Impact Of Transportability Into Literary Fiction On Levels Of Empathy Towards Outgroup

Bella Blumenschein and Alisha Holland

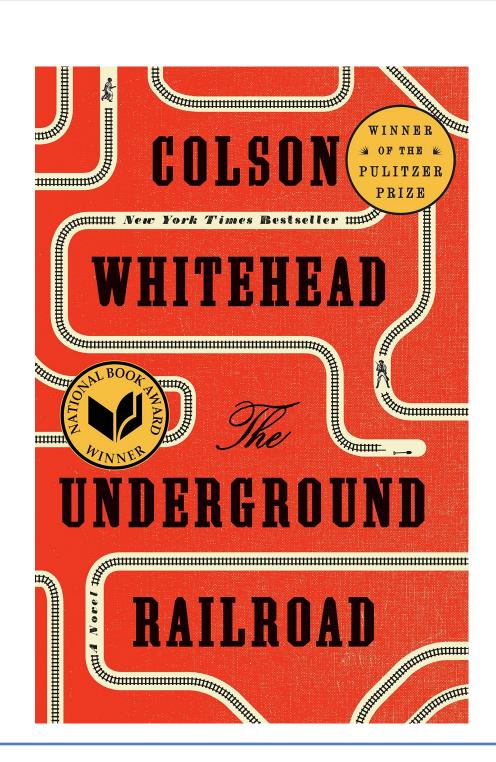
Trinity College HARTFORD CONNECTICUT

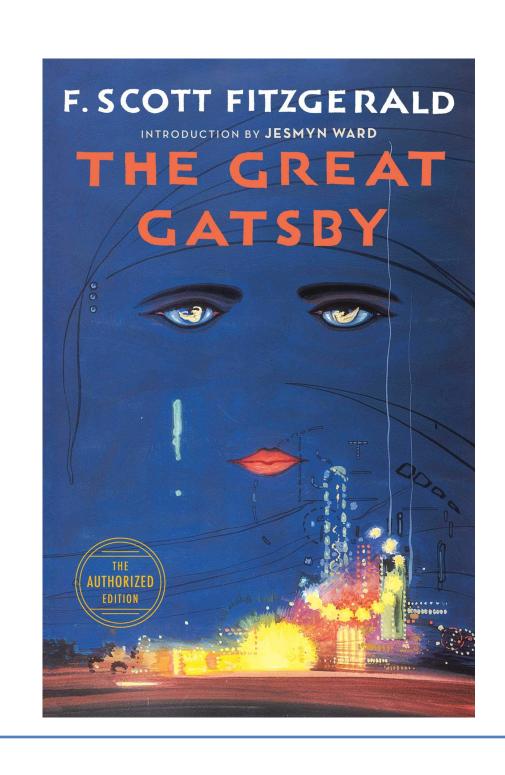
Introduction

- *Empathy has been defined as the capacity to understand and feel the internal states of others, argued to be a malleable skill which can be learned and developed through experience- or expression-based approaches¹.
- ❖ In contexts of group segregations and conflict in which direct contact is not feasible, different art forms are promising alternatives in increasing empathy towards outgroup members through indirect contact to their perspective^{2, 3}.
- ❖ Brain areas involved in affective empathy and emotional processing are neurologically activated during fiction reading but not during non-fiction⁴.
- Literary fiction is an experience-based approach shown to improve understandings of other people's feelings and perspectives¹.
- Literary fiction focuses on aesthetic qualities and character development, increasing people's abilities to infer mental states more than popular fiction, which is more concerned with topic and plot⁵.
- ❖ Emotional transportability has been suggested as the central mechanism through which literary fiction impacts people's abilities to empathize emotionally ⁶.
- ❖ Emotional transportability is defined as 'the act of becoming cognitively, emotionally, and imaginatively immersed in a story', in a state of detachment from the external world⁷ and can be manipulated through transportation-enhancing conditions^{8,9}.
- ❖ The current study aimed to expose participants to different pieces of literary fiction to investigate if increasing transportability into a story from the perspective of a black individual would increase empathy towards outgroup in comparison to a story from a white perspective
- ❖ Based on the literature, we manipulated transportability into the story by increasing familiarity to its cultural context ⁹.

Hypothesis

Manipulating transportability into a literary fiction passage portraying the perspective of a marginalized group will increase empathy towards out-group members.





Methodology

- Forty-eight participants were recruited from Trinity College
- ❖ 27 identified as women and 19 identified as men and 2 preferred not to respond

White/Caucasian Black/African American Asian Hispanic/Latino Other/Prefer not to respond

Measurements:

Participants:

Transportability
Manipulation: Participants
read a paragraph on the
historical context of the
story.

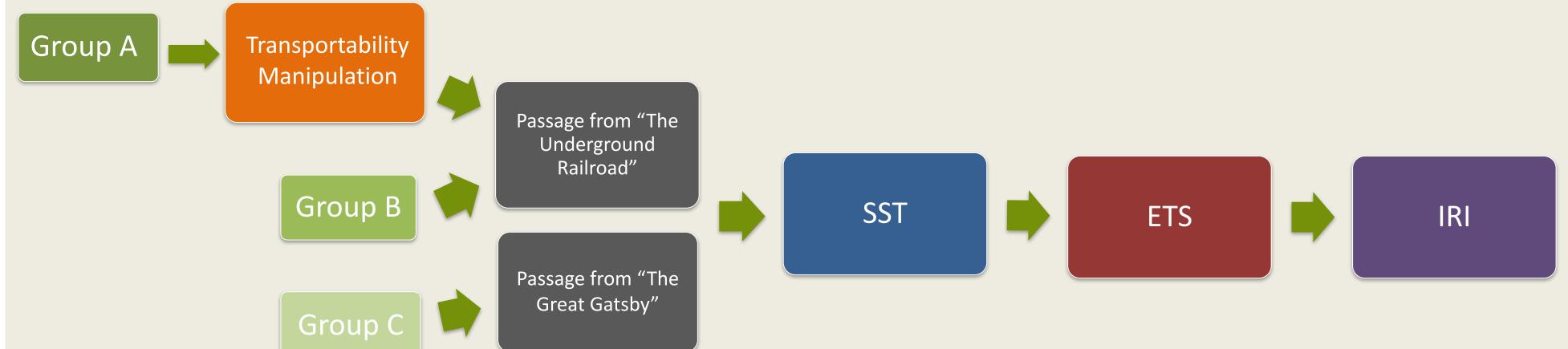
❖ Their age ranged from 18 to 23

Short Story Task: Open-ended questions on familiarity with the story, spontaneous mental inference, story comprehension, and explicit mental reasoning

Emotional Transportation
Scale: five-point scale
questionnaire on general,
cognitive, emotional, and
imaginative engagement with
the piece of fiction

Interpersonal Reactivity
Index: five-point scale
questionnaire assessing
perspective-taking,
empathic concern, fantasy,
and personal distress

Procedure:



Results

A univariate ANOVA revealed a significant effect of group on the emotion transportation scale (ETS), F(2,45) = 4.61, p = .02. Post-hoc comparisons revealed that Groups A and B both scored significantly higher than Group C, ps < .04.

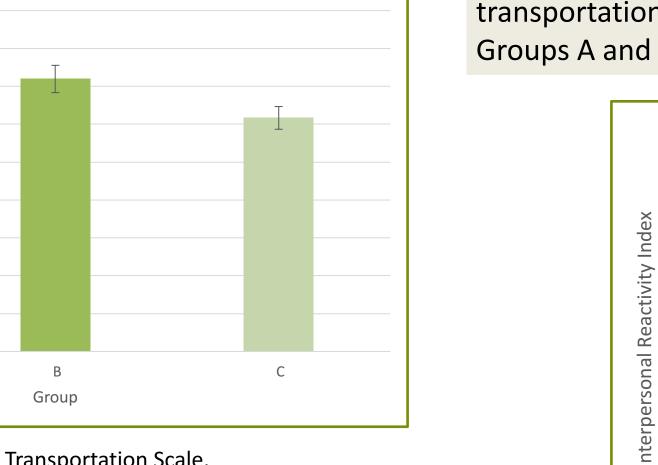
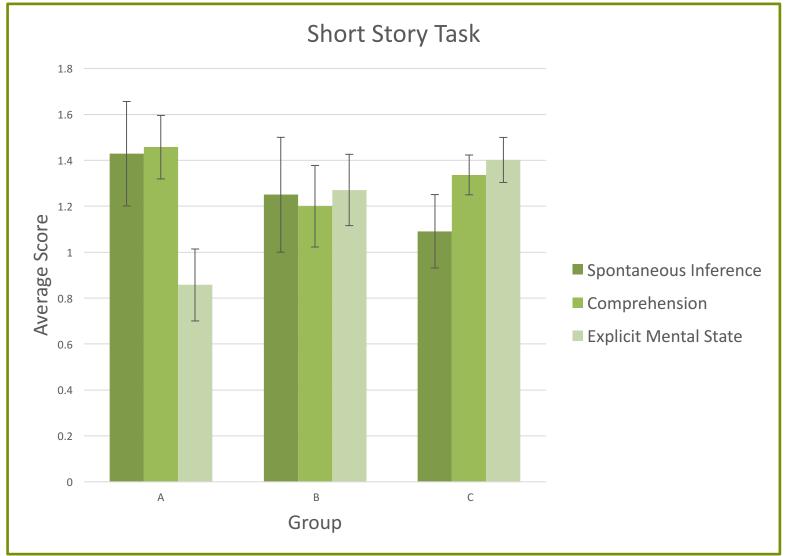


Figure 1: Effect of group on Emotion Transportation Scale.



Emotion Transportation Scale

Figure 2: Effect of Group on subscales of the Short Story Task.

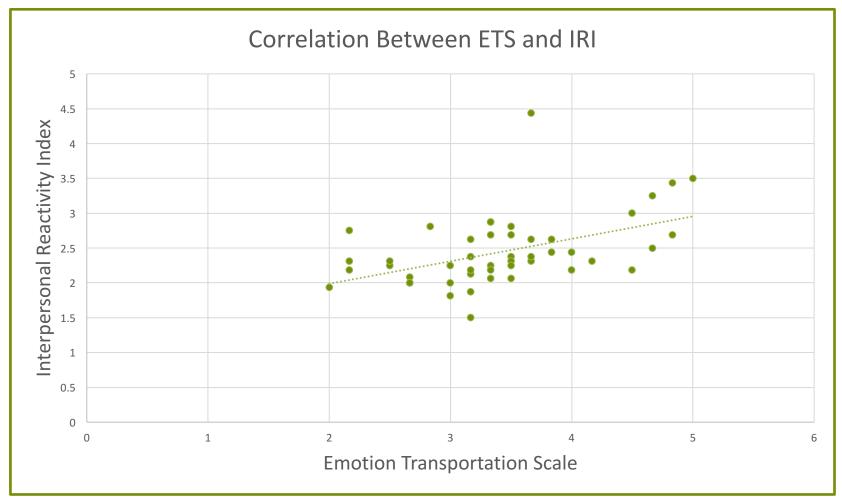


Figure 3: Correlation between Emotion Transportation Scale and Interpersonal Reactivity Index.

There was a significant effect of group on the explicit mental inference (EMI) subsection of the Short Story Task (SST), F(2,45) = .4.830, p = .01. Group A scored significantly lower than both Groups B and C, Ps < .05. No significant effect of group was found on the comprehension subsection, F(2,45) = .866, p = .43, nor on the Spontaneous Mental Inference (SMI) subsection, F(2,45) = .749, p = .48.

There was a strong positive correlation between the ETS ad the IRI total scores, r(47), p = .001.

Discussion

- ❖ Chart 1: the story itself increased transportability more than the manipulation. This might be because the passage from the underground railroad is more emotionally evocative, increasing transportability into the story more than the manipulation.
- Chart 2: Group C scored higher on the SST possibly because of previous exposure to the story, which provides them with even more contextual information than participants in the experimental groups.
- ❖ They might also be attributed to the closer identification with the reality of a white man in the 1920s NYC than with a slave before the Civil War.
- ❖ Chart 3: higher emotional transportation correlated with higher levels of empathy across all groups. Perhaps groups A and B were more transported into the story through the emotional aspect of it, and group C through their previous familiarity with the context of the protagonist.

Limitations:

- ❖ Participants were recruited from a limited pool of Trinity College students which reduces the generability of results.
- This study was conducted through an online platform with digitalized versions of the physical books in an environment of their choice. This influences the reading experience, and we have no way of controlling for environment
- ❖ While we used 10-page passages from each piece, previous studies have suggested that exposure to the whole piece and long-term exposure to fiction are more effective in increasing empathy.

Conclusion:

To our knowledge, this was the first study to manipulate transportability while comparing exposure to two pieces of literary fiction from contrasting perspectives. Results showed that higher emotional transportability correlated with empathy towards outgroup members but more work is needed to determine the role of different manipulations and perspectives in inducing empathy.

Acknowledgements

I would like to gratefully acknowledge the guidance I received from my advisor Professor Alisha Holland. During the entirety of the 2020-2021 academic year, her mentorship was imperative for the conduction of this study. I would also like to express my deepest appreciation for my parents for providing me with the opportunity to attend Trinity College and for always encouraging me in all my endeavors. I would not have been able to write a research thesis without their ongoing support. Finally, I would like to thank my dear friends Antonio Simonetti and Sofia Westerberg for endless emotional and moral support throughout the past year.

References

- L. Weisz, E., & Zaki, J. (2017). Empathy building interventions: A review of existing work and suggestions for future directions. *The Oxford handbook of compassion science*, 205-217.
- 2. Shih, M., Wang, E., Trahan Bucher, A., & Stotzer, R. (2009). Perspective taking: Reducing prejudice towards general outgroups and specific individuals. *Group Processes & Intergroup Relations*, 12(5), 565-577.
- Vezzali, L., Stathi, S., & Giovannini, D. (2012). Indirect contact through book reading: Improving adolescents' attitudes and behavioral intentions toward immigrants. *Psychology in the Schools*, 49(2), 148-162.
- 4. Lin, F. H., Liu, Y. F., Lee, H. J., Chang, C. H., Jaaskelainen, I. P., Yeh, J. N., & Kuo, W. J. (2019). Differential brain mechanisms during reading human vs. machine translated fiction and news texts. *Scientific reports*, 9(1), 1-10.
- Kidd, D., & Castano, E. (2017). Different stories: How levels of familiarity with literary and genre fiction relate to mentalizing. *Psychology of Aesthetics, Creativity, and the Arts*, 11(4), 474.
- 6. Gerrig, R. J. (1993, p. 127). Experiencing narrative worlds: On the psychological activities of reading. Yale University Press.
- 7. Barnes, J. L. (2018). Imaginary engagement, real-world effects: Fiction, emotion, and social cognition. *Review of General Psychology*, 22(2), 125-134.

3. Shedlosky-Shoemaker, R., Costabile, K. A., & Arkin, R. M. (2014). Self-expansion through fictional characters. Self and

- Identity, 13(5), 556-578.
- 9. Van Laer, T., De Ruyter, K., Visconti, L. M., & Wetzels, M. (2014). The extended transportation-imagery model: A meta-analysis of the antecedents and consequences of consumers' narrative transportation. *Journal of Consumer research*, 40(5), 797-817.