

Bridging the Gap between Social Reasoning and Action:

Impacts of Collaborative Small-Group Discussion

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Abstract

This study examined whether participating in dialogic discussions could enhance students' social reasoning and in turn help them use it to shape their social-moral action. A total of 250 fifth-grade students in a Midwestern city in the U.S. were assigned to the Collaborative Small Group condition-CSR, Read Aloud condition-RA or Regular Instruction-RI condition. Students' social reasoning and social behavior were assessed before and after the intervention. CSR students experienced greater improvement in social reasoning compared to RA and RI students. CSR students demonstrated greater improvement in social behavior, whereas RA students failed to translate social reasoning into their social action. The better alignment between social reasoning and social behavior can be attributed to the social constructivist approach that CSR adopts.

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Objectives

In the field of social cognition, there is a growing debate of whether individuals act in accordance with their social reasoning and judgment, defined as the ways by which individuals perceive, construe, and evaluate complex issues that occur in the social world (Mulvey, 2016). Some researchers focus on the idea of causal links between social-moral thought and moral actions (Turiel, 2008; Guerra, Huesmann & Spindler, 2003; Dodge & Godwin, 2013). Other researchers suggest differences between individuals' social reasoning and their moral behavior (Hardy, 2006; Gino & Galinsky, 2012). The incongruence between one's reasoning and social actions has been attributed to individual's inability to recognize and weigh on multiple perspectives of complex social issues, and reliance on intuition and emotion (Hardy, 2006; Monin, Pizarro & Beer, 2007). These are factors that can subvert individuals' social compass in favor of their needs.

Group-based dialogic inquiry about complex issues has been shown to have positive effects on students' ability to consider and use multiple perspectives in their social reasoning processes (Bloome et al., 2019). Although diverse intervention programs have been developed to promote students' reasoning and positive social moral behavior (see Durlak et al., 2011; Taylor et al., 2017 for reviews), few of these programs have taken a dialogic approach. Moreover, there is limited insight into whether the interventions could help students use their reasoning process as precursor to and primary influence on their social moral action. The goal of the current study was to address this gap in research.

Theoretical Background

Thought and Action Congruency Debate

Some evidence has shown that social cognition and reasoning successfully predicts and mediates social moral behavior (Guerra et al., 2003; Turiel, 2008). Dodge & Godwin (2013) implemented an intervention to reduce antisocial behavior and found that social cognitive processes such as bias reduction, devaluing aggression mediated the relation between the intervention and positive outcomes. Another group of researchers have suggested that factors other than social reasoning, such as emotion and moral identity serve as better predictors of behavior (Monin et al., 2007). Gino and Galinsky (2012) identified a factor called psychological closeness and showed that participants behaved more selfishly if they perceived themselves to be close to someone who engaged in a selfish/dishonest behavior. These studies suggest that humans can either be very conscious and deliberate or be influenced by quick affect driven behavior.

Dialogic Inquiry and Social Reasoning/Behavior

Dialogic inquiry is a social constructivist approach where the teacher and students reflect on various social moral issues to construct social reasoning through argumentation (Alexander, 2006; Wells, 2000). According to Walton (1998), dialogue that takes place in the form of *inquiry* is helpful as everyone works together to develop reasonable solutions to controversial issues. Complex reasoning skills (negotiation, argumentation) develop through processes of conflict regulation and eventual group resolution (Darnon et al., 2006; Piaget, 1932). Students who are given an opportunity to construct their thinking for active learning processes have a very

different approach to their knowledge than those who learn through direct instruction and thus, are more able to apply it to real world, every day activities.

The Intervention- Collaborative Social Reasoning Discussion.

Collaborative Social Reasoning (CSR) discussion is a small-group dialogic inquiry approach informed by literature on Collaborative Reasoning (CR) (Chinn, Anderson, & Waggoner, 2001; Reznitskaya et al., 2009). (See method section for details).

Research Questions and Hypothesis

- Can CSR discussions improve students' social reasoning in comparison to two control-comparison groups?
- Can CSR discussions improve students' social behavior in comparison to two control-comparison groups?

We hypothesize that students who experienced CSR discussions would demonstrate significant improvement in both social reasoning and social behavior, whereas students in the other conditions would exhibit asynchronous change in their social reasoning and social behavior or show no improvement in either domain.

Methods

Participants

The current sample included 250 fifth grade students (121 females) from 12 classrooms in two schools in the Midwestern United States. 35.6% were white, 14.4% were Hispanic, 24.4% were Black, 1.6% were Asians, 2.4% were American Indians and 18.8% came from mixed backgrounds.

Study Conditions

The current study adopted a pre-post control quasi-experimental design with the following three conditions.

Collaborative Social Reasoning (CSR). The students formed heterogeneous small groups and were expected to follow the following group norms: collaborative argumentation, mutual respect, and equal participation. To help students be more cognizant about the group norms, they were asked to set up their individual goals pertaining to the group norms with a goal setting sheet. A CSR discussion then began with a teacher-led introduction. The teachers then announced the big question, a social-moral dilemma from the story. Once students gave their initial position on the issue, they then collaboratively reasoned about the issue by considering various perspectives with evidence and reasons. The discussion ended with a teacher-led debriefing session in which students reflected on their performance.

Read-Aloud condition (RA). In this condition, the teacher read aloud one story each week to the students in a whole-class setting. These were the same stories that were given to the CSR students. They then individually wrote a prequel or ending of the story.

Regular Instruction (RI). These students received regular language arts instruction throughout the intervention.

Measures

Social reasoning. Students received a social reasoning essay task before and after the intervention to reason about a social exclusion issue arising from a short story. Social perspective taking was also assessed through these essays.

Social Behavior. Social behavior was assessed by a peer nomination questionnaire adapted from Parker and Asher (1993), Crick (1996), Younger et al. (2000), and Greener (2000). Students were asked to nominate classmates who showed physical aggression, relational aggression, anxiety, or wariness. Each type of social behavior was measured by four items.

Essay Coding

Coding for social reasoning. Based on the argument schema theory (Walton, 1996), we identified claims that students made in their essays. The *claim* was further classified into three sub-categories. Claims supported by *fact* means that the student supported a claim by paraphrasing or referring to what happened in the story. Claims supported with *Justification* means that the student justified their claims with reasons that involved meaningful interpretations of story characters' thought, feeling, or action. If neither *Fact* nor *Justification* was provided or the justification was insufficient, the claim would be coded as *Unjustified Claim*. Based on the coding, we derived the following index: (a) weighted number of justified claims (justified claims x 2 + claims supported by facts x 1 – unjustified claims).

Coding for social perspective taking. Social perspective taking -children's ability to differentiate between self's from others' cognitive or affective mental states (e.g., Sutton, Smith,

& Swettenham, 1999) was assessed with the following coding categories. The first category was *Perspective*, which consisted of two sub-categories: *Recognized* perspectives referred to the number of story characters which the student distinctively mentioned in the essay. Among the recognized perspectives, if the student generated a claim about the story character, the perspective was further coded as *justified*. Based on the coding, we derived at the following index: (a) weighted number of justified perspectives (justified perspectives x 2 + recognized perspectives x 1).

Data Analysis

Poisson regression models with GEE (generalized estimating equations) were used to estimate:

- Number of perspectives and supported claims (social reasoning)
- Rate at which three groups of students (CSR, RA, RI) were nominated by their classmates for being physically aggressive, relationally aggressive, socially anxious, or wary (social behavior)

Results

The mean and SDs of all measures are listed in Table 1.

Social Reasoning and Perspective Taking (Table 2). In terms of social reasoning, students in the CSR group scored significantly higher than students in the RA (.32) and RI (.66) groups. In terms of perspective taking, students in the CSR group scored significantly higher than students in the RA (.83) and RI (1.11) groups.

Social Behavior. Students in the CSR group scored significantly lower on overt aggression when compared to students in the RA (-.70) and RI (-.74) conditions. Students in the CSR group also scored significantly lower on relational aggression when compared to students in

the RA (-.53) condition. Students in the CSR group also scored significantly lower when compared to students in the RA condition on anxiety (-.40) and wariness (-.26). Although CSR students scored lower on relational aggression, anxiety and wariness in comparison to the RI condition, these differences were not significant.

Discussion

The current study examined if CSR can be an effective educational practice for a better alignment between the development of social reasoning and interpersonal competencies. Our findings showed that CSR discussions significantly improved students' social reasoning as compared to the regular instruction students. There were no significant differences between the social reasoning scores of CSR and Read Aloud (RA) students, after controlling for pre-test performance. Interestingly, CSR students performed significantly better than both RA and RI students on interpersonal competencies. CSR students showed greater social acceptance, lower aggression, and lower withdrawn behavior when compared to RA and RI students. They also showed lower tolerance of aggression when compared to RA and RI students.

Compared to the CSR students, the improved social reasoning in RA students might not have successfully translated into their social actions. Unlike CSR students who had extensive opportunities to openly voice different ideas about moral principles, societal rules, personal concerns related to complex issues of social exclusion, RA students only had an opportunity to individually reflect on these issues. The social exclusion issues embedded in the stories might have reinforced RA students' experiences with social exclusion. Without dialogic inquiry, RA students might be more inclined to maintain the aggression norm as a selfish action to hold their social standing (Cillessen & Mayeux, 2004), to prevent themselves from being victimized (Guimond et al., 2018), or to fit in (Zimmer-Gembeck et al., 2005).

Conclusion

It is important to conclude by noting that dialogic inquiry not only promotes students' social reasoning, but also helps them translate that richer understanding into real life situations in a way that they are better able to respond and handle their social relations. The discussions orient students toward key social cues embedded in dynamic and complex social interactions with others; enabling them to generate more reasonable, unbiased interpretations of their classmates' and their own social behavior, emotion, or motivation; and, in turn, enhance their relationships and interpersonal competencies. This suggests that if educators do want to make connections between advances in socio-moral reasoning and moral action it might be worthwhile to further explore social constructivist approaches like CSR.

Limitations and Future Directions

Since this is not a truly randomized study, there could have been other variables such as school norms, teacher comfort level when talking about social issues, friendships in classrooms etc. that could have also influenced the results. Moreover, we had lesser number of RA classrooms in comparison to CSR and RI conditions. There is a need for future research to understand the underlying mechanisms that lead to social reasoning and behavioral change. Future research can also use implicit tools to measure reasoning about complex social issues (and not just limiting it to essay scores). There is also a need for more longitudinal studies to see if social reasoning mediates the effect of the condition on social behavior.

Table 1

Means and Standard Deviations of all the Measures

Variable	CSR		RA		RI	
	Pre	Post	Pre	Post	Pre	Post
	N = 134		N = 42		N = 74	
Social Reasoning	4.00 (3.09)	6.51(4.04)	4.57(3.78)	5.77 (3.14)	3.58(2.24)	4.56(2.84)
SPT Weighted Perspective	.56 (.30)	.76 (.27)	.63(.29)	.74 (.27)	.51 (.29)	.69(.29)
Social Acceptance	4.96(1.07)	5.06 (1.09)	5.00 (1.18)	4.66 (1.04)	5.25 (.99)	5.12 (1.00)
Overt Aggression ^a	.27 (.39)	.28 (.39)	.61 (.77)	.67 (.82)	.32 (.54)	.45 (.63)
Relational Aggression ^a	.33 (.33)	.44 (.44)	.51(.55)	.77 (.66)	.35 (.43)	.46 (.42)
Anxiety ^a	.37 (.29)	.41 (.42)	.47(.43)	.54 (.54)	.42 (.32)	.48 (.31)
Wariness ^a	.19 (.26)	.18 (.29)	.26 (.46)	.24 (.52)	.20 (.22)	.20 (.24)

^aThe means and standard deviations were calculated based on the ratios of nominations in class.

Table 2

Generalized Linear Models (GEE) of Social Reasoning

<i>Condition</i>	Perspectives	Reasoning-Justified Claims
<i>CSR vs RA</i>	.83**	.32**
<i>CSR vs RI</i>	1.11***	.66**

* $p < .05$, ** $p < .01$. *** $p < .001$

Table 3

GEE Models of Social Behavior

<i>Condition</i>	Overt Aggression	Relational Aggression	Anxiety	Wariness
<i>CSR vs RA</i>	-.70**	-.53***	-.40*	-.26*
<i>CSR vs RI</i>	-.74***	-.03	-.28	-.19

* $p < .05$, ** $p < .01$. *** $p < .001$

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