video clip. We hypothesise that individuals' drinking behaviour will be related to their alcohol appraisals. We also hypothesise that the manipulation of alcohol appraisals will influence remembering and predicting emotional responses to alcohol.

Living with an invisible neurological condition: An interpretative phenomenological analysis

A. H. C. Barham¹, G. J. Treharne¹ and D. L. Snell²

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²Department of Orthopaedic Surgery and Musculoskeletal Medicine, University of Otago Christchurch and Concussion Clinic, Brain Injury Rehabilitation Service, Burwood Hospital, Canterbury District Health Board, Christchurch

This qualitative study aimed to explore the lived experience of people with an invisible neurological condition that is either congenital or acquired. Few studies have focused on the impact of traumatic brain injury (TBI) on family life from the patient's perspective. Very few qualitative studies on prosopagnosia have been published, and most have been single-case clinical studies, providing no insight into any shared issues. In the present study four individuals (aged 44-68) with invisible neurological conditions were interviewed: one man and one woman with congenital prosopagnosia and one man and one woman who both sustained a TBI as adults. The research questions were: what is it like to live with an invisible neurological condition? And what is the effect on the family? Participants with a current partner and children were therefore recruited and interviewed by the first author using a semi-structured format. Each interview transcript was repeatedly read and coded systematically by the first author in order to generate themes which were then integrated across participants and verified in discussion with the co-authors. Three themes were found: managing impairments, moral failure, and loneliness. The participants found alternative ways to handle everyday activities with which they have some impairment. Sometimes these means of coping were seen by themselves and others as being lazy or uncaring. Being judged or misunderstood can make people with invisible neurological conditions feel lonely. These results suggest that helping family members and the general public understand the wide-ranging impact of various neurological conditions may increase the wellbeing of people with those conditions.

A.B.C. links to reading: Associations between academic enabling skills, reading performance, and sleep-disordered breathing in children

R. Harding¹, L. Flannery¹, C. Lobb², R. Luo², A. Gill³, B. Galland² and E. Schaughency¹

Departments of ¹Psychology, ²Women's and Children's Health, Dunedin School of Medicine, University of Otago, and ³Ministry of Social Development, Wellington

We examine the interrelations of sleep-disordered breathing (SDB) and academic performance in eight-year old children, exploring associations with broader academic enabling skills. SDB was assessed through parent-reported history of symptoms and physical examination of features related to SDB. Parent-completed questionnaires provided demographic and health information and ratings of attentional and behavioural regulation. Teachers provided overall teacher judgements for progress in reading and ratings of general learning problems. Both parents and teachers rated executive function and communication skills. Researchers assessed accuracy and fluency in oral reading and analysed children's retelling of reading passages (in a subset of the sample). Preliminary analyses suggest bivariate associations between academic, SDB, and behavioural measures. Exploratory independent t-tests found significant differences as a function of gender on some academic enabling skills, suggesting gender as a possible predictor for these measures. Results show significant correlations with SDB, demographic, learning, and academic enabling outcomes. These relations held in multivariate analyses, wherein SDB contributed to variation in reading progress and academic enabling skills above and beyond the contribution of demographic covariates. Given that academic enabling skills are predictors of achievement, we then explored whether these skills mediated the links between SDB and academic performance. Further analyses will examine additional academic outcomes (e.g., maths) and investigate implications of developmental trajectories of SDB to academic outcomes in longitudinal analysis from preschool to age 8. Findings will increase understanding of possible adverse developmental impacts of under-recognized early and chronic SDB on learning and development.

School performance in children before and after adenotonsillectomy: A case control study

***S. Maessen^{1,2}, C. Lobb¹, B. Galland¹, P. Dawes³
and E. Schaughency²***

*¹Departments of Women's and Children's Health, ²Psychology, and
³Otorhinolaryngology, University of Otago*

The resolution of sleep-disordered breathing (SDB) by adenotonsillectomy (AT) in children is associated with further improvements in behaviour and cognition. No studies to date have used measures of academic achievement intended for short term treatment evaluation, so the effects on school performance remain unclear. The current study investigates the suitability of a number of numeracy and literacy curriculum based measures for evaluating the effects of adenotonsillectomy on school performance. Children undergoing adenotonsillectomy and matched control participants aged between 3 and 12 will be assessed at three time points using new and repurposed literacy and numeracy tasks. It is anticipated that these new measures will be sensitive to the improved academic growth that is expected after treatment of SDB. To date, data for two case control pairs has been collected for the first two time points, and illustrative case data will be presented for these participants.

The relationship between discrimination and belonging

O. Scobie and J. Hunter

Department of Psychology, University of Otago

The relationship between intergroup discrimination and belonging was investigated. Two hypotheses were tested; the first was that low levels of belonging would lead to increased discrimination and the second was that intergroup discrimination would lead to increased levels of belonging. Three studies were conducted. Study one involved the participants' belief that they were split into two groups, but in reality all participants were in the Klee group. Experimental participants evaluated in-group and out-group members using 20 pairs of trait ratings whilst control group participants were forced to show fairness to out-group members through distribution matrices. Participants' level of belonging was assessed before and after the evaluations and their personal state self-esteem, private collective self-esteem and identity salience was measured after the evaluations. Study one showed that participants who evaluated in-group members more positively than out-group members showed increased levels of belonging. Study two was similar however social identity, group specific and personal self-esteem were measured prior to the experiment. A 3-item measure of belonging was then completed. Negative intergroup allocations were assessed via distribution matrices that represented seconds of white noise that participants were to listen to. Experimental participants were asked to allocate white noise to in-group and out-group members. There were four control conditions; forced fairness between in-group and out-group members, in-group versus in-group, out-group versus out-group and allocation to two random persons. Participants then completed the measure of group inclusion again. Study two found participants who discriminated more towards the out-group using negative outcomes showed increased levels of belonging.

The experience of cancer treatment: A qualitative study of patients' experiences during adjuvant treatment in New Zealand

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¹Department of Psychology, University of Otago

²Oncology and Haematology Services, Dunedin Hospital

Objective: The aim of this study was to explore the experiences of cancer patients undergoing treatment in New Zealand.

Methods: Six men and four women (n=10) participated in in-depth individual interviews. Participants had a range of cancer sites and initial surgeries and were receiving adjuvant cancer treatment at the time of the interviews. Audio-recorded interviews were transcribed, coded, and analysed using Interpretative Phenomenological Analysis.

Results: Six themes arose from the analysis: 1) Diminished well-being, 2) Role changes in intimate relationship, 3) Heightened awareness of limited time and future uncertainty, 4) A new order of priorities, 5) Resilience, acceptance and dealing with treatment difficulties, and 6) Development of trust in health professionals.

Conclusions: The impact of cancer treatment on well-being, day-to-day living, work, relationships and future outlook was mitigated by the patients' acceptance of the uncertainty and uncontrollable, optimism, present focus, and dedicated partners' support. Psychological support was deemed useful in past events or in the future if/when needed. Further research on well-being and day-to-day life in cancer patients with less social support is warranted.

Why not paint 1000 words? Drawing as an encoding tool

A. Cronin, H. Hayne and J. Gross

Department of Psychology, University of Otago,

Drawing during interviews has been shown to facilitate children's reports of past events; however, very little is known about the effect of drawing on the learning of information. We examined the effect of drawing on intermediate-school students' learning in a science class. All students were taught the same material about the topic of brain function but one class was asked to take notes in the form of drawings and another class was asked to take written notes. We hypothesised that there would be a difference between students who generated their own drawings and students who wrote traditional notes. We conducted follow-up testing 1- and 6-weeks post intervention to compare the effectiveness of using drawing as a learning technique. We found that drawing about the taught material was as effective as note taking on 2 of the three post-intervention measures and drawing effects were independent of students' efficacy beliefs around drawing ability. Notable outcomes of this research were the level of information that students retained and possibilities for teaching neuroscience as a topic in school science. In follow-up studies, we are examining the effects of drawing on memory with trained artists, with a view to developing programs to aid the retention of information gained in museum visits. We are also examining the effect that TED talks have on learning and attitudes and the use of pop culture references to facilitate encoding of information.

“Of course I lied, mum asked me to!” The effect of cross-examination on children’s responses when they have been coached to lie

B. Irvine and R. Zajac

Department of Psychology, University of Otago

Cross-examination has been identified as the most difficult aspect of the criminal court procedure for child witnesses. Despite the growing body of empirical evidence critiquing cross-examination, it remains the status quo. This is largely because the legal fraternity regard cross-examination as an integral tool for testing the accuracy of children’s evidence. This assumption, however, has never been experimentally tested. The present study aims to address this by examining the effect that cross-examination-style questioning has on children’s responses, after they have been coached to lie. Forty 6- to 11-year-olds participated in a ‘computer challenge’ against their parents in the laboratory. Parents were asked to coach their children to lie to the experimenter about two features of the computer challenge. Following the computer challenge, the children were interviewed with an analogue of direct-examination. After a short delay, a second experimenter cross-examined all children on half of their direct-examination responses. Interestingly, cross-examination did elicit truthful responses from the children who had lied about the coached details during the direct-examination interview. This finding was promising for the efficacy of cross-examination in a legal setting. However, consistent with previous research, cross-examination also prompted children to change details about the non-coached features of the computer challenge, which significantly reduced accuracy. These findings suggest that cross-examination coerces children to change their previous responses, irrespective of the truth.

Is bilingualism an advantage? Evidence from the Simon Task

C. Guido Mendes, J. Miller, T. Murachver, and M. Taumoepeau

Department of Psychology, University of Otago

Several studies point to the idea that being proficient in more than one language leads to positive cognitive gains, namely in what concerns attentional control and conflict monitoring. Such studies propose that the process of acquiring two languages and of simultaneously managing those languages, inhibiting one of them so that the other one can be accessed and used without interference, allows bilinguals to develop inhibitory control skills that extend into other cognitive domains. However, the existence of a bilingual advantage in nonverbal inhibitory processes has been challenged: some authors have highlighted methodological issues related to the control of confounding variables; additionally, recent studies have failed to replicate the bilingual advantage in conflict control, suggesting limitations to the robustness of previous findings. The present study set out to investigate the existence of a cognitive bilingual advantage in the Attention Network Test and in the Simon Task. Participants were English monolingual speakers and bilinguals with a high proficiency in English as a second language, and who had acquired English at different points in their lives, ranging from early childhood to adult age. The sample comprised 115 participants, between the ages of 18 and 67. Age, gender, socio-economic status, education level, fluid intelligence and proficiency in English were controlled for in the analysis. A bilingual advantage would have been supported by a reduced susceptibility to the conflict effect in response times and in error rates. Results showed no evidence of a statistically significant bilingual advantage in conflict effect, as both groups presented similar results in this measure.

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