PSYD66: Current Topics in Human Brain and Behaviour
Winter 2024

Professor Ravi Thiruchselvam
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Seminar Meetings: Wednesdays 1 – 3pm
Seminar Classroom: AC 332

This course will investigate specific questions on the neural bases of self-representation. Nearly every waking moment of our lives appears to be characterized by the peculiar feeling of *being someone,* a fundamental sense that there is a unitary self that occupies a body, engages in various decisions and actions, and is continuous across time. How does the human mind and brain construct and represent this sense of self? We will explore emerging theories and empirical findings on this topic.

Course Objectives

It is my hope that, by the end of this course, students would be able to:

1) Understand current scientific debates on the neural and psychological bases of self-representation and their connection to foundational theories and findings in the field.
2) Learn how to read and carefully decipher primary scientific articles in the field, discerning the meaning and significance of both the core elements and finer details of the articles.
3) Develop critical thinking skills by identifying important weaknesses and limitations in current research (e.g., in conceptual foundations, methodology, and data analysis or interpretation) and reflecting on potential ways to improve the state of the field.
4) Strengthen oral communication skills by actively engaging with peers and the instructor in thoughtful class dialogue and presentations.
5) Learn to write more effectively by completing reflection papers on assigned readings and a two-stage APA-style research proposal.
6) Identify the broader relevance of the content covered in the class to other academic disciplines (e.g., the arts, political science).

Course Email

All course-related emails must be sent to the following address:

Thiruchselvam.PSYD66@gmail.com

Messages sent to other addresses (e.g., to Quercus or the instructor's individual email account) may not be answered. Please ensure that the correct email address is used in all your course-related communications.

Course Prerequisites

To enrol in this course, please ensure that you have completed 1.0 credit from the following:

[PSYB55H3 or (PSYB65H3)] and [0.5 credit at the C-level in PSY or NRO courses] and [(PSYB01H3) or (PSYB04H3) or PSYB70H3] and [PSYB07H3 or STAB22H3 or STAB23H3]

Course Webpage/Quercus

The website associated with this course is accessible on Quercus via http://q.utoronto.ca. The syllabus, relevant course documents, and announcements will be posted there. I strongly recommend that you check Quercus regularly.

Office Hours

I will be available for virtual meetings on Tuesdays 11am-1pm or by appointment. If you have questions about course content, performance in the class, or neuroscience and psychology more broadly, feel free to schedule a meeting. To do so, please email me at:
Thiruchselvam.PSYD66@gmail.com

Course Evaluation/Marking Scheme

Seminar participation: 20%
Discussion questions: 8%
Article reflections: 20% (two reflections worth 10% each)
Class Debate: 15%
Research proposal: 37% (12% outline and 25% final paper)

Below, I offer a high-level summary of each of the evaluation components in the course. A more detailed rubric, including the grading scheme, for each of these assessments will be shared separately as the course progresses and remains subject to change based on how the Covid-19 pandemic unfolds and impacts course delivery.

Seminar Participation (20%)

Seminar classes offer an invaluable space to interact directly with your peers and instructor – to openly ask questions, share thoughts, and to ultimately learn from each other. For seminars to be most meaningful, it is important that students actively participate by contributing to class discussions. I invite you to view seminar discussions as an ongoing opportunity to develop and refine your oral communication skills – to learn how to ask better questions, express ideas more clearly, challenge arguments and offer alternative views. In addition to bringing us towards the ideas of *other people*, seminars can also be a helpful vehicle with which to investigate

our own thinking carefully by inviting real-time feedback from peers and the instructor. To this end, we will aim to cultivate an atmosphere where respectful, non-judgmental dialogue is promoted and self-inquiry is valued. I understand that students may sometimes find it difficult to actively participate for different reasons (e.g., technical issues, shyness). If that is the case, please feel free to schedule office hours meetings with me to discuss potential solutions. Seminar participation will be graded based on regularity of attendance (you are expected to attend all classes on time) and the thoughtfulness of questions and comments raised during the class discussion.

Discussion Questions (8%)

Prior to every seminar meeting, students will submit two discussion questions for each of the two assigned articles each week, for a total of 4 discussion questions per week. In each case, you are asked to clearly describe the question and add a brief (i.e., 3-5 sentence) explanation about why you believe this specific question is interesting or important. Student discussion questions for each week's assigned readings should be submitted sometime before the seminar meeting, by Wednesdays at 10am at the latest. The discussion questions for each week can be uploaded onto Quercus under the *Assignments* module. Where possible, I will try to integrate students' questions into the seminar discussion for that meeting.

In addition, I will be posting my own set of discussion questions for the assigned readings each week on Quercus prior to every seminar meeting. You are encouraged to reflect on these questions as you read the assigned articles, as they will help orient your attention to aspects of the readings that will become the focus of our seminar discussions.

Article Reflections (20%)

You will select an empirical article from our set of assigned readings to summarize, analyze, and critique. This will be completed in two phases to promote self-reflection about your analysis. For your first submission (due February 12th), you will receive feedback from me alongside a set of novel questions about your report. Your second submission (due April 5th) is expected to respond to my questions and incorporate my feedback where relevant, and it will be partly graded in how effectively it accomplishes that. Additional details will be provided in class.

Class Debate (15%)

There will be three class debates throughout the course, with each debate consisting of two groups (3-4 students) taking opposing positions on an assigned topic. Groups will be established at the beginning of the course based on students' topic preferences.

The debate will consist of three phases: (1) opening arguments – 8 minutes for each group; (2) free exchange, involving rebuttals to the initial points made during the opening arguments as well as additional claims each group wishes to make – 25 minutes; and (3) closing arguments – 3 minutes for each group. Following the debate, the class at large will have an opportunity to discuss the assigned topic. The material in the opening and closing arguments should be divided up fairly among the group members. I will be moderating each debate.

Although each debate will be partly based on assigned readings, debate groups are responsible for performing a literature review to generate arguments to build as robust a case for their position as possible. This involves probing the literature for additional empirical studies and theoretical arguments. I encourage each group to meet with me to obtain guidance on this. Additional details on the class debates will be provided on Quercus.

Research Proposal (37% total: 12% proposal outline and 25% final paper)

One goal of the course is to generate new hypotheses for research on the neural and psychological bases of self-representation. Since the field is relatively young, the possibilities for novel research questions are vast, and you are asked to think creatively to identify new questions and predictions. You will choose a specific topic that we cover in the course, review the relevant literature on it, construct novel predictions, design a study to test these predictions, and outline expected findings. This will culminate in an APA-style research proposal.

The research proposal will have two components: a proposal outline (due February 16th at 11:59pm) and a final paper (due April 8th at 11:59pm). The purpose of the initial proposal outline is to help you receive feedback that can then be integrated into the final paper. For the proposal outline, you are asked to submit a brief (i.e., 2-3 page, double-spaced) summary of your planned proposal. This will include a justification of your research question based on a review of the literature and an overview of the research methods, including the study design and key measures. The final research proposal (expected to be 10-12 pages in length, double-spaced) should strive to elaborate on the core elements in your outline and integrate my feedback where possible. Additional details will be provided in class.

Class Format

The class will meet in AC 332 on Wednesdays from 1 – 3pm. In general, I will begin most sessions with a brief lecture, offering context for our discussion of the assigned readings for that week. We will then open the session for class discussion, focusing on the discussion questions that I had posted online for that week. I will also aim to weave together into our discussion the questions that students have submitted prior to the seminar meeting.

Course Outline

I have tried to make the schedule as comprehensive as possible. However, I reserve the right to make minor adjustments as necessary. I will inform you of these changes as soon as possible.

DATE	TOPIC	ASSIGNED READINGS
Week 1 January 10th	Introduction to the course	No Readings
Week 2 January 17th	Making the self: Agency	McAdams (2013); Soon et al. (2008)
Week 3 January 24th	Making the self: Identity (part I) *Group assignments posted for class debates*	McAdams and Guo (2014); Schwabe et al. (2012)
Week 4 January 31st	Making the self: Identity (part II)	Adler et al. (2015); Crocker et al. (2003)
Week 5 February 7th	Making the self: Body ownership	Ehrsson et al. (2004); Salomon (2017)
Week 6 February 14th	Making the self: Seeing oneself through others	Jenkins et al. (2008); Krienen et al. (2010)
Week 7 February 21st	Reading week – No class	No Readings
Week 8 February 28th	Protecting the self (part I): Positive illusions and self-enhancement	Hughes and Beer (2013); Sharot et al. (2012)
Week 9 March 6th	Protecting the self (part II): Authenticity and self-disclosure	Bailey et al. (2020); Tamir and Mitchell (2012)
Week 10 March 13th	Losing the self: Transcending the *I*	Carhart-Harris et al. (2012); Milliere (2017)
Week 11 March 20th	Class debate I: Agency	*To be announced*

| Week 12
March 27th | Class debate II: Identity | *To be announced* |
| Week 13
April 3rd | Class debate III: Self-enhancement | *To be announced* |

Reading Assigned Articles

A core aim in the course is to delve deeply into the theoretical and empirical literature on the psychological and neural bases of self-representation. I have done my best to select articles that are of reasonable length and complexity. However, some of these articles are dense (as they are written with current researchers in mind) and it may be helpful to read them more than once prior to class. To facilitate a deeper understanding of the assigned readings and to prepare for a thoughtful seminar discussion, please read the articles with at least the following four **general** questions in mind:

1) What claims are being made exactly? Are the claims supported by strong reasoning and evidence? Do you see any problems or concerns?

2) What assumptions are the author(s) making? Are these assumptions reasonable or can they be challenged? In this case, *assumptions* refer to ideas or beliefs that the authors seem to be relying on that are not explicitly stated.

3) For empirical papers: What are the specific methods (e.g., experimental design, independent & dependent variables) being used to investigate the research questions? Do these methods have weaknesses, and if so, how might you have conducted the study differently?

4) How do the articles' claims fit into broader themes on the topic of self-representation? How do they relate to other ideas and findings you have encountered in this course or elsewhere?

In addition to these general questions, as noted above I will also be posting **article-specific** questions for each of our readings every week on Quercus. These article-specific questions are meant to highlight important elements of the readings and orient your attention towards aspects of the papers that we will explore in seminar discussions. Please be sure to reflect on these questions as well as you read the articles. In general, both assigned articles each week should be read prior to the seminar meeting. All readings are available through UofT Libraries or Google Scholar and students are responsible for accessing and downloading them.

Assigned Readings

Week 1 -- Introduction to the course

No assigned readings

Week 2 -- Making the self: Agency

McAdams, D. P. (2013). The psychological self as actor, agent, and author. *Perspectives on psychological science*, *8*(3), 272-295

Soon, C. S., Brass, M., Heinze, H. J., & Haynes, J. D. (2008). Unconscious determinants of free decisions in the human brain. *Nature neuroscience, 11*(5), 543.

Week 3 -- Making the self: Identity (part I)

McAdams, D. P., & Guo, J. (2014). How shall I live? Constructing a life story in the college years. *New directions for higher education*, *2014*(166), 15-23

Schwabe, L., Nader, K., Wolf, O. T., Beaudry, T., & Pruessner, J. C. (2012). Neural signature of reconsolidation impairments by propranolol in humans. *Biological psychiatry, 71*(4), 380-386.

Week 4 -- Making the self: Identity (part II)

Adler, J. M., Turner, A. F., Brookshier, K. M., Monahan, C., Walder-Biesanz, I., Harmeling, L. H., ... & Oltmanns, T. F. (2015). Variation in narrative identity is associated with trajectories of mental health over several years. *Journal of personality and social psychology*, *108*(3), 476

Crocker, J., Karpinski, A., Quinn, D. M., & Chase, S. K. (2003). When grades determine self-worth: consequences of contingent self-worth for male and female engineering and psychology majors. *Journal of personality and social psychology*, *85*(3), 507

Week 5 -- Making the self: Body ownership

Ehrsson, H. H., Spence, C., & Passingham, R. E. (2004). That's my hand! Activity in premotor cortex reflects feeling of ownership of a limb. *Science*, *305*(5685), 875-877.

Salomon, R. (2017). The assembly of the self from sensory and motor foundations. *Social cognition*, *35*(2), 87-106.

Week 6 -- Making the self: Seeing oneself through others

Jenkins, Adrianna C., C. Neil Macrae, and Jason P. Mitchell. Repetition Suppression of Ventromedial Prefrontal Activity During Judgments of Self and Others. *Proceedings of the National Academy of Sciences 105*, *11* (2008): 4507–4512.

Krienen, F. M., Tu, P. C., & Buckner, R. L. (2010). Clan mentality: evidence that the medial prefrontal cortex responds to close others. *Journal of Neuroscience*, *30*(41), 13906-13915.

Week 7 -- Reading week: No class

Week 8 -- Protecting the self (part I): Positive illusions and self-enhancement

Hughes, B. L., & Beer, J. S. (2013). Protecting the self: The effect of social-evaluative threat on neural representations of self. *Journal of Cognitive Neuroscience, 25*(4), 613-622.

Sharot, T., Guitart-Masip, M., Korn, C. W., Chowdhury, R., & Dolan, R. J. (2012). How dopamine enhances an optimism bias in humans. *Current Biology*, *22*(16), 1477-1481.

Week 9 -- Protecting the self (part II): Authenticity and self-disclosure

Bailey, E. R., Matz, S. C., Youyou, W., & Iyengar, S. S. (2020). Authentic self-expression on social media is associated with greater subjective well-being. *Nature communications*, *11*(1), 1-9.

Tamir, D. I., & Mitchell, J. P. (2012). Disclosing information about the self is intrinsically rewarding. *Proceedings of the National Academy of Sciences*, *109*(21), 8038-8043.

Week 10 -- Losing the self: Transcending the *I*

Carhart-Harris, R. L., Erritzoe, D., Williams, T., Stone, J. M., Reed, L. J., Colasanti, A., ... & Nutt, D. J. (2012). Neural correlates of the psychedelic state as determined by fMRI studies with psilocybin. *Proceedings of the National Academy of Sciences, 109*(6), 2138-2143.

Milliere, R. (2017). Looking for the self: phenomenology, neurophysiology and philosophical significance of drug-induced ego dissolution. *Frontiers in human neuroscience*, *11*, 245

Week 11 -- Class debate: Agency

Readings to be announced

Week 12 -- Class debate: Identity

Readings to be announced

Week 13 -- Class debate: Self-enhancement

Readings to be announced

Academic Integrity

The University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (http://www.governingcouncil.utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences.

Potential offences in papers and assignments include using someone else's ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, obtaining or providing unauthorized assistance on any assignment.

On tests and exams, cheating includes using or possessing unauthorized aids, looking at someone else's answers during an exam or test, misrepresenting your identity, or falsifying or altering any documentation required by the University.

University's Plagiarism Detection Tool

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (https://uoft.me/pdt-faq).

Use of Generative Artificial Intelligence Tools

Students may not use artificial intelligence tools for taking tests, writing research papers, creating computer code, or completing course assignments. The use of generative artificial intelligence tools, including ChatGPT and other AI writing and coding assistants, for the completion of, or to support the completion of, an examination, term test, assignment, or any other form of academic assessment, may be considered an academic offense in this course.

Late Assignment Submission

To maintain fairness and consistency across the class, assignments submitted late that are not supported with legitimate documentation are subject to a penalty of 10% per day. If there are valid reasons warranting an accommodation (e.g., a medical illness), please follow the Missed Term Work policy outlined below.

Disability-Related Accommodations

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible.

AccessAbility Services staff (located in Rm AA142, Arts and Administration Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations 416-287-7560 or email ability.utsc@utoronto.ca. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Religious Accommodations

The University has a commitment concerning accommodation for religious observances. I will make every reasonable effort to avoid scheduling tests, examinations, or other compulsory activities on religious holy days not captured by statutory holidays. According to University Policy, if you anticipate being absent from class or missing a major course activity (like a test, or in-class assignment) due to a religious observance, please let me know as early in the course as possible, and with sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.

Equity, Diversity, and Inclusion

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

The University of Toronto is a richly diverse community and as such is committed to providing an environment free of any form of harassment, misconduct, or discrimination. In this course, I seek to foster a civil, respectful, and open-minded climate in which we can all work together to develop a better understanding of key questions and debates through meaningful dialogue. As such, I expect all involved with this course to refrain from actions or behaviours that intimidate, humiliate, or demean persons or groups or that undermine their security or self-esteem based on traits related to race, religion, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, gender identity, gender expression, age, marital status, family status, disability, receipt of public assistance or record of offences.

Recording of Classroom Material by Students

Recording or photographing any aspect of a university course - lecture, tutorial, seminar, lab, studio, practice session, field trip etc. – without prior approval of all involved and with written approval from the instructor is not permitted.

Masks in the Classroom

While the mask mandate has been paused as of 1 July 2022, the use of medical masks continues to be strongly encouraged at U of T Scarborough in indoor settings where physical distancing is not possible. We ask everyone to respect each other's decisions, comfort levels, and health needs. Masks are

available at all building entrances at U of T Scarborough and in all classrooms.

Department of Psychology Missed Term Work Policy

For missed term work (assignments and term tests) due to illness, emergency, or other mitigating circumstances, please follow the procedure outlined below.

Procedure:

1. Complete the Request for Missed Term Work Accommodations Form ("MTW Form").

2. Email **BOTH** your MTW Form and Supporting Documentation to thiruchselvam.psyd66@gmail.com according to the instructions specified below.

Supporting Documentation Requirements and Deadlines:

Reason for Missed Work	Documentation required for a *first absence* in the term	Documentation required for *subsequent absences* in the term	Deadline for submitting MTW form and supporting documentation
Illness or Injury	ACORN Absence Declaration	UofT Verification of Illness Form	**WITHIN 2 BUSINESS DAYS** of the missed work
Bereavement	ACORN Absence Declaration	A death certificate or funeral announcement	**WITHIN 2 BUSINESS DAYS** of the missed work
University-sponsored athletic or artistic obligation at the varsity/provincial/national level	ACORN Absence Declaration	A note from a university staff member (advisor, coach, residence staff, etc.) who can substantiate the obligation, sent directly to the course email	**10 BUSINESS DAYS IN ADVANCE** of the missed deadline
Disability-related reasons for students registered with AccessAbility Services	For missed *TERM TESTS,* - **Contact your AccessAbility consultant** and have them write to the course email detailing the accommodations needed. For missed *ASSIGNMENTS,* - If your desired accommodation is **within the scope** of your Accommodation Letter (e.g. your letter includes "extensions of up to 7 days" and you need 3 days), send your **Accommodation Letter** to the course email and specify how many days extension you are requesting. - If your desired accommodation is **outside the scope** of your Accommodation Letter (e.g. your letter		**PREFERABLY IN ADVANCE OF THE MISSED WORK, OR AS SOON AS POSSIBLE**

	includes "extensions of up to 7 days" but you need more time than that), **contact your AccessAbility consultant** and have them write to the course email detailing the accommodations needed.	
Academic Conflict (e.g. two midterms at the same time)	Screenshot from Quercus demonstrating the conflict.	**10 BUSINESS DAYS IN ADVANCE** of the missed work
Religious Conflict	None required	

Notes:

- The following reasons are not considered sufficient for missed term work: social activities, recreational travel, technological issues, avoidance of assessments or deadlines, work commitments
- Missed Final Exams are handled by the Registrar's Office and should be declared on eService.
- For ACORN absence declarations, the date you declare the absence is required to fall within the seven-day declaration period (i.e.) the absence cannot be submitted proactively or retroactively.
- Instructors cannot accept term work any later than five business days after the last day of class. Beyond this date, accommodations are only possible via the Registrar's Office petition process.
- If you are unable to submit your request within the specified number of business days, you must still email your instructor within that window to explain the nature of the delay. Exceptions to the deadlines are made only under exceptional circumstances.
- Multiple assignments due on the same day are not considered academic conflicts. Students are expected to manage their time effectively to meet assignment deadlines.
- Back-to-back tests/quizzes are not considered academic conflicts. Only overlapping activities are conflicts.
- Students are responsible for keeping their course timetables conflict-free. Students who register in two courses with overlapping lecture/tutorial/lab schedules will not be accommodated.

Next Steps:

After submitting your documentation, you will receive a response from your instructor or TA. The course instructor reserves the right to decide what accommodations will be made. Failure to adhere to any aspect of this policy may result in a denial of your request. **You are responsible for checking your official U of T email and Quercus course announcements daily**, as accommodations may be time-critical.

For missed assignments, **do not wait for the instructor's response to resume work on your assignment.** Extensions may be as short as one business day, depending on the nature of the illness/emergency. Complete your assignment as soon as you're able, and email it to your instructor.

If an accommodation is granted but a continued illness/emergency prevents you from meeting its requirements, you must repeat the missed term work procedure to request additional accommodations. **Please make it clear in your subject line that you are requesting a second accommodation.** Examples: If you were granted an extension for a paper but are still unable to meet the new deadline, or if you miss a make-up term test, you must submit *another* MTW form and supply documentation according to the "subsequent absences" column in the chart above. *Note: In the case of a missed make-up test, an opportunity to write a second make-up test may not necessarily be provided.