

UWINNIPEG

PSYCHOLOGY

PRAIRIE UNDERGRADUATE
RESEARCH CONFERENCE
AND COLLOQUIA

Keynote Address:
Dr. Nancy Collins
(University of California,
Santa Barbara)

27.04.18



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Conference Overview

Time	Activity	Location
8:00 – 8:45	Registration, Reception, and Refreshments	4 th floor Lockhart Hall
8:45 – 8:55	Opening remarks, Dr. Doug Williams, Chair of Psychology University of Winnipeg	4M47
9:00 – 10:15	Spoken Presentation Session I (p.6-7)	3M57, 3M71 4M37
10:15 – 11:00	Poster Session and Coffee Break (p.7)	4 th floor Lockhart Hall
11:00 – 12:15	Spoken Presentation Session II (p.8)	3M57, 3M71 4M37
12:15 – 1:15	Lunch	Convocation Hall, Wesley Hall
1:30 – 2:45	Keynote Address: Dr. Nancy Collins, University of California, Santa Barbara	Eckhart Gramatté Hall, Centennial Hall, 3C00
3:00 –	Post-Conference social gathering	University Club 4 th floor, Wesley Hall

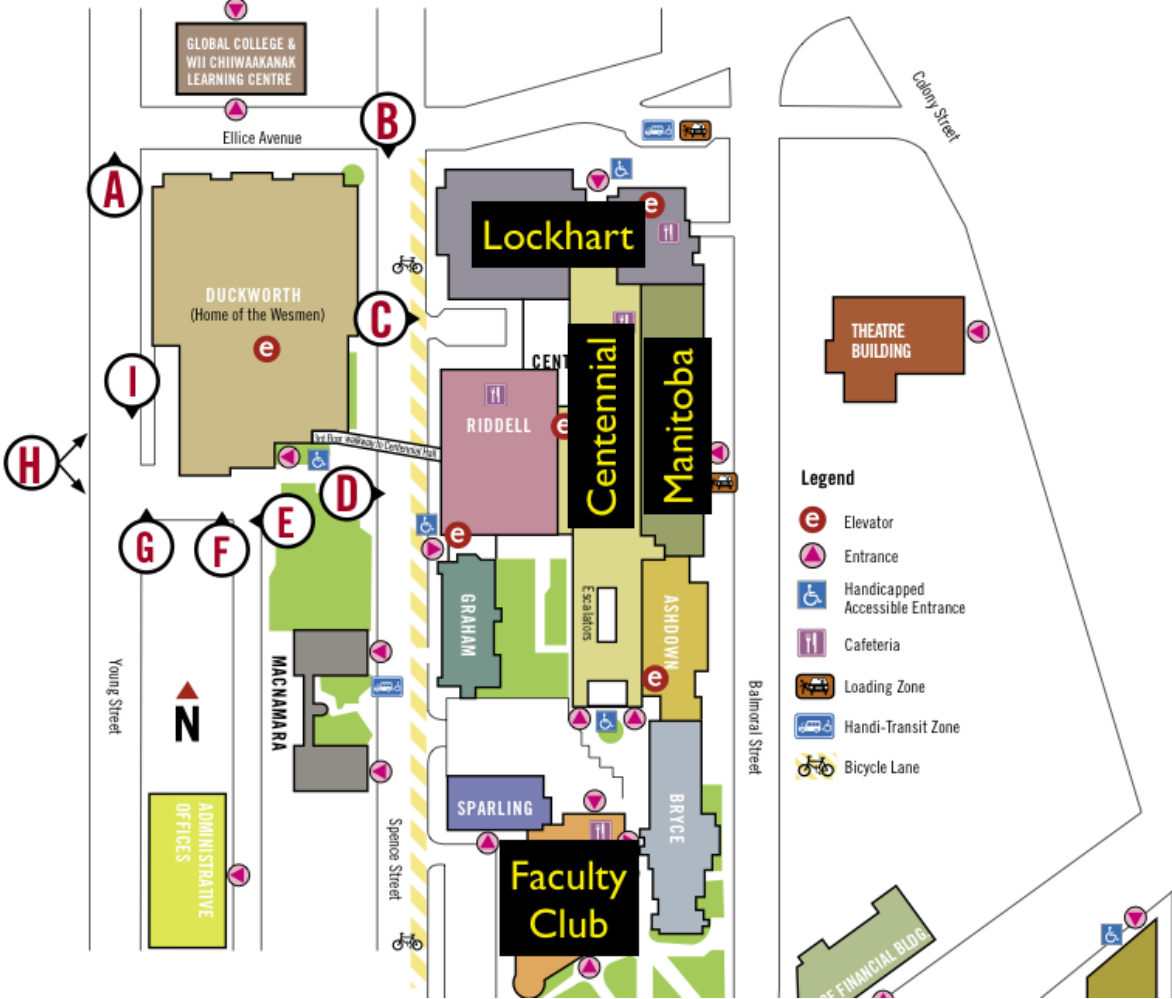
Keynote Speaker: Dr. Nancy Collins

The Compassionate Heart: Psychological and Physiological Responses to a Loved One in Need



After receiving her BA in Psychology from UCLA, Professor Collins completed her PhD in Social Psychology at the University of Southern California. She returned to UCLA for a Postdoctoral Fellowship in Health Psychology, and then served as a professor of Social Psychology at the State University of New at Buffalo from 1993 to 1997. Dr. Collins joined the Psychology Department at UCSB in 1997. Dr. Collins includes among her professional honors the Society for Personality and Social Psychology (SPSP) Theoretical Innovation Prize (2007), the Harold J. Plous Award for outstanding contributions to teaching and research at UCSB (2002), and the Young Investigator Award from the Close Relationships group of the Society of Experimental Social Psychology (1991). Dr. Collins has also received numerous honors for excellence in teaching and service at UCSB including an Academic Senate Distinguished Teaching Award (2004), three Outstanding Teaching Awards from the UCSB Residence Halls Association (1998, 2010, 2011), and the Sarah Miller McCune Service Award (2013). Dr. Collins is currently chair of the Quantitative Methods in Social Sciences (QMSS) program. She teaches courses in close relationships, research methods, introductory statistics, multivariate statistics, and structural equation modeling. Her research has been funded by the National Science Foundation, the National Institutes of Health, and the Fetzer Institute.

Conference Map



Spoken Presentation Session I (9:00-10:15)

Brain & Cognition I - 3M57

Moderator: Harinder Aujla

Time	Presenter	Title
9:00	Kenny, Sara University of Winnipeg	A Emotion and modes of thinking: does laughter make you more creative?
9:15	Wilson, Alyssia University of Winnipeg	Neural responses to consciously and unconsciously perceived emotional faces: A spinal fMRI study
9:30	Nedjadrassul, Paulina University of Winnipeg	Capturing asymmetry through analysis of context and frequency of words within a corpus
9:45	Bhanot, Shiv University of Winnipeg	The resting state fMRI and the emotional module of attention
10:00	Francis, Teighan University of Winnipeg	Susceptibility to auditory distraction and academic achievement

Social/Personality I - 4M37

Moderator: Justin Friesen

Time	Presenter	Title
9:00	Rickner, Raven University of Winnipeg	Workplace bullying in school settings: a qualitative study
9:15	Philippot, Chloe University of Winnipeg	“Do I belong here?” Factors contributing to feelings of belonging among university students and the implications for academic performance
9:30	Suszynski, Jenessa University of Winnipeg	Queue jumper or refugee? The effects of system justification and stereotypes.
9:45	Strand, Leora K University of Manitoba	Perceived connectedness to the natural world and attitudes toward reconciliation
10:00	Vallotton, Jamie-Lee University of Winnipeg	Too long didn't read: the effect of information complexity on unfalsifiable beliefs

Clinical/Health - 3M71

Moderator: Doug Williams

Time	Presenter	Title
9:00	Nelson, Gus University of Winnipeg	The relationship between pornography use and psychological distress
9:15	Biddell, Michelle University of Winnipeg	The path to feeling: the association between alexithymia, avoidant attachment and the Behavioral Tendencies Questionnaire
9:30	Plett, Shaelyn University of Winnipeg	Can music-evoked nostalgia reduce stress in university students?
9:45	Abo Aoun, Mohamed University of Winnipeg	Detecting changes in brain volume due to concussions in adolescents using voxel-based morphometry (VBM) in statistical parametric mapping (SPM8)

Poster Presentation Session (10:15-11:00)

4th floor Lockhart Hall

Poster	Presenter	Title
1	Adams, Theresa University of Manitoba	Impacts of anxious mood in socially anxious emerging adults
2	Cabildo, Juan Paolo University of Winnipeg	Enlightened enlightened self-interest
3	Chekay, Richelle University of Manitoba	Examining the causal link between “The sexes are different” and relationship quality
4	Gauthier, Tessa University of Winnipeg	The relative efficacy of two methods for teaching components of mindfulness: didactic vs. experiential learning
5	Humphrey, Chantal University of Manitoba	Reduced self-control and expected mindreading beliefs: heightened risk of poor relationship quality

Spoken Presentation Session II (11:00-12:15)

Brain & Cognition II - 3M57

Moderator: Bruce Bolster

Time	Presenter	Title
11:00	Gomez, Irlanda University of Winnipeg	Development of phonemic integration in pre-reading children
11:15	Bortoluzzi, Janel University of Winnipeg	The time course of spoken word recognition in preschoolers
11:30	Korade, Chloe University of Winnipeg	The effects of reading development on spoken language processing
11:45	Shebaylo, Keaden University of Winnipeg	Beginning spellers' orthographic knowledge
12:00	Oyafunke, Modupeoluwa University of Winnipeg	Computer-based assessment of navigation and visuospatial memory

Social/Personality II - 3M71

Moderator: Bev Fehr

Time	Presenter	Title
11:00	Robak, Deena University of Winnipeg	Do you envy your Selfie?
11:15	Strike, Benjamin University of Winnipeg	Machiavellian Mentalizing: A Study in Motivated Mentalizing Performance
11:30	Frederickson, Alesha University of Winnipeg	Why Sweat May Equal Threat: Women's Perceptions of Threat and Belonging in Gym Environments
11:45	Paddock, Spencer University of Winnipeg	Does our social media affect our romantic relationships?
12:00	Kerelluke, Taylor University of Winnipeg	"A troll and a sadist walk into a bar": understanding the association between online trolling and sadism through dark humor

Social/Personality III - 4M37

Moderator: Wendy Josephson

Time	Presenter	Title
11:00	Barnes, Anissa University of Winnipeg	The Effects of music on empathy
11:15	Wiebe, Jessica University of Winnipeg	Examining bodily and social awareness in misophonia and autonomous sensory meridian response (ASMR)
11:30	Kesselman, Daniel University of Winnipeg	A Semantic model analysis of gendered communities on Reddit
11:45	Stamper, Cierra Brandon University	Identifying social barriers in older adults living in rural areas
12:00	Morpheus, RainShyne University of Winnipeg	Correlates of participant attrition in a prison-based therapeutic community

Lunch (12:15- 1:15) - Convocation Hall

Keynote Address (1:30) - Eckhart Gramatté Hall

The Compassionate Heart: Psychological and Physiological Responses to a Loved One in Need

UWINNIPEG'S
PSYCHOLOGY DEPARTMENT'S
2018 PRAIRIE UNDERGRADUATE
RESEARCH CONFERENCE'S
KEYNOTE SPEAKER:

DR. NANCY COLLINS

(Professor of Psychology and Director of the Close Relationships Lab,
University of California, Santa Barbara)
<https://www.psych.ucsb.edu/people/faculty/collins>

**The Compassionate Heart:
Psychological and Physiological
Responses to a
Loved One In Need**

Friday, April 27, 1:30 - 2:30 pm
UWinnipeg, Eckhardt Gramatté Hall
Everyone is welcome to attend this free lecture.

Spoken Presentation Abstracts

Detecting changes in brain volume due to concussions in adolescents using voxel-based morphometry (VBM) in statistical parametric mapping (SPM8)

Abo Aoun, Mohamed. *University of Winnipeg*

Faculty Supervisor: Bolster, Bruce

Second Reader: N/A

Concussions, or mild traumatic brain injuries (mTBI) are one of the most common form of injuries relating to contact sports, potentially leading to the development of chronic traumatic encephalopathy (CTE). Previous studies have shown that concussed patients develop neuropathological changes associated with functional disturbances, with no detected structural changes. More recent studies point to atrophy in the amygdalo-hippocampal-septo-hypothalamic-mesencephalic circuit. Magnetic resonance imaging (MRI) techniques can be used to detect volumetric changes in the brain as a result of concussions. In this study, T1 images were obtained from 13-21 year old concussion patients and age-matched controls. The images were preprocessed using the Voxel Based Morphometry (VBM) toolbox on Statistical Parametric Mapping (SPM8) software, which runs using Matrix Laboratory (MATLAB). Preprocessing involved removing non-brain tissue, segmenting white matter and grey matter tissues, and normalising the images to Montreal Neurological Institute (MNI) space using the a high-dimensional Diffeomorphic Anatomical Registration using Exponentiated Lie Algebra (DARTEL) algorithm. False-discovery rate (FDR) correction was used to determine statistical significance of the volumetric changes. The corrected p-values of the FDR analysis were not significant for volumetric increases, but one cluster in the superior aspect of the cerebellum was significant for a volumetric decrease, partly explaining the lack of balance often attributed to concussion patients. No white matter changes were detected. The results indicate that some volumetric changes can be attributed to concussive brain injury. A larger sample size would increase the power to detect small volumetric changes in future experiments.

The Effects of Music on Empathy

Barnes, Anissa. *University of Winnipeg*

Faculty Supervisor: Strub, Harry

Second Reader: Santesso, Diane

A study was carried out to examine the influence of music on empathy levels with individuals (N = 96) in Introductory Psychology at the University of Winnipeg. Empathy, which involves both an affective and cognitive component, has been viewed as a stable trait component in past research. However, several studies have proposed that empathy levels can be raised, and some of these studies have used music as the method to raise empathy. Certain types of music appear to be preferred by more empathetic individuals. The use of “empathetic” pieces of music - those which include aspects of music typically preferred by empathetic individuals and which were rated by students (N=9) as evoking high amounts of empathy - were used in the present study to determine whether empathy could be raised. Using Shen’s State Empathy scale to measure state empathy, and the Interpersonal Reactivity Index, the Empathy Index, and the CES (Cognitive, Emotional and Strategic Empathy) to measure trait empathy, it was found that state empathy scores were higher in participants after listening to empathetic pieces of music. Additionally, it was found that

personal enjoyment of the specific piece of music had an impact on state empathy scores. Some dimensions of trait empathy remained stable, some aspects of emotional trait empathy increased, and some aspects of cognitive trait empathy decreased. The study therefore demonstrated that empathetic music has an ability to raise state empathy scores, and also may act as a situational trigger to temporarily raise aspects of trait empathy scores.

Resting State fMRI and the Emotional Module of Attention

Bhanot, Shiv. *University of Winnipeg*

Faculty Supervisor: Smith, Stephen

Second Reader: Kornelsen, Jennifer

Previous research has indicated that the Default Mode Network, Salience Network, and Central Executive Network contribute to attentional processing in addition to other functions. With respect to performance on a Rapid Serial Visual Presentation task, the aim of this inquiry was to attempt to elucidate a relationship between the strength of the various resting state networks and individual differences on the RSVP task. It was found that functional connectivity in the anterior Default Mode Network was positively correlated with RSVP covariates. A degree of lateralization was observed in the positive and negative correlation observed in the left and right Central Executive Networks. Additionally, the Visual, posterior Default Mode, and Salience Networks all exhibited mixed correlation with RSVP covariates.

The Path to Feeling: The association between alexithymia, avoidant attachment and the Behavioral Tendencies Questionnaire

Biddell, Michelle. *University of Winnipeg*

Faculty Supervisor: Halldorson, Mike

Second Reader: McIntyre, Michael

Alexithymia is a personality construct that is characterized by difficulty in identifying and describing emotions. Individuals high in alexithymic traits have difficulty with interpersonal relationships, as well as a high prevalence of mental health issues, and somatic disorders. It has been shown to be strongly associated with avoidant attachment tendencies. Due to its inherent deficiencies in emotion recognition, individuals with high alexithymic traits have been difficult to treat. Mindfulness practices have shown promise in reducing alexithymic traits, notably mindful self-compassion. The Behavioral Tendencies Questionnaire (BTQ) has been developed based on Buddhist concepts of behavioral motivation. The BTQ places individuals into one of three personality profiles that are identified by their behavioral tendencies of approach, avoid, or equivocate. The aversive/discerning personality profile of the BTQ is identified with avoidance tendencies, and the prescriptive advice for those in this profile to gain emotional balance is to practice mindful self-compassion. The study wanted to see if there was an association between those high in alexithymic traits, and the aversive/discerning personality type of the BTQ, and if avoidant attachment was a mediating factor. The idea was that identifying with this personality type might help in prescribing a mindfulness practice that would be most beneficial for that individual. The results found no direct associations between alexithymia, avoidant attachment and the BTQ. Small but significant interactions between the levels of alexithymia, attachment, mindfulness, and the BTQ were found. Supporting previous

studies, there were strong associations between alexithymia and attachment. Possible reasons for these results are discussed.

The Time Course of Spoken Word Recognition in Preschoolers

Bortoluzzi, Janel. *University of Winnipeg*

Faculty Supervisor: Desroches, Amy

Second Reader: Bourassa, Derrick

Previous research has shown that phonologically similar words (e.g., cohorts – cat, cab; and rhymes – cat, hat) compete for recognition during speech processing (c.f., the TRACE model; McClelland Elman, 1986). While much is known about phonological competition in adults and older children, less is known about these processes in preschool aged children. In the present study, we used event-related potentials (ERPs) to examine cohort and rhyme effects in 3-5 year old children (N=7) as they completed a picture-word matching task. During this task, a target picture was presented, followed by an auditory word that either matched the target (CAT-cat), or mismatched the target in one of three ways: rhyme (CAT-hat), cohort (CAT-cap), or unrelated (CAT-block). We monitored changes to the N400 response, a negative-going ERP component sensitive to phonological overlap (later occurring for cohorts, and more positive-going for rhymes, Desroches et al., 2009; 2012). Analyses revealed a late N400 for cohort mismatches for preschoolers, which occurred quite late in comparison with past studies. Also, no significant rhyme effects were observed. The occurrence of a late N400 might suggest that preschool children have similar bottom-up processing to that of adults and school-age children. However, the lack of rhyme effect might suggest that top-down effects (which is what drives rhyme effects in older children and adults) require more experience with language, and possibly reading to produce. Of note, our sample size is still small for a typical ERP study, so the present results, especially the null effect for rhymes, should be interpreted with caution.

Susceptibility to Auditory Distraction and Academic Achievement

Francis, Teighan. *University of Winnipeg*

Faculty Supervisor: Clark, Jim

Second Reader: Halldorson, Michael

This study looked at how an individuals susceptibility to auditory distraction relates to their academic achievement. The participants included 96 University of Winnipeg students enrolled in introductory psychology classes. Distraction was measured using a self report questionnaire and recall performance in different auditory distraction conditions. Academic achievement was measured using both a grade self report and a questionnaire based on information taught in the first semester of introductory psychology courses. Despite all main and interaction effects failing to reach significance, the effects of distractibility and academic achievement fit the expected pattern with better performance on the recall task for people with higher academic scores and lower distractibility scores. These results provide a basis for further research, with implications highly applicable to educational environments.

Why Sweat May Equal Threat: Women’s Perceptions of Threat and Belonging in Gym Environments

Frederickson, Alesha. *University of Winnipeg*

Faculty Supervisor: Friesen, Justin

Second Reader: Gaucher, Danielle

Understanding the relationship between public space and its effect on minorities is a recent but burgeoning area of research (Murphy & Walton, 2013). The current study advances this work by investigating whether and why women may perceive feelings of threat and belonging in gym environments. We draw from previous theories such as self-objectification (Fredrickson & Harrison, 2005) and social identity threat (Steele, Spencer, & Aronson, 2002). Results from this experiment suggest that women felt more threat while imaging themselves in male-dominated gyms. Specifically, we found that women anticipated feeling less belonging in male-dominated gyms as opposed to gender-neutral or female-dominated gyms. We also found that women reported feeling more appearance concern after viewing gyms that predominantly showed male clients. Additionally, we found that women were willing to pay less to join male-dominated gyms than for female-dominated gyms. Lastly, we investigated whether gaze patterns of female participants when viewing gyms would relate to feelings of belonging and found that the more women looked at men in a female-dominated gym, their feelings of belonging were reduced.

Development of Phonemic Integration in Pre-Reading Children

Gomez, Irlanda. *University of Winnipeg*

Faculty Supervisor: Desroches, Amy

Second Reader: Bourassa, Derrick

While adults and typically developing school-aged children (TD) are sensitive to phonological similarity during spoken word recognition, children with developmental dyslexia are not (Desroches et al., 2006; Desroches et al., 2013). One interpretation of this insensitivity to phonology is that dyslexics have an abnormal mechanism for integrating phonemes; however, it is also possible that instead, sensitivity to phonology only develops as a function of learning to read successfully. To investigate which alternative is correct, in the present study we examined phonological competition effects in preschooler children (PS; 3-5 years old, N=7) and typically developing school aged children (TD; 8-11 years old, N=15). We used event related potentials (ERPs) to examine phonological similarity effects during a picture-word matching task with four conditions: match (e.g., DOLL-doll), rhyme mismatch (DOLL-ball), cohort mismatch (DOLL-dog), or unrelated mismatch (DOLL-wig). We monitored the N400, an ERP component sensitive to phonological similarity. Like those with dyslexia, our PS children show larger and later occurring N400s to cohorts compared to TD; however, these occur much later than was observed in the previous dyslexia study. Importantly, for rhymes while a difference between PS and TD children was observed, this pattern was also unlike what was observed in the dyslexia study. That is, instead of an N400 that showed an insensitivity to rhymes, PS children seem to be hyper sensitive to rhymes, marked by more negative-going N400s for rhymes compared to unrelated mismatches. Although the results are still preliminary because of a small sample size in the PS group, at present they suggest that pre-reading children are indeed sensitive to both cohorts and rhymes, but that these effects mature over development. Further, the results suggest that the previously observed effects in dyslexia likely mark an abnormal mechanism

of speech processing.

Emotion and Modes of Thinking: Does Laughter Make You More Creative?

Kenny, Sara. *University of Winnipeg*

Faculty Supervisor: Strub, Harry

Second Reader: Santesso, Dianne

Divergent thinking is the mode of thought used to produce new ideas, colloquially known as “thinking outside of the box” (Ryder, Pring, & Hermelin, 2002). Positive emotional states are correlated with improved divergent thinking performance (Chermahini et al. 2012 ;Vosburg, 1998; Yamada et al., 2015; Ziv, 1976), but there is less research on whether negative emotional states decrease divergent thinking performance. University of Winnipeg intro psychology students participated in an experiment in which they were induced into either a positive or negative emotional state, then completed three measures. The first measure was a simple mood inventory devised by the authors to assess and make salient their emotional states. The other two measures were Guilford’s Alternative Uses Task, and Mednick’s Remote Associates Test, both devised to measure divergent thinking performance. While the mood inventory confirmed that the authors induced the target emotional states, only one of the four variables of divergent thinking significantly differed between groups. The results suggest that positive emotional states prime thinking about a wider range of ideas, whereas a negative emotional state “narrow” one’s thought process. Due to the low statistical power of the sample size, these findings may only constitute a trend. Implications of these data and future research are discussed.

“A Troll and a Sadist Walk into a Bar”: Understanding the Association Between Online Trolling and Sadism Through Dark Humor

Kerelluke, Taylor. *University of Winnipeg*

Faculty Supervisor: Trapnell, Paul

Second Reader: Sinclair, Lisa

Online trolling is an antisocial behaviour characterized by deliberate harmful and antagonizing behaviour towards others. Because trolling behavior closely motivationally resembles sadism – causing harm to others for intrinsic enjoyment – an emerging research literature has examined the association between trolling and dispositional sadism, finding strong support for the hypothesis that non-instrumental trolling is largely an online manifestation of everyday sadism. Humor appreciation may be an additional individual difference domain that might show psychological similarities between trolls and sadists, both in interpersonal uses of humor, and in humor content appreciation, especially humor content that profiles sadistic elements, namely “dark” humor. However, previous research has not examined the association between trolling and dark humor. Therefore, the current study evaluated trolls humor styles and dark humor preferences and whether trolling relations with humor are mediated by dispositional sadism. Both self-reported trolling identity and behavior as well as dispositional sadism demonstrated positive associations with aggressive uses of humor and with explicit and implicit measures of dark humor enjoyment. Dispositional sadism also mediated all observed trolling associations with humor styles and dark humor preferences. These humor findings are generally consistent with the trolling-sadism hypothesis: online trolling is a manifestation

of everyday sadism.

A Semantic Model Analysis of Gendered Communities On Reddit

Kesselman, Daniel. *University of Winnipeg*

Faculty Supervisor: Aujla, Harinder

Second Reader: Clark, Jim

Semantic Memory Models were developed to explain how human memory works. Here we propose and test a method of using Semantic Memory Models to analyze gender bias in text drawn from comments submitted to communities on the website reddit.com.

The effects of reading development on spoken language processing

Korade, Chloe. *University of Winnipeg*

Faculty Supervisor: Desroches, Amy

Second Reader: Tulloch, Shelley

Recent research has shown that orthography is automatically activated during auditory word tasks, yet its developmental timeline is largely unknown. The present study examined such orthographic effects during spoken word recognition in children, using Event-Related-Potentials (ERPs), measure of the time course of brain activity. Specifically, ERPs of school-aged children (8-11 years old) were monitored during an auditory picture-word matching task. Four types of picture-word pairs were used: matches (e.g. BALL-ball), orthographically dissimilar (O-) rhymes (e.g. BALL-doll), orthographically similar (O+) rhymes (e.g. BALL-wall), or unrelated pairs (e.g. BALL-pig). While significant effects of orthographic overlap were not observed, statistical analyses revealed that this effect approached significance ($p = .059$). That is, the N400 waveform (an ERP component sensitive to lexical properties of words, including semantics and phonology) was numerically more positive-going for the orthographically similar compared to orthographically different rhymes. These results are similar those observed for adults (Desroches et al., In Prep), who show an increased sensitivity to orthography during auditory word tasks. With additional data collection, we hope that we will indeed see a significant effect, which would suggest that like adults, children automatically access orthography during spoken word recognition. Such a finding would provide insight into how the language network changes to accommodate reading over development.

Correlates of Participant Attrition in a Prison-Based Therapeutic Community

Morpheus, RainShyne. *University of Winnipeg*

Faculty Supervisor: Weinrath, Michael

Second Reader: Rockman, Gary

Research indicates a high participant attrition rate in the Winding River Therapeutic Community (WRTC) at Headingley Correctional Centre. It is suggested that item response data from three risk/needs assessments already administered to inmates could be used to identify possible correlates of participant attrition; this may be a useful strategy for increasing appropriate admissions into WRTC for treatment. Current literature suggests an inmate's level of motivation is a

factor, but its significance as a possible correlate for participant attrition in the context of this study remains to be seen. The potential for screening more participants into prison-based TCs, the implications of doing so, and the possible decrease in attrition rate, all warrant further investigation.

Capturing Asymmetry Through Analysis of Context and Frequency of Words within a Corpus.

Nedjadrassul, Paulina. *University of Winnipeg*

Faculty Supervisor: Aujla, Harinder

Second Reader: Clark, Jim

Semantics refers to the meaning of words and concepts. The semantics of a word is partly defined by its relationship to other words (Saeed, 2016). Semantic associations arise from the semantic connection between concepts and words, this can be visualized in the semantic network model. In psychology, vector space models are highly utilized to study semantic connections. However, these models rely on the use of cosines between vectors to look at the association strength between words. The reliance on cosines does not capture asymmetry seen in free association tasks. The object of this thesis is what types of predictors or models can capture asymmetry best. Some of the predictors being looked at are cue set size, semantic diversity, frequency, and distances.

The Relationship Between Pornography Use and Psychological Distress

Nelson, Gus. *University of Winnipeg*

Faculty Supervisor: Rockman, Gary

Second Reader: Clark, Jim

Pornography use is associated with poor psychological well-being and sexual dysfunction. In the United States, a Google search estimated the keywords porn, free porn, sex, and porno were searched approximately 23 million times over a one month period (Dunn, 2011). Pornography is described as accessible, affordable, and anonymous (Wery Billieux, 2016). The effects of such availability of pornography are unclear and causal links have not been established (Pizzol, Bertoldo, Foresta, 2015; Wery & Billieux, 2016). Male introductory psychology students (N=198) were given self-report measures to examine the relationship of self-reported pornography use and psychological distress, defined by: problem pornography use, social anxiety, low self-esteem, negative ways of coping, negative cognitive schema activation, depression, anxiety, and stress. Sexual desire and sexual dysfunction were also analyzed. A positive relationship was hypothesized for increased pornography use and respective scores of high social anxiety, low self-esteem, negative ways of coping, negative cognitive schema activation, and sexual dysfunction. Regression analyses found a significant association between pornography use and psychological distress and solitary sexual desire. Dyadic sexual desire and sexual dysfunction were not significant. This study suggests that psychological distress and high solitary sexual desire are significant factors associated with pornography use.

Computer-based assessment of navigation and visuospatial memory

Oyafunke, Modupeoluwa. *University of Winnipeg*

Faculty Supervisor: Bolster, Bruce

Second Reader: Halldorson, Michael

This study focused on assessing human navigation and examined a few of the individual processes that are involved. We compared performance on a 2-dimensional object memory task and a 2-dimensional object location task with performance on a virtual navigation task assessing place memory, object-in-place memory and temporal order memory. We found that temporal order memory interacts with object-in-place memory but not place memory and that the object location task was not a good predictor of the performance on the virtual navigation task. These findings support the notion that human navigation and memory is extremely complex and context-dependent and cannot be captured by simple 2 dimensional tasks.

Does our social media affect our romantic relationships?

Paddock, Spencer. *University of Winnipeg*

Faculty Supervisor: Fehr, Beverley

Second Reader: Bourassa, Derrick

The purpose of this research is to investigate jealousy in romantic relationships, specifically in the context of a potentially threatening situation in which a partner's commitment to the relationship can be seen as questionable. We are also interested in people's responses to a possibly threatening situation. We are interested in seeing if jealousy is affected by factors such as attachment style, self-esteem and perceived social approval of the situation.

“Do I Belong here?” Factors Contributing to Feelings of Belonging among University Students and the Implications for Academic Performance

Philippot, Chloe. *University of Winnipeg*

Faculty Supervisor: Gaucher, Danielle

Second Reader: Friesen, Justin

Belonging is the feeling that one is socially accepted by others (Walton Cohen, 2007), and is a member of a community (Hurtado Carter, 1997). Greater feelings of belonging are associated with a host of positive health and academic outcomes such as higher subjective well-being, lower suicide incidence, fewer doctor visits, and higher grades (Beaumeister Leary, 1995; Walton Cohen, 2011). The current study investigated whether belongingness is an important factor in students' university experience (student engagement) and academic performance outcomes (grade point average). Moreover, this study investigated whether individual-level factors (i.e., self-esteem, positive emotionality), and contextual factors (i.e., perceived discrimination, university support), were important contributors of belonging, and whether feelings of belonging differed as a function of students' international status. Results showed that belonging was associated with more academic engagement and is an important predictor of students' academic performance in general. Positive individual-level and contextual factors explained over half of the differences in belonging. There was preliminary evidence to suggest that international students' belonging may decrease over time

as they progress through their studies. Implications for belonging interventions, student behaviour, and students' academic performance are discussed.

Can music-evoked nostalgia reduce stress in university students?

Plett, Shaelyn. *University of Winnipeg*

Faculty Supervisor: Bradbury, Hinton

Second Reader: Halldorson, Michael

Can feelings of nostalgia, evoked by music, reduce stress in university students? The purpose of the current study was to test this question. Sixty female participants completed a stress-inducing computer task. They then listened to unique playlists on Apple iTunes. Playlists contained three songs from the past that participants preferred (PaP); past, not preferred (PaNP); present, preferred (PrP); or present, not preferred (PrNP). Participants also rated their in-the-moment feelings of stress/anxiety, and indicated how nostalgic their playlist songs made them feel. Independent t-tests revealed that those who listened to music from the past (i.e. PaP and PaNP) experienced significantly more nostalgia than those who listened to music from the present (i.e. PrP and PrNP). However, the nostalgic music groups experienced more stress than the non-nostalgic music groups. Furthermore, participants who listened to nostalgic music they preferred (i.e. PaP) experienced more stress than those who listened non-nostalgic music they preferred (i.e. PrP). These results suggest that nostalgia does not reduce stress independent of preference, nor does it strengthen preference's ability to reduce stress.

Workplace Bullying in School Settings: A Qualitative Study

Rickner, Raven. *University of Winnipeg*

Faculty Supervisor: Josephson, Wendy; Harlos, Karen

Second Reader:

This exploratory qualitative study examines the nature of bullying experiences in the workplace and their effects on members of a large provincial association of educators. Participants (N = 22) worked as teachers, school leaders, counsellors, clinicians, and specialists in school settings across the province of Manitoba. Participants were among over 3,000 educators who had participated in the quantitative Safe and Inclusive Workplace survey. Participants had volunteered to take part in semi-structured, face-to-face focus group interviews facilitated by a professional researcher as a follow-up to the survey. Data were analyzed using thematic analysis, and eight major themes regarding workplace bullying and their consequences were discovered as a result of the focus groups. The eight major themes include: criticism and undermining; verbal abuse and intimidation; ill-being triggered by workplace bullying; lack of organizational support; personal characteristics; silence and voice; powerlessness; and lost sense of community.

Do You Envy Your Selfie?

Robak, Deena. *University of Winnipeg*

Faculty Supervisor: Fehr, Beverley

Second Reader: Bourassa, Derrick

People tend to post highly idealized versions of themselves on Instagram. I hypothesized that after participants viewed their own Instagram photos, those with low trait self-esteem would make an upward comparison towards their Instagram self, resulting in unfavourable outcomes. Specifically, I hypothesized that feelings of envy would arise when low self-esteem individuals compare their actual self to their Instagram self, because they post idealized images. Participants (N = 204) completed self-report measures after being exposed to their favourite Instagram photos of themselves. It was found that participants with low self-esteem subsequently experienced more self-envy and other negative outcomes than those who had high self-esteem. The relation between self-esteem and envy was mediated by posting more idealized and fake photos on Instagram. The findings suggest that the pursuit for online perfection has real life implications; people's "Instagram selves" affect their real life well-being.

Beginning Spellers' Orthographic Knowledge

Shebaylo, Keaden. *University of Winnipeg*
Faculty Supervisor: Bourassa, Derrick
Second Reader: Smith, Stephen

An important aspect of spelling development involves sensitivity to orthographic patterns (i.e., permissible letter sequences) that exist in the English language. However, there have been relatively few detailed analyses of children's sensitivity to these regularities, particularly among beginning spellers. The present study examined first graders' knowledge of a variety of rudimentary and context-specific orthographic patterns. Analyses revealed considerable individual differences in both overall sensitivity and sensitivity to particular types of spellings. The present results underscore the heterogeneity of spelling development, and point to the need for further analyses of children's sensitivity to the various complexities that exist in the English language.

Identifying Social Barriers in Older Adults Living in Rural Areas

Stamper, Cierra. *Brandon University*
Faculty Supervisor: Newall, Nancy
Second Reader: Watier, Nick

Compared to exercise and healthy diet, perhaps a lesser-known factor that is critical to our health and well-being is social participation. Therefore, understanding what may prevent people from being as socially active as they would like (social barriers) is important. This presentation will explore the social barriers reported by participants (aged 45+) of the Canadian Longitudinal Study on Aging. Main questions of interest included whether social barriers would differ based on urban/rural-living, age group (45-64/65+), or sex. From the overall sample (N=51 250), 50.9% were female, and 41.8% were aged 65+, and 13.9% were rural-living according to Statscan census definitions. Forty four percent of the overall sample indicated that they would like to be more socially active. A slightly greater proportion of urban-living indicated wanting to be more socially active as compared to rural-living (44.7% vs. 40.1%). For the overall sample, the top three reported social barriers were "being too busy," "personal responsibilities," and "health conditions." Results were similar regardless of whether participants were rural- or urban-living, and there were only small

differences based on age group or sex. For example, the second most reported barrier for older (65+) participants after “being too busy” was “health conditions”, whereas the younger (45-64) group had reported “personal and family responsibilities” as the second most common barrier.

Perceived Connectedness to the Natural World and Attitudes Toward Reconciliation

Strand, Leora K. *University of Manitoba*
Faculty Supervisor: Starzyk, Katherine B.
Second Reader: Fontaine, Aleah S. M.

The Truth and Reconciliation Commission of Canada describes an urgent need for reconciliation between Indigenous and non-Indigenous peoples. Specifically, they call for reconciliation between human beings and the natural world. In response to this call, I examined the relationship between feeling connected to nature and attitudes toward reconciliation. I recruited 236 non-Indigenous participants from the University of Manitoba’s Psychology participant pool. I conducted two simple mediation analyses. In the first analysis, feeling connected to nature predicted more positive reconciliation attitudes; this was partially mediated by greater feelings of moral concern. In the second analysis, perceiving animals and humans as more similar rather than different predicted more positive reconciliation attitudes; again, this relationship was partially mediated by moral concern. These results indicate that feeling connected to nature and perceiving more similarities between animals and humans is associated with positive attitudes toward reconciliation, because of a greater sense of moral concern. Due to the TRC’s emphasis of reconciling with the natural world, understanding the relationship between attitudes toward the natural world and attitudes toward reconciliation is important for improving relations between Indigenous and non-Indigenous peoples in Canada.

Machiavellian Mentalizing: A Study in Motivated Mentalizing Performance

Strike, Benjamin . *University of Winnipeg*
Faculty Supervisor: Trapnell, Paul
Second Reader: Smith, Stephen

Machiavellianism, a member of the Dark Triad of personality traits, is characterized by the frequent use of manipulation and deceit in social interaction. Although Machiavellians tend to be capable social manipulators, they tend to exhibit below average performance on empathy and mentalizing tasks such as inferring mental states from facial expressions. The current study tested whether the apparent poor mentalizing skills of Machiavellians are due to impaired task motivation related to low ego involvement in empathy tests. To test this, a popular mentalizing task, the Reading the Mind in the Eyes Test (RMET), was administered with either standard instructions, or modified instructions that identified bogus high scoring groups that were either agentic identity relevant (“professional poker players and CIA field agents”) or communal identity relevant (“child care workers and nursing mothers”). However, this instruction manipulation did not moderate Machiavellianism correlations with RMET scores, which were either null, or slightly negative, in all conditions, depending of the Machiavellianism measure. One of those measures, a short, face valid trait measure of manipulativeness showed a strong positive correlation with self-reported mental-

izing abilities, particularly strategic mentalizing abilities, that imply benefit to oneself rather than others. In summary, Machiavellians self-attribute superior mentalizing skills but tend to demonstrate impairment of those skills, even under test conditions designed to motivate persons who believe they possess those skills. Machiavellians' invalid mentalizing skill claims are consistent with agentic competency overclaiming, i.e, agentic bias, commonly associated with cold-dominant dispositions such as the Dark Triad.

Queue jumper or refugee? The effects of system justification and stereotypes.

Suszynski, Jenessa. *University of Winnipeg*

Faculty Supervisor: Friesen, Justin

Second Reader: Frimer, Jeremy

Can the need to defend one's system influence the stereotypes that people have about immigrants? We investigated the effect of system threat on people's stereotype of immigrants and their perceived system justification. We had two conditions, system threat vs. system affirmation and refugee stereotype confirmation vs. stereotype disconfirmation. We then measured participant's responses to a variety of measures, such as system justification, system trust, system blame, victim blame, immigrant helping and immigrant stereotypes. We found that participants who were in the system threat and stereotype confirmation condition, had the least trust in the system, were more willing to blame the victim, were more likely to believe that irregular border crossings were due to refugees not willing to wait their turn, and were less willing to help immigrants than participants in the other three conditions. This suggests that some stereotypes about immigrants may produce not just victim blaming, but also criticism of broader institutions and the system generally.

Too Long Didn't Read: The Effect of Information Complexity on Unfalsifiable Beliefs

Vallotton, Jamie-Lee. *University of Winnipeg*

Faculty Supervisor: Friesen, Justin

Second Reader: Trapnell, Paul

Is complex information more convincing than simple information when your beliefs are untestable? Shepard and Kay (2012) found that complex information increases people's dependence on the government, but it was unknown whether or not that dependence could generalize to belief systems. We proposed that reactions to complex versus simple information on a social issue would change depending on whether that issue was framed as testable or untestable. We premeasured participants' attitudes towards immigration, and then framed immigration as either testable or untestable in a news article. Following the article, we had participants read a Canadian immigration policy that was either complex or simple. Finally, to assess attitude change, we measured participants' attitudes towards immigration. Our results were inconclusive but were trending towards suggesting that only testable belief systems are affected by complex phrasing. Further exploration is required to learn why untestable belief systems are unaffected by both simple and complex information.

Examining Bodily and Social Awareness in Misophonia and Autonomous Sensory Meridian Response (ASMR)

Wiebe, Jessica. *University of Winnipeg*

Faculty Supervisor: Smith, Stephen

Second Reader:

Autonomous sensory meridian response (ASMR) and misophonia are two understudied phenomena that involve atypical forms of multimodal integration. ASMR consists of pleasurable tingling in the scalp, neck, and shoulders in response to audio-visual stimuli that tend to involve repetition and a socially intimate ambiance. ASMR “tingles” often provoke positive affect and relaxation. Misophonia is a condition in which specific sounds trigger autonomic responses in sufferers that leave them agitated and angry. Despite the phenomena eliciting radically different affective states, there is some evidence of possible links between them. This study examines the different traits associated with ASMR and misophonia to determine if a unique pattern of characteristics is present in individuals that experience both phenomena. Participants completed measures of mindfulness, interoceptive awareness, absorption, and empathy. They were also asked about the presence of other atypical forms of multimodal integration. Participants with ASMR had more severe misophonia symptoms. ASMR was associated with increased emotional empathy, absorption in mundane experiences, and a tendency to reflect on and become reactive to inner experience. Misophonia was associated with judging one’s thoughts and feelings more harshly, increased awareness of bodily sensations, and worrying about discomfort or pain.

Neural Responses to Consciously and Unconsciously Perceived Emotional Faces: A Spinal fMRI Study

Wilson, Alyssia. *University of Winnipeg*

Faculty Supervisor: Smith, Stephen

Second Reader: Kornelsen, Jennifer

Research has shown that emotional stimuli are preferentially processed in the brain and produce an action response which is then carried through the body via the spinal cord. Importantly, these stimuli do not necessarily need to be consciously perceived; activity in the right amygdala is frequently observed in response to unconsciously perceived emotional stimuli. No previous research has examined whether this amygdalar activity is linked to downstream motoric activity in spinal cord neurons. Our current research aims to determine whether motoric response to negative emotional stimuli in the spinal cord is exclusive to consciously perceived emotion or if unconsciously perceived emotional stimuli which triggers a bilateral amygdala response, will also trigger a motoric response in the cervical spinal cord. By using fMRI to observe subjects while viewing consciously or unconsciously perceived angry, fearful, and neutral faces, we were able to determine that less motoric activation was seen in the fear conditions relative to neutral or angry stimuli, suggesting that the amygdala does not modulate the spinal cord. Anger however, triggered motoric activation of the cervical spinal cord, indicative of a “fight-or-flight” response.

Poster Presentation Abstracts

Impacts of Anxious Mood in Socially Anxious Emerging Adults

Adams, Theresa. *University of Manitoba*
Faculty Supervisor: Keough, Matthew
Second Reader: N/A

University students in North America are among the heaviest drinkers in our population, and have increased risk of health problems, impaired driving, injury, and death. Tension reduction theory proposes that socially anxious individuals drink to relief negative affect which puts them at increased risk for developing an alcohol use disorder. However, the literature supports an inconsistent association between social anxiety and alcohol problems – perhaps due to a reliance on self-report measures that are far removed from in-the-moment anxiety and decisions to drink. The present study used the Trier Social-Stress Test to experimentally induce a heightened state anxiety in participants. Young adults classified as either high, or low, in trait social anxiety then reported their degree of alcohol craving as it was occurring. This allowed for a more direct assessment of the differential impacts of anxious mood on alcohol craving (following cue exposure) among young adults who are high and low in trait social anxiety. Results reveal that increases in anxious mood predicted alcohol craving only for individuals high (vs low) in trait social anxiety when exposed to an alcohol (vs neutral) cue. In-lab craving was positively correlated with real-world retrospective reports of alcohol use and related problems. Clinical implications and future research directions are discussed.

Enlightened Enlightened Self-Interest

Cabildo, Juan Paolo. *University of Winnipeg*
Faculty Supervisor: Frimer, Jeremy
Second Reader: Smith, Stephen

Public goods scenarios are social situations wherein individual actors can either retain their goods or give their goods away for the sake of the group's benefit. While retaining one's goods tends to constitute modal behaviour, Weber and Murnighan (2008) found that some individuals consistently contribute to the group. We propose that these consistent contributors' (CCs) actions are rational and that their behaviour stems from "enlightened enlightened self-interest". Enlightened self-interest occurs when actions that further the interest of others ultimately further the interests of the acting agent. Weber and Murnighan (2008) CCs' generosity ultimately led to the CCs own material benefit. This is because CCs' generosity is socially contagious and the resulting increase in generosity from CCs' group-mates offset CCs' original losses and then some. We suggest that CCs not only benefit from this enlightened self-interest, but they are enlightened about it (that is, they aware that it will happen). This leads to our main prediction that CCs have unusual cognitive and affective characteristics that inform rational prosociality in positive-sum public goods scenarios. One characteristic is an accurate ability to anticipate how one's actions can influence the actions of others (social contagion). A second is a self-referential standard. While CCs do better than they would if they were not CCs, they do worse than other people in their group. If CCs were to judge themselves relative to proximal others (as most people do), they would perceive their actions as self-sacrificial. However, we suggest that CCs have the unusual characteristic of evaluating

themselves against a personal standard, rather than a social one. Third is that the benefits of CCs materialize only after several rounds of interactions. CCs may rely on an unusual ability to delay their need for gratification, allowing them to make short-term sacrifices.

Examining the Causal Link between “The Sexes are Different” and Relationship Quality

Chekay, Richelle. *University of Manitoba*
Faculty Supervisor: Cameron, Jessica
Second Reader: N/A

The sexes are different belief is a dysfunctional relationship belief that is correlated with poor relationship quality. However, researchers have neglected to examine the theoretical causal link between these variables. The goal of the present study was to determine if this causal link exists. I randomly assigned participants from an introduction to psychology course into one of two conditions. In one condition, participants were primed with the belief that the sexes differ. In the other condition no prime was provided. All participants then reported on their level of relationship satisfaction, trust, closeness, and intent to persist as a measure of relationship quality. My hypothesis, that book titles eliciting the sexes are different belief would lower relationship quality, was not supported. However, book titles were ineffective in increasing men’s sexes are different beliefs whereas these titles influenced women’s sexes are different beliefs, partially explaining the lack of effects on relationship quality. The correlational data also revealed that the sexes are different belief was negatively associated with satisfaction, trust, and intent to persist. These results may have implications for couples’ therapy.

The Relative Efficacy of Two Methods for Teaching Components of Mindfulness: Didactic vs. Experiential Learning

Gauthier, Tessa. *University of Winnipeg*
Faculty Supervisor: Schnerch, Gabriel
Second Reader: Clark, Jim

The effectiveness of mindfulness and acceptance techniques have been empirically studied, but the way that these techniques are implemented has not. In the present study, 3 different seminars are considered. An experiential seminar allowed introductory psychology students to learn about mindfulness and cognitive defusion, but they were also given the opportunity to try specific exercises. A didactic workshop taught participants about mindfulness and cognitive defusion techniques, but they were not given a chance to experience the exercises. The experiential and didactic seminars are compared to a didactic control lecture on the mental health benefits of nutrition, active living and exercise. Measures of mindfulness, automatic thoughts and personal values were taken pre-, post-seminar and at a 3-week follow-up. Contrary to the hypotheses that the experiential group would show decreases in automatic thoughts and increases in mindfulness skills, significant changes in automatic thoughts, both frequency and belief in them, were found in the didactic group, as well as the control group. No significant changes were found on the mindfulness measures.

Reduced Self-Control and Expected Mindreading Beliefs: Heightened Risk of Poor Relationship Quality

Humphrey, Chantal . *University of Manitoba*

Faculty Supervisor: Cameron, Jessica

Second Reader: MacLean, Justine

Expected mindreading is the dysfunctional belief that partners should be able to sense one's thoughts and feelings without overt communication and is theorized to reduce romantic relationship quality. However, associations between expected mindreading and relationship quality have been inconsistent in the literature, suggesting an important moderating variable has been overlooked. In the present study, I suggested that when individuals experienced high self-control depletion, individuals who endorsed expected mindreading beliefs would report lower levels of relationship accommodation, satisfaction and commitment. To test this hypothesis, I conducted a quasi-experimental study. Participants were recruited from introductory psychology courses to complete a series of questionnaires and an ego-depletion task intended to manipulate state self-control. Results revealed a correlation between expected mindreading beliefs and two out of three indicators of relationship quality – accommodation and satisfaction. However, results surrounding the moderating effects of self-control were inconclusive. This study has important implications for future research and counselling.