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Perspective-Taking as a Tool to Examine Engaging in Differences during Shared Meaning-Making

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Abstract: Supporting students to develop shared meaning-making skills across differences is a critical educational goal. This study built on a series of studies to explore ways to address this goal and examined how diverse teams engaged with their differences around politically charged topics in a text-based CSCL tool. We conceptualized engaging in differences as the extent to which team members position, coordinate, and negotiate their identity-related narratives and different perspectives during their shared meaning-making and as a form of perspective-taking. We then collected and analyzed the discussions of 13 diverse teams over four-time points. Our analysis suggested that teams engaged in five communication patterns while engaging in differences in their narratives and perspectives around charged topics: Egocentric, subjective perspective-taking, reciprocal perspective-taking, mutual perspective-taking, and societal-symbolic perspective-taking.

Introduction

Our divergences can dictate the nature of our relationships with others. We tend to empathize with ingroup members while developing biases towards outgroup members (Dovidio et al., 2012). Thus, developing the skills to bridge those differences and create shared meaning gains significance as an educational goal (Gurin et al., 2013). Recently emerging CSCL studies situated in this problem space have examined the development and evaluation of new technological tools in moderation of charged discussions and how emotions are expressed and regulated in this context (e.g., Slakmon & Schwarz, 2019). Others have also examined how individuals can develop an understanding of intersubjective meaning-making across disagreements in historically charged discussions (e.g., Pollack & Kolikant, 2012). However, these efforts lack a concrete framework for assessing the quality of shared meaning-making around charged topics such as race, gender, and identity. Outlining a model of communication patterns at varying levels of quality helps learners 1) develop regulatory skills with an understanding of what high- versus low-quality discussions look like, 2) compare their processes to an established model to identify problems in their collaborative processes, and 3) identify a solution to address the problems (Borge et al., 2018; Winne & Nesbit, 2009). Therefore, we argue that a theoretically informed model that outlines the communication patterns and the details of desirable and dysfunctional behaviors in politically charged topics could support learners to develop the agency to optimize critical-dialogic processes in diverse teams. As the initial step to develop a theoretically-informed model, in this paper, we identified diverse teams' patterns and behaviors of engaging in differences as they participated in synchronous discussions on politically charged topics in a text-based CSCL environment.

Theoretical framework - Perspective-taking to bridge differences

We adapted Selman's (1980) social role-taking framework and conceptualized 'Engaging in Differences' as the extent to which team members position, coordinate, and negotiate their identity-related narratives and different perspectives in the social-relational, cognitive and affective spheres during their discussions. Selman's (1980) original framework outlined five levels of ability to understand others' feelings and perspectives as a result of the cognitive growth in children: 1) egocentric role-taking: a lack of recognition of the different perspectives, 2) subjective role-taking: the awareness that their perspectives may significantly differ from others due to the information provided but lack integration, 3) self-reflective role-taking: understanding how different values and purposes shape the differences but no simultaneous consideration of the perspectives, 4) mutual role-taking: simultaneous consideration of different perspectives and their consequences, 5) societal-symbolic role-taking: reflection on societal and more abstract reasons rooting the divergences. Adapting this framework for charged discussions in the CSCL context, this study aims to identify communication patterns and behaviors associated with engaging in differences and addresses the following research questions:

R.Q. How did online teams engage in their differences as conceptualized by the theoretical framework? What engaging in differences patterns and behaviors were most commonly exhibited during shared meaning-making around politically charged topics?

Methods

Research design, context, and participants

The study is an exploratory multiple case study (Yin, 2018) with bottom-up and top-down analytical strategies. The data was collected from an in-person Multicultural Psychology course that introduced students to concepts of race, culture, and cultural competence and guided them to explore the meaning of these concepts. The participants were 35 undergraduate Psychology students. There were 25 females, nine males, and one non-binary student from diverse ethnic-racial backgrounds. All participants consented to participate in the research.

Procedure

At the beginning of the semester, the students were divided into teams of two and three based on their self-reported gender and racial-ethnic identities ($N = 13$; triads = 9; dyads = 4). As a partial requirement of their course work, students were asked to engage in a set of synchronous collaborative activities in a text-based CSCL environment called CREATE (see Borge et al., 2018). Each set involved: (1) synchronous discussions where students discussed their responses to four questions on readings around politically charged topics (e.g., racial disparities); (60 mins); (2) individual assessments where students assessed their collaborative sense-making performance using a rubric developed by the second author (Borge et al., 2018) and provided justifications for their assessments (15 mins); and (3) collective assessment where students met to discuss their individual assessments to collectively identify the team's weaknesses and strengths and identify a strategy to address their weaknesses in the following discussions (15 mins). The discussion transcripts of the teams were automatically saved to CREATE. Then, the first author downloaded the transcripts and scored them using an established rubric with interrater reliability established at Kappa= .81) and provided feedback to teams.

Identifying engaging in differences patterns and associated behaviors

We first employed holistic coding to chunk the instances of engaging in differences into five categories of perspective-taking (first cycle, Saldaña, 2016). Then, we employed the initial coding strategy to examine how teams engaged in these perspective-taking categories and identify their associated behaviors (first cycle, Saldaña, 2016). In the second cycle, we conducted focused coding to determine what initial codes make the most analytical sense based on the research question, theoretical framework, and established theories of multicultural competence, intergroup dialogues, and shared cognition. We also wrote analytical memos with evidence quotes for each behavior (Saldaña, 2016). By constantly comparing the themes across the teams, we identified each category's primary behaviors (Corbin & Strauss, 2014). Then, we conducted multiple debriefings with an external coder who coded the discussions of all 13 teams and discussed the validity of the behaviors, both semantically and theory-wise.

Findings

Analysis of the 13 teams' discussions over four-time points suggested that teams exhibited all of the five perspective-taking patterns while engaging in differences in their perspectives around charged topics, from least sophisticated to most sophisticated form: Egocentric (18.92%), subjective perspective-taking (36.49%), reciprocal perspective-taking (24.32%), mutual perspective-taking (12.19%), and societal-symbolic perspective-taking (8.11%).

Egocentric sharing

In egocentric sharing episodes, team members' perspectives were shared in a monologic manner. The extent to which members' sharing was different or similar was not specified or limited to simple acknowledgment. The most common behavior associated with this pattern was *sharing disconnected perspectives* (79% out of all egocentric sharing), where team members did not position their sharing to each other's sharing. In relatively more advanced egocentric cases, one team member differentiated their perspectives by posing a flaw in others' arguments; yet, their attempts were ignored by other team members—i.e., *ignored challenges*.

Subjective (unilateral) perspective-taking

In subjective (unilateral) perspective-taking instances, a different perspective is acknowledged and followed by immediate accommodating reactions. Three major behaviors associated with this pattern emerged (out of all subjective perspective-taking instances): Acknowledgment & brief elaboration (25.92%), follow-up inquiries (59.25%), and emotional support (14.82%). In the *acknowledgment & brief elaboration* instances, team members acknowledged different perspectives (e.g., quick consensus) and offered brief elaboration. In the *follow-up*

inquiries episodes, after appreciating a different narrative, team members posed follow-up questions to the member who shared the narrative. These questions consisted of information-seeking questions, prompting the member to share more about their narrative or self-reflect on how it shaped their perspectives. The following excerpt from Team 2's first discussion exemplifies this behavior.

Line 1	Zhang:	I'm Chinese and I was born in China.
Line 2	Lisa:	Are you an international student?
Line 3	Zhang:	Yes, I spent most of my life before high school in China, and I went to high school in Toronto and then came to the U.S. for college.
Line 4	Lisa:	Oh wow that's interesting

Riley (White, Female) and Lisa (Black, Female) exhibited a noticeable interest in Zhang's (Chinese, Male) different perspective by posing multiple inquiries to learn more about him. They recognized and appreciated the difference (Line 4), but their efforts to learn more about it induced unilateral sharing and reflection.

Reciprocal perspective-taking

Reciprocal perspective-taking (24.32%) included two-way reciprocity of sharing and reactions where teams negotiated multiple perspectives and narratives. Yet, there is no clear sense of interconnecting of members' differences. Two behaviors were identified to be most prominent in reciprocal perspective-taking episodes (out of all reciprocal perspective-taking instances): Persuasion/self-defense (27.78%) and self and other engaging (72.22%). In the *persuasion/self-defense* instances, team members either challenged each other's perspective while supporting theirs or defended their stance by putting effort to self-explain over multiple turns of speech. In the *self and other engaging* episodes, most team members shared their narratives/perspectives while posing questions and reflecting on others' sharing. There was two-way sharing and reflecting, but this reciprocity was sequential rather than simultaneous, and the interconnection between different perspectives/narratives was limited. The following excerpt from Team 4's discussion exemplifies this behavior.

Line 1	Amelia:	I grew up in a predominantly white school/community, because whites made up about 75% of the community. But I've talked to several people who were "1 of 3 black people"…
Line 2	Eric:	yeah i was 1 of about 10 other asians [*sic*] in my highschool [*sic*]…
Line 3	Amelia:	Was that because you went to a small school, or was it really just that low diversity??
Line 4	Elena:	I feel like my percents [*sic*] higher it was about 85% white and the rest was others
Line 5	Eric:	I went to a pretty small highschool [*sic*], my graduating class was around 120
Line 6	Elena:	same there were only 200 student in my graduating class
Line 7	Amelia:	Ohh. My graduating class was 550, so even a small percent of minorities was a lot.
Line 8	Elena:	thats insane

The episode started with Amelia sharing her limited exposure to diversity while growing up. Then, she posed a question to elicit whether they shared similar narratives (Line 1), which was followed by team members sharing narratives around the same topic, posing a difference/similarity in their narratives (e.g., Line 4), reacting to other's sharing (e.g., Line 8), and asking questions to understand or learn more about other's narrative (e.g., Line 3).

Mutual perspective-taking

Mutual perspective-taking patterns (12.19%) included reflective processes where multiple divergent perspectives were coordinated and analyzed to co-construct shared meaning. Two major behaviors were associated with this pattern: Analyzing differences (33.33%) and synthesizing & establishing consensus (66.67%). In the *analyzing differences* episodes, team members analyzed the roots of the differences in their perspectives to co-construct a shared meaning that integrated self and others' perspectives/narratives. In the *synthesizing & establishing consensus* instances, team members synthesized multiple narratives/perspectives through reflective processes to establish a consensus with/without situating self-narrative and perspective. For example, in their first discussion, Team 3 members negotiated their definitions of the race concept. Chloe synthesized her team members' perspectives to construct an integrative argument: "*…I agree with Wang that there is also a biological aspect, but that biological aspect - such as looking at physiological features - was used as another way to categorize and "other" people… race is so connected to culture and daily lived experiences because people have had to find meaning and connection in these groups that was essentially prescribed for us centuries ago*."

Societal-symbolic perspective-taking

Societal-symbolic perspective-taking was the most sophisticated but least common form of engaging in differences (8.11%). Teams exhibited societal theorizing, where they examined the societal factors leading to the differences/commonalities in their perspectives and pointed to structural attributions to explain the divergences/commonalities. For example, in an episode where Team 8 members negotiated whether labeling people is necessary, Angela acknowledged the validity of her team member's alternative perspective and rationalized the divergence in their perspectives by situating it in a larger societal issue: "*The concept of labels being bad is a manipulation of societal history… I agree with Rick that they shouldn't be the defining characteristic but at a base there *shouldn't* be anything wrong with recognizing a certain label or aspect that has shaped you into the person you are, while simultaneously acknowledging we are so much more complex than that one thing about us.*"

Discussion and Conclusion

This study used perspective-taking as a theoretical and analytical tool to identify engaging in differences patterns and associated behaviors in text-based synchronous discussions around politically charged topics. Analysis suggested the teams predominantly exhibited subjective and reciprocal perspective-taking in their discussions. Subjective and reciprocal perspective-taking patterns have a similar connotation to Mercer's (1996) cumulative talk, where team members build on others' ideas without critical reflection. However, unlike the slightly negative reputation of its counterpart in CSCL, there were some desirable strategies associated with this form of perspective-taking. For example, follow-up inquiries helped team members appreciate and learn about different narratives/perspectives, which are desirable behaviors associated with bridging divergences (Gurin et al., 2013). In addition, some acknowledgment & brief elaboration instances included critical reflection where team members acknowledged their identity-related privileges (Gurin et al., 2013). However, there is not any form of co-construction or integration of the divergences in these instances. Mutual and societal-symbolic perspective-taking included more sophisticated behaviors such as synthesizing to establish a consensus and analyzing differences (mutual perspective-taking), and theorizing societal roots of the differences/commonalities (societal-symbolic perspective-taking). These are desirable behaviors because they (1) support building relationships across differences while also (2) being critical regarding how societal structures shape the divergences in individual members' perspectives (Gurin et al., 2013). The findings of this study laid out a foundation for our larger goal of developing multicultural collaborative competence in a CSCL context; however, further studies with multiple case comparisons are needed to develop an operational model of competence.

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