

THEORY OF MIND

Psychology 456
Queen's University
Winter 2016

TU: 10:30-12:00 TH: 11:30-1:00, ELIS 333

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Syllabus

Introduction

Theory of mind is the everyday understanding that people do things because of their mental states such as intentions, beliefs, desires. We call it a "theory" because we cannot see these mental states -- they are the constructs. These theoretical constructs, though, are powerful and allow us to understand the proximal causes of human behaviour. Using our theory of mind, we can both explain what a person has done, and predict what person will do in the future. Some researchers and theorists use the term "folk psychology" to describe theory of mind. It is our everyday, non-scientific, understanding of the basic psychological mechanisms that underlie everyday behaviour.

For some time now, developmental psychologists have been studying the developmental timetable and trajectory of young children's theory of mind. Hundreds of studies have been published investigating young children's understanding of psychological states and how they affect behaviour. This literature is diverse yet coherent, and arguably we know more about this one particular aspect of human cognitive development than any other. Because of its richness, researchers have used theory of mind as a window on children's cognitive development more generally; as the basic phenomena that constitute theory of mind reasoning are gradually uncovered, so too are fundamental insights into the very mechanisms which development takes place. Clinicians have also found that the theory of mind framework is a useful one for understanding disorders that are particularly associated with social-cognitive difficulties. Thus, theory of mind development is not only an interesting topic of study, it is also of practical importance.

General Structure of the Course

The course will be divided into two modules, each comprising 6 weeks of the class.

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In the first module, we will learn how researchers conceptualize theory of mind, and the developmental trajectory of theory of mind concepts in young children. In each case, we will gain exposure to important general issues that face developmental psychologists, such as problems of interpreting children's behaviour in experimental tasks, characterizing theoretical mechanisms of development, and understanding the interplay between biology and experience in shaping development.

For each class during this module, we will have a reading or two that students will be expected to have read in advance and composed a short informal "reaction" thought for (see attached). I will make a brief presentation on the article, highlighting what I think are key points. After about 20 minutes, we will then turn to a discussion phase. For the first 30 minutes of the discussion phase, students will spend time in groups discussing the questions and "reactions" that each student brought. For the second 30 minutes, I will ask a spokesperson for the group (a different one each day) to share back with the class something that emerged from the discussion as particularly interesting, puzzling, or noteworthy.

At the end of week 4, I will assign four essay questions related to material that is covered in the first module. Responses to these essay questions will be due on the last day of week 6, Friday Feb 11.

Assessment for Module 1 will be made as follows:

- 35% ~ Reading response papers
- 25% ~ Discussion participation
- 45% ~ Essay Questions

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In the second module, we will build on the basics acquired in the first module to explore how a theory of mind perspective can help us to understand children's developing abilities to negotiate a host of ever-changing social challenges.

To achieve these goals, students will work throughout the module in small group. Each group will tackle one of six challenges and be responsible for achieving three main goals ~ a) conceptualizing through how a theory of mind perspective on the challenge might be useful, b) finding and reviewing relevant extant literature that may speak to whether theory of mind skills are relevant

to the challenge, and c) identifying future directions for research on the topic.

The ultimate product for the group will be to co-author a review article like those that are published in a general psychology journal such as *Trends in Cognitive Sciences*. There are many examples of what these kinds of papers can look like and I will go over one in detail for the class. Typical review papers comprise approximately a 3000 word organized essay review accompanied by figures and boxes that provide succinct summaries of research paradigms, a general pattern of research findings, or a specific study's worth of data from a paper that might be particularly illustrative of a particular phenomenon. The reason for choosing this format in particular is a flexible one with many options for creatively and clearly

their goals while communicating material to the rest of the students in the course. Presentations can be up to 40 minutes long each (inclusive of discussion time), and we will leave some time at the end for the rest of the students in the course to evaluate what they have learned.

Each group's review paper will be due on the Monday April 4, which is the first Monday after classes officially end. Only one paper will be submitted along with a detailed description of the work that each person in the group did, agreed upon and attested by each member of the group.

Special notes about group work

I realize that group work poses many challenges as students with different motivations, backgrounds, and talents are asked to work together toward a common goal. Some of the challenges are similar to those that are faced in real-world productive environments, academic or otherwise. I expect that each group will have some of these sorts of everyday challenges and will have to organize themselves to negotiate them successfully. I will do my best to facilitate that process, but would like to emphasize some ground rules that may help folks get off on the right foot.

One of the biggest challenges of working in a group is when someone offers an idea or a suggestion that another in the group is critical of. These situations inevitably arise and when they do, two things are important:

1. The one who is being critical must phrase their comments in terms of the idea, and not the person.
2. Given that criticisms are not intended as judgments on the person, it is important not to take them as such.

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The second biggest challenge of working in a group is ensuring that everyone does equal work to the best of their ability. I hope it does not sound too cynical to say that I doubt that it is possible to meet this challenge to full satisfaction. For this reason I will be putting in place mechanisms for ensuring that no group members suffer because of a colleague's insufficient efforts.

1. At the end of every class period in which group work is scheduled I will come around toward the end and determine that there is a clear, mutually agreed upon plan for all group members in terms of what they are expected to do to facilitate progress in the group. I will write these expectations down and present them at the beginning of the next group session.

2. I will regularly ask students to confidentially rate the extent to which group members are contributing to the progress of the project. This will be done on standardized rating forms that I will hand out at different phases of the group work project.

3. Grades for the group work portion will be based upon the contribution that each person makes, and not on the contributions of the other students. The idea is that students can work together to help one another develop better work, but if someone in the group bails on the rest of the students in the group WILL NOT BE PENALIZED. This will be true even if the extent to which a student bails is extreme.

Assessment for Module II will be made as follows:

- 20% ~ Quality of contribution to group work as apparent to me and rated by members of the group
- 30% ~ Quality of contribution to the presentations
- 30% ~ Quality of unique contribution to the review paper
- 20% ~ Contribution to the overall quality of the review paper as apparent to me and rated by members of the group.

Schedule of Class Topics and Readings



~~W. Wed~~

Tuesday, Jan 5: Introduction to the class and get into groups

Thursday, Jan: Social cognition in the wild

Clayton, N. S., Dally, J. M., & Emery, N. J. (2007). Social cognition by food-caching corvids: The western scrub-jay as a natural psychologist. *Philosophical Transactions of the Royal Society B*, 362, 507-522.

~~W. Wed~~

Tuesday, Jan 12: The classic false belief task

Wellman, H. M., Cross, D. & Watson, J. (2001). Meta-analysis of theory-of-mind development: The truth about false belief. *Child Development*, 72, 655-684.

Thursday, Jan 14: False belief in younger children and infants

Onishi, K. H. & Baillargeon, R. (2005). Do 15-month-old infants understand false beliefs? *Science*, 308, 255-258.

Heyes, C. (2014). False belief in infancy: a fresh look. *Developmental Science*, 17, 647-654.

~~W. Wed~~

Tuesday, Jan 19: Overview

Devine, R. T. & Hughes, C. (2014). Relations between false belief understanding and executive function in early childhood: A meta-analysis. *Child Development*, 85, 1777-1794.

Thursday, Jan 21: The emergence account

Carlson, S. M., Claxton, L. J., & Moses, L. J. (2015). The relation between executive function and theory of mind is more than shallow. *Journal of Cognition and Development, 16*(1), 197.

Benson, J. E., Sabbagh, M. A., Carlson, S. M., & Zelazo, P. D. (2015). Individual differences in executive functioning predict preschool improvement from theory-of-mind training. *Developmental Psychology, 49*(15), 1627.

W. Berlin

Tuesday, Jan 26 Understandings before and after false belief

Peterson, C. C., Wellman, H. M., & Slaughter, V. S. (2012). The mind behind the message: Advancing theory-of-mind scales

Wellman, H. M., Lane, J. D., LaBounty, J. & Olson, S. L. (2011).
Observant, nonaggressive temperament predicts theory of mind
development. *Developmental Science*, 14, 326.

~~W/ 16~~

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Tuesday, Feb 9: Parents' Mind-mindedness

Meins, E., Fernyhough, C., Wainwright, R., Das Gupta, M., Brad
E. & Tuckey, M. (2002). Maternal mind-mindedness and attach
security as predictors of theory of mind understanding. *Child
Development*, 73, 1517-1526.

Thursday, Feb 11: Siblings and Peers

McAlister, A. & Peterson, C. C. (2007). A longitudinal study of cl
siblings and theory of mind development. *Cognitive Development*,
25, 258-270

Wang, Y. & Su, Y. (2009). False belief understanding: Children ca
it from classmates of different ages. *International Journal of Behavi
Development*, 33, 331-336.

~~W/ 16~~

~~W/ 16~~ 7 & 8: Homework

Outlines for review papers and detailed plans for dividing work equally
due at the end of class on Thursday, Mar 3.

~~W/ 16~~

Although this week we will have group presentations in class, I am
assuming that everyone will be continuing their work on their
contributions to the review papers outside of class. This will include d
the research, integrating thoughts, and beginning work on a rough dra
their contribution.

Tuesday, Mar 18

Presentations from groups A, B, & C.

Thursday, Mar 10

Presentations from groups D, E, & F.

undergraduate/academic-integrity), and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of credit on an assignment to the failure of a course to a requirement to withdraw from the university.