

Direct Evidence for the Influence of Collaborative Small Group Discussion on Social Perspective Taking

Saetbyul Kim, Tzu-Jung Lin, Seung Yon Ha, Michael Glassman, Trent Cash, Ziyue Wen, Manisha Nagpal

ABSTRACT

We examined whether participating in collaborative small group discussions led to growth of students' social knowledge and social perspective taking. The data included 72 transcripts of video-recorded discussions from 24 small groups of fifth-grade students in two Midwestern public schools. Students' social perspective taking was assessed before and after six weeks of discussions using an essay task. Poisson regressions with Generalized Estimating Equations (GEE) showed that the amount of social knowledge constructed during discussion predicted changes in individuals' social perspective taking. Specifically, societal knowledge was shown to be more predictive of students' social perspective taking than psychological or moral knowledge. The findings shed lights on the social constructivist mechanism of dialogic inquiry in enhancing one's social perspective taking.

BACKGROUND

- SPT is key to shaping students into concerned citizens (Mulvey, 2016).
- Research showing the link between social knowledge and SPT is scant (Reznitskaya & Gregory, 2013).
- Reasoning can be developed through active social interactions within the context of dialogic inquiry (e.g., Kuhn & Udell, 2003; Murphy et al., 2009)
- Differential effects of category in influencing children's SPT is assumed according to social domain theorists (Turiel, 1983; Smetana, 2006)

THEORETICAL BACKGROUND

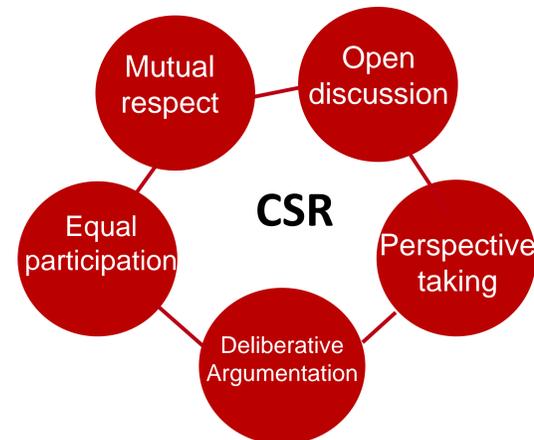
Social Constructivism

Effective learning occurs when students learn to become a community partners who learn from, and with each other through positive and meaningful interactions (Vygotsky, 1999).

Theories of Moral Development

Moral development theories (Piaget, 1932; Kohlberg, 1973; Kohlberg & Hersh, 1977) suggest that children's social knowledge develops as they become able to distinguish morality from social conventions and can mentally coordinate these different perspectives (Lourenço, 2014).

Collaborative Social Reasoning (Lin et al., 2019)



Dialogic Discussion: CSR

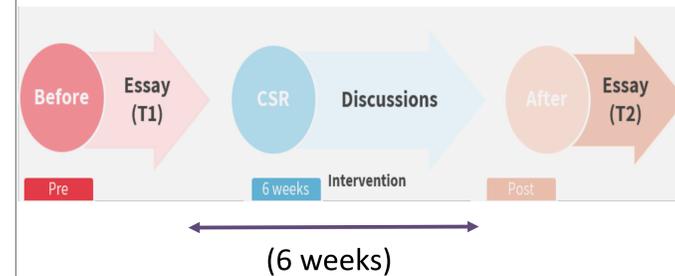


STORY USED FOR CSR:
Multi-faceted texts involving controversies issues

RESEARCH QUESTIONS

- Q1. What types of social knowledge do students generate the most during CSR discussions?
- Q2. Do students who generate more justified social knowledge during CSR discussions demonstrate more advanced perspective taking in their essays?
- Q3. Are certain types of social knowledge (moral, societal, psychological) that students generate during small group discussions more predictive of their social perspective taking in writing?

RESEARCH DESIGN & PROCEDURE



STUDY POPULATIONS

- 129 fifth-grade students (52% female, 33.3% White, 23.3% Black, 21.7% Hispanic, 2.3% Asians, 19.4% Mixed and others).
- 6 teachers (5 content teachers and 1 ESL teacher; all female, 1-22 years of experience with mean=6.67).
- 2 schools (School A: 76% low SES, ~50% White/ School B: 56% low SES, ~38% White)

DATA CODING

Social Knowledge

Societal knowledge (Cohen's $K = .87$)

e.g., Shirley shouldn't punch Aki **because it is against the school policy**

Psychological knowledge (Cohen's $K = .86$)

e.g., I think it's okay for the Dad to buy the car **because it makes him happy**

Moral knowledge (Cohen's $K = .72$)

e.g., Dovey needs to tell on her brother because **killing people is wrong**

Social Perspective Taking (SPT)

(number of justified perspectives x 2) – (number of unjustified perspectives)

Justified perspectives is defined as explanations or interpretations of others' (e.g., classmates or story characters) internal states, beliefs, or arguments.

RESULTS

1. Students generated more societal and psychological knowledge than moral knowledge during CSR discussions

	Moral		Societal		Psychological	
	Mean (SD)	Median (Range)	Mean (SD)	Median (Range)	Mean (SD)	Median (Range)
	2.26 (2.12)	2 (0~10)	8.71 (7.99)	7 (0~49)	8.39 (6.29)	7 (0~25)

2. Social Knowledge Construction during CSR discussions positively predicted SPT in writing

Variable	SPT	
	Est.	SE
Gender	-.110	.147
SES	.103	.038
Ethnicity	.209	.142
Essay length	.338	.163
Pre-test scores	.014	.015
Social knowledge	.010*	.004

3. Construction of societal knowledge made the most significant contribution to the development of SPT

Variable	SPT					
	β	SE	β	SE	β	SE
Gender	-.118	.141	-.101	.144	-.111	.147
SES	.091*	.041	.113**	.038	.094*	.040
Ethnicity	.243	.149	.222	.133	.225	.147
Essay length	.446**	.143	.337*	.151	.384*	.168
Pre-test knowledge	.018	.014	.018	.014	.013	.016
Moral	-.007	.023				
Societal			.019**	.007		
Psychological					.015	.012

CONCLUSIONS

- Collaborative Social Reasoning discussion is an effective approach to nurture students' social knowledge development and social perspective taking.
- Social knowledge construction with peers is a key mechanism of change in CSR.
- With the positive support of CSR, students were more attuned to societal knowledge (knowledge related to societal conventions or rules) than psychological knowledge (personal concerns), which is considered more developmentally challenging for typical students at the fifth-grade level.