

Introduction

This study investigated the individual differences and relations between emerging adolescents' Theory of Mind (ToM) and their teachers' ratings of their social and academic competencies. Past studies have shown positive associations with ToM understanding and academic and social competencies among children (Miller, 2012) but research on ToM and social and academic competencies in emerging adolescents remains limited.

We explored gendered connections between participants' ToM and teachers' perceptions of students' academic and social competencies.

Literature Review

Theory of Mind (ToM) refers to a cognitive process and helps an individual to place him/herself in the other person's mind and accounts for human traits like empathy, compassion and deceit (Drubach, 2008)

Children's social competence in peer interaction is significantly related to ToM-based understanding of others' minds (Peterson, Slaughter, Moore, & Wellman, 2016)

Children's improving competence in theory of mind promotes a stage for gaining academic skills (Lecce, Caputi, & Hughes, 2011)

Current Study

➤ What is the relation between emerging adolescents' ToM and their teachers' ratings of their social and academic competencies?

➤ How do gender differences affect the behavioural conduct and academic ratings of adolescents?

➤ Are there any gender differences in teachers' ratings of physical aggression and prosocial behaviours?

Method

Participants: Grade 8 students from 13 schools within Ontario, Canada, $N = 146$ (97 girls, 49 boys; $M_{age} = 13.5$ years, $SD = 5.436$) and 12 teachers (9 females, 3 males)

Procedure: Participants' mental state understanding was measured by:

➤ Two advanced Theory of Mind (ToM) stories (e.g. Story of Will and his mom, What does will think he will get for his birthday- Cognitive ToM)

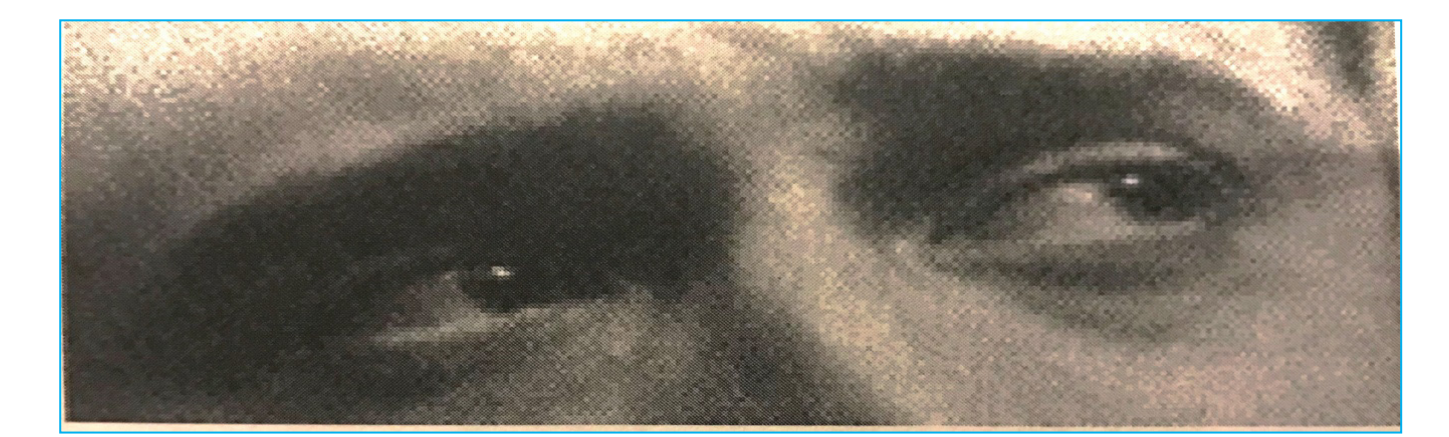
➤ Reading the Mind in the Eyes Test (RME)- Emotional ToM

(e.g. Irritated, worried, sarcastic, friendly)

Also included

➤ Teachers' ratings of students' academic competencies (e.g. mathematics, arts)

➤ Behavioural competencies. (e.g. physical and relational aggression, prosociality)



Results

➤ Obtained a marginal difference in the scoring of ToM of Girls and Boys (girls $M=30.21$, $SD = 5.28$ boys $M = 27.62$, $SD= 3.95$, $T = p = .051$)

➤ Teacher rated Children's Emotional competence Scale, CECS (girls $M=4.12$, Boys $M=3.43$), Perspective taking (girls $M=3.25$, boys $M=3.02$), Empathetic concern (Girls $M=3.79$, Boys $M=3.47$) and Personal Distress (girls $M=2.88$, boys $M=2.55$) are associated with adolescents' social competence.

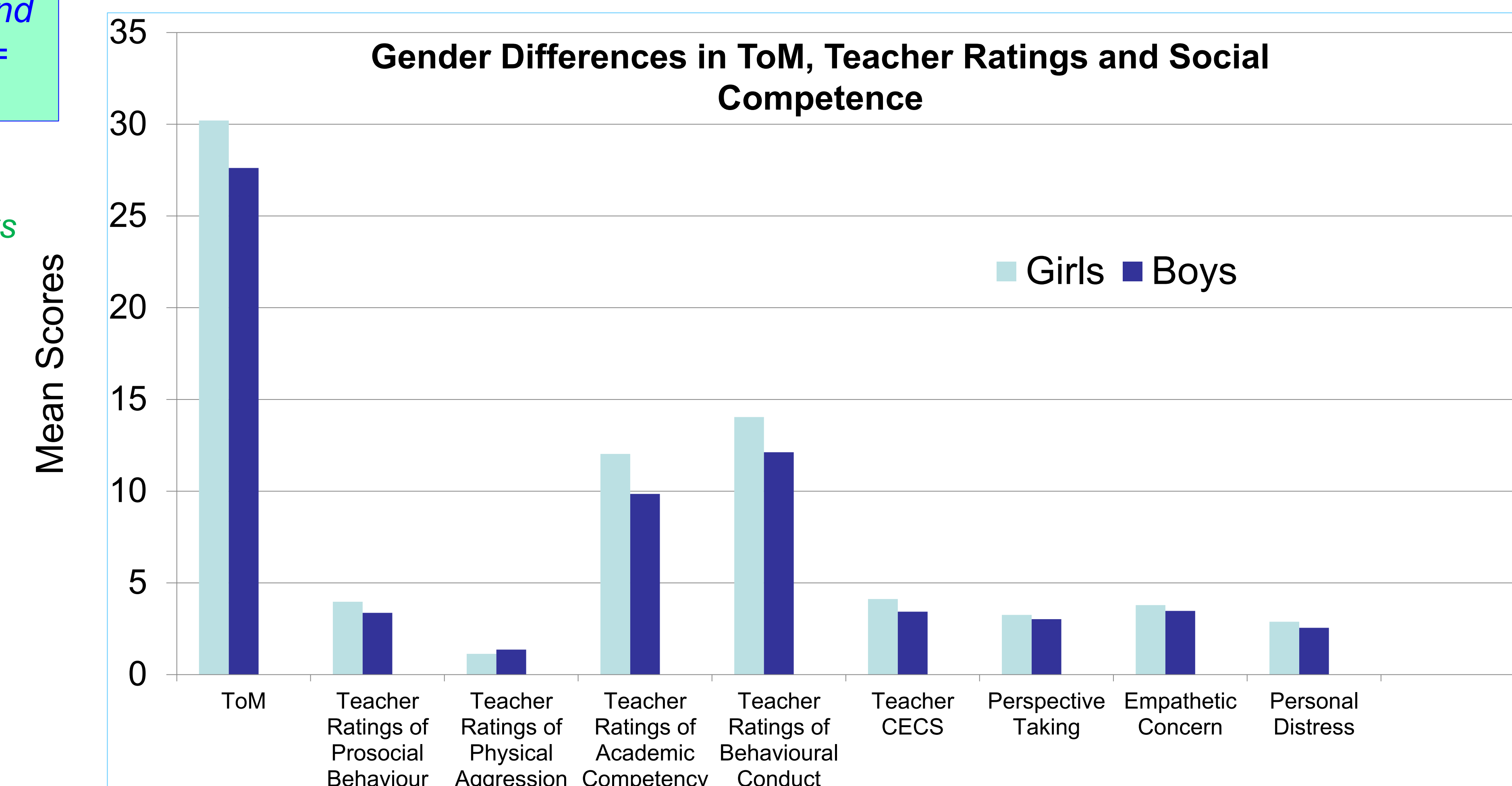
➤ Analysis of variance (ANOVA) showed significant ($p < .05$) gender differences in teachers' ratings of physical aggression (boys > girls, $F = 6.62$, $p = .012$), and prosocial behaviours (girls > boys, $F = 13.30$, $p = .00$). Overall, girls received higher total behavioural conduct ($F = 21.20$, $p = .00$), and academic ratings ($F = 12.60$, $p = .00$) than boys.

➤ Obtained Teacher ratings of: Prosocial behaviour

(girls $M=3.9739$, boys $M= 3.3652$), Physical aggression

(girls $M=1.1269$, boys $M=1.3603$), Academic competency, (girls $M=12.03$, boys $M=9.85$) Behavioural conduct (girls $M= 14.04$, boys $M=12.12$)

➤ Significant positive correlations were found between children's total ToM scores and teachers' ratings of students' academic competencies $r(145) = .360$, $p < .000$ only. No gender differences were found among teachers' ratings of children's relational aggression rating



Discussion

Findings: Gender may influence the relations of young adolescents' ToM and teacher ratings of academic & social competencies.

Implications: Theoretically, this study highlights the complex gendered connections between participants' ToM and teacher perceptions of students' academic and social competencies. Practically, it provides empirical groundwork for gender-informed and developmentally appropriate educational programs that foster metacognitive skills and emotional well-being.

Limitations:

- Sample size and limited geographical area: to control for socio-economic and geographical factors, participants from different parts of Canada are needed.
- No causation or directionality can be inferred in the relations reported

Future direction: Further research is needed to explore gendered perceptions of teachers' ratings of students' academic and social competencies.