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# Acting, Props, and Intimacy

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#### Abstract

Acting experience has been connected to the development of social skills and social emotional processes (Goldstein, 2009). This study investigates actors' feelings of closeness with scene partners and the role prop work plays in the development of interpersonal relationships and socioemotional understanding of others. For this study, pairs of strangers prepared a short performance of a script that required different degrees of pretense in how props were used. Subject pairs were randomly assigned to act out the scene with either the props referenced in the script, objects meant to replace the props, e.g., a banana for a telephone, or no props and instructed to use pantomime. Participants reported increased feelings of closeness, trust and empathic concern towards their partners across all prop conditions.

#### Acting, Props, and Intimacy

People interact with others in a myriad of spaces: work, school or even the grocery store. These interactions can guide the way people view others and manage their relationships with them. Socioemotional feelings of trust, closeness and empathy are integral to relationship development and the way these feelings develop has been a source of great interest in developmental and social psychology. Understanding the role of collaboration in fostering social connection can help to create more opportunities for people to develop fulfilling relationships. These feelings can impact the way people extend prosocial behaviors to others and even improve quality of life. This paper seeks to better understand the ways that interpersonal relationships develop through collaboration on a joint activity, specifically actors in a theatrical environment.

## **Acting and Social Skills**

The theater is a space where social relationships are shown not only on stage but behind the scenes as the cast and crew collaborate to put on a successful production. Literature has connected acting as a practice with social skills. Goldstein (2009) theorizes that acting can help develop theory of mind skills (i.e., the knowledge that the thoughts, feelings and motivations of others are different from one's own) because actors have to imagine the internal world of characters. Indeed, Nettle (2006) found that professional actors scored higher on a measure of affective empathy. This implies that there is something specific about the acting process that can affect the way that people process their thoughts and feelings towards and about others.

In addition, acting is a joint activity as actors must collaborate to create a show that is entertaining and immersive to the audience. Actors "invite" one another to participate in the world of the play as though they are their characters and their props are real in order to create an immersive experience for the audience. Past literature has connected shared goals to the

2

formation of social bonds and positive feelings towards the person with whom the goal is shared (Wolf, 2016). Therefore, actors' shared goal of a good performance may be a vehicle for interpersonal closeness that is developed throughout the theater process.

Further, there is a vulnerability in seeming odd when performing that may cause people to feel more bonded to their scene partner. Displays of embarrassment have been found to impact inferences of prosociality, trust, and cooperative behavior (Feinberg 2012). Past literature has presented evidence that sharing negative affect with others can create social solidarity by increasing perceptions of similarity (Hinsz 2023). The social bonding developed through the vulnerability of performance could potentially be intensified by using more unconventional props or acting methods. It is more difficult to display unconventional props to the audience in a realistic way and enduring the awkwardness in trying to accomplish this task with a partner could facilitate positive feelings towards them.

Past literature on theater has primarily focused on theater education, finding that participating in theater programs can help students develop relationship skills such as empathy and increase openness to developing relationships with peers (Holochwost, 2022). However, there is little exploration about the specific mechanisms in theater that explain why people engage with theater in this way and how theater can serve as an intervention in interpersonal interaction. This study hopes to explore the mechanisms that affect the interpersonal relationships of scene partners through prop work.

### **Prop Work**

In scripts and theater productions, characters are written interacting with various objects, most commonly referred to as props. However, there is vast variation in the ways props are presented and used; the same object can be represented differently between different plays or even different productions of the same script. Prop work mirrors pretense and play in children, a process where they engage in a make-believe world with events, roles and objects that are meant to mirror the real world. This can occur either through "role-play" where they enact different social contexts or "object substitution play" where they treat objects as though they are something different. This process allows children to practice representational thinking (Lillard 2014). The process of pretense also requires communication skills as children negotiate roles and actions within their pretend-universe (Bretherton 1989). This implies a connection between prop work and social understanding as one must assess the real world in order to mimic it effectively and also communicate that understanding to fellow actors and the audience.

### Abstraction

One way in which prop work may be related to communication is through the level of abstraction that it demands. The language used in storytelling has been connected to social understanding (Horton, 2007). Horton (2007) found that when people read stories where characters used metaphor as opposed to literal language, they viewed these characters as closer. Horton's findings of intimacy based on metaphor is ascribed to common ground or conversational pacts, where people use mutual knowledge and shared experiences to communicate more effectively (Clark, 1991). Clark (1996) proposed language as a joint action that requires those involved to coordinate with one another and suggested that this coordination is guided by a common goal. In conversation, both parties must coordinate language in order to reach the goal of understanding from the listener are required to have a successful conversation. Figurative language is seen as an invitation that the speaker extends to the listener, which makes them seem closer (Bowes, 2015). This difference in figurative language as opposed to literal

language implies that there is an increase in intimacy as we move towards more abstract communication. Whereas Horton (2007) studied written text and figurative language, the current study explores abstraction in prop use.

In a past study, we studied prop use from an audience perspective, exploring how audience members viewed closeness between characters that used different props, changing props between conditions to be more abstract (Hart, Boulware, & Henly, 2023). We hypothesized that there would be a similar effect to Horton's (2007) study and those in the replacement and pantomime condition would view characters as being closer because actors utilized more abstract interpretations of the props. Using the prop as it is written in the script is similar to literal language in that the meaning is clear and direct. Replacement props and pantomime are similar to metaphor in that they deviate from convention and must be interpreted by the audience in order to be understood. Audience members watched videos in one of three conditions: literal, replacement or pantomime. In the literal prop condition, the actors used the objects literally referred to in the script. In the replacement prop condition, they replaced the intended prop with a different object such as using a banana for a phone. In the pantomime condition, actors mimed using objects. Videos were controlled for other factors such as scripts, actors and video editing.

While there was an effect of prop type, contrary to our predictions, we found that people assumed less intimacy between characters in the replacement prop condition, possibly due to a replacement prop being distracting and more difficult to interpret in the context of the play. This may have taken attention away from the relationships shown between characters in the play. Figurative language also functions differently than abstract prop use. In conversation, metaphors are given as an invitation that can be either accepted (continuing the conversation with a sense of understanding) or denied (asking for clarification). Prop work in theater lacks those moments of repair that occur in conversation which showcase the collaborative process of understanding an abstract way of communicating. In the plays there was a less explicit creation of the "invitation" that is found in verbal metaphor as abstract props were simply used as part of the universe with little acknowledgement of them directly and no reasons given for object replacement in the dialogue. There was no showing of the process for creating and interpreting the abstract concept the way that dialogue of successful metaphor use showcases. Object replacement is also less often utilized in the way that metaphor is for everyday interactions, so the associations with sociality may be less salient to the audience.

This study provided understanding for the ways that people interpret the relationships of characters in theatrical productions based on the props used. The current study expands on this finding to explore attributions of intimacy from an actor's perspective to better understand how interpersonal relationships between actors are developed in a theatrical space. This study will see if being part of the pact and collaborating to present an abstract concept, as opposed to observing it, makes the effects of the pact more evident and therefore stronger, causing actors to feel closer to each other.

#### **Current Study**

For this study, two participants were paired to act as scene partners, given a script and told to act out the script with the scene partner using literal props, replacement props or pantomime. They took a pre and post-test assessing feelings of trust, closeness, and empathic concern towards their scene partner before and after the exercise. We theorized that those that act out the scene with more abstract props would feel closer to one another as they had to collaborate more in making the scene realistic and also have a more abstract pact to participate in. We

believe the most abstract props to be the replacement props as it is the most unconventional form of prop work, causing participants in that condition to have more positive feelings towards scene partners after the intervention. We hypothesize that the pantomime condition is the second most abstract as one must still interpret the actions to associate them with the designated object, causing more positive feelings in this condition than the literal prop condition.

#### Methods

## **Participants**

We collected data from 48 undergraduate students at the University of Chicago. Participants were recruited through social media posts, posters displayed across campus and emails to psychology classes. Participants signed up through a prescreener on Qualtrics assessing acting experience and were categorized into two acting levels: Actors and Non-Actors. Participants were randomly paired up with another participant within the same acting level. There were 45.8% non-actors and 54.2% actors. Pairs were randomly assigned to one of three conditions: Literal props (37.5%), replacement props (33.3%) or pantomime (29.2%). Participants were compensated \$20 or 1 class credit upon completion of the study. The participants were 22.9% male, 72.9% female and 0.2% nonbinary. Participants ranged from 18 to 30 in age with a mean age of 20.5 (SD = 2.32).

#### **Pre-test**

Participants were briefly introduced to their scene partner then took a questionnaire through Qualtrics. Questionnaires were taken with computers provided on site. Measures assessed trust in scene partner with an adapted version of Partner Trust Scenario Questionnaire specific to feelings towards a scene partner (Praxmarer-Carus, 2014), feelings of closeness towards their scene partner ("How well do you think you and your scene partner know each other?" with a 6-point Likert scale), confidence in their assessment of closeness to their partner (6-point Likert Scale) and Empathic Concern towards their partner with the subscale of the Interpersonal Reactivity Index for Couples (Péloquin & LaFontaine, 2010).

# **Acting Intervention**

Participants were given a short script and instructed to prepare a performance to be recorded for researchers to assess in order to encourage them to perform to their fullest. The 3page script was chosen from one of the scripts used in a previous study and followed two coworkers fixing the office coffee machine (Hart, Boulware, & Henly, 2023). Participants were given 10 minutes to prepare the script and were given suggestions on how to use the time and prepare their performances. All groups received instructions on how to use the designated props or pantomime for the prop condition they were in with demonstrations for the prop (ex: phone, banana, pantomime using a phone). After their designated preparation time was completed, participants recorded their performances in one take.

#### Post-test

After the performance recording, participants took a second questionnaire on Qualtrics. First, to measure their feelings towards the activity we took measures of engagement in the activity (ex: I found this script engaging and interesting."), assessment of how real characters in the play felt to them (ex: "The character Cam felt like someone I might know."), assessment of closeness between the characters of the play ("How well do you think the characters Cam and Jordan know each other?") and confidence in their assessment of closeness. All measures were randomly presented and were measured on a 6-point Likert scale. Engagement and character realness were scored by taking the sum of questions related to each measure. Participants again rated their feelings towards their scene partner including: feelings of closeness towards scene partner, confidence in their assessment of closeness with their scene partner, empathic concern for partner (Péloquin 2010) and trust in scene partner (Praxmarer-Carus 2014) as well as partner empathy during activity (Fischer 2012). These were presented in randomized order.

Participants also took general measures in randomized order including: The Chicago Empathy Scale (Jackson 2006), Big Five Inventory to measure extraversion, agreeableness, consciousness, neuroticism and openness to experience (Rammstedt 2007), and the Sussex-Oxford Compassion Scales for compassion for the self and compassion for others (Gu 2020). For The Chicago Empathy Scale, participants were randomly presented 15 pictures of hands or feet in painful positions. Participants were asked to rate how painful they deemed the picture to be on a 4 point Likert scale from the perspective of themselves or the perspective of a stranger. The sum of their response for the perspective of a stranger was taken to assess general empathy.

#### Results

This paper will primarily focus on analysis of measures that give insight into the interpersonal relationships that participants developed with their partners throughout the study. Additional analysis on other measures will help to better understand the ways that participants engaged in the activity and the world of the play they acted out.

#### **Partner Interpersonal Relationships**

A Repeated Measures analysis of variance (ANOVA) was conducted on pre and post test scores for the within-subject measures trust in partner, closeness to partner and empathic concern for their partner, with time (pre- vs. post-test) included as a within-subject measure and prop condition (literal, replacement, pantomime) and acting level (nonactor and actor) as betweensubjects variables.

# Main Effects on Interpersonal Feelings Measures

The experience of working with their partner to present the play significantly increased scores on all three measures of interpersonal feelings: trust, closeness, and empathic concern. There was a significant difference in the pre- and post-test scores for trust ; See Figure 1), participants' feelings of closeness to their scene partner ; See Figure 2) and empathic concern ; see Figure 3). Participants scored higher in the post test on trust in their partner, feelings of closeness towards their partner and empathic concern for their partner after participating in the acting intervention.



Trust

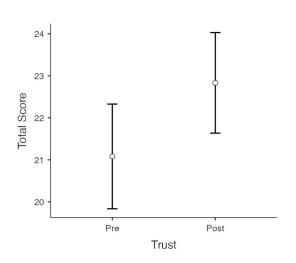
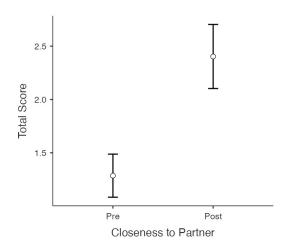


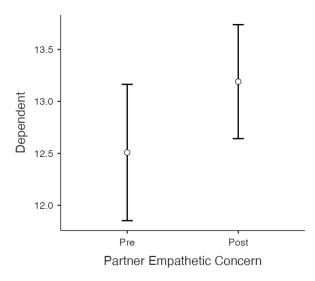
Figure 2.

**Closeness to Partner** 





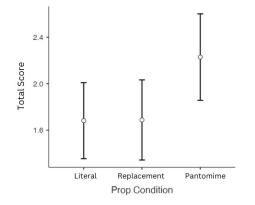




There were also significant main effects of prop condition on partner closeness ; see Figure 4), and on empathic concern ; see Figure 5) but no effect on trust. Participants in the pantomime condition had higher scores in partner closeness than those in the literal and replacement prop conditions but lower scores on empathic concern.

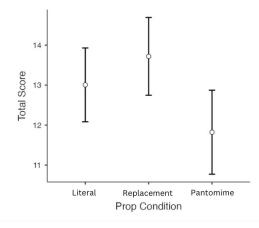
# Figure 4.

Partner Closeness by Prop Condition





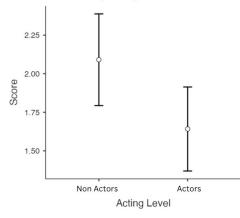
Empathetic Concern by Prop Condition



Acting experience had a significant effect on partner closeness scores ; see Figure 6), and on empathic concern ; see Figure 7) but no effect on trust. Although non actors reported higher feelings of closeness towards their partners than actors, they felt less empathic concern for them than actors did.

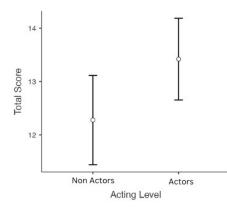
Figure 6.

Partner Closeness by Acting Level



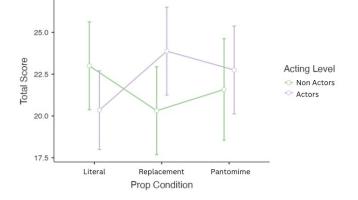


Empathetic Concern by Acting Level



While there was no main effect of either acting level or prop condition on trust, there was a significant 2-way interaction between acting level and prop condition for trust ; see Figure 8) whereas no such interaction was found for either empathetic concern or personal closeness. Non actors in the literal prop condition scored higher on trust than actors. Actors in the replacement and pantomime prop conditions scored higher than non actors in both conditions. *Figure 8.* 

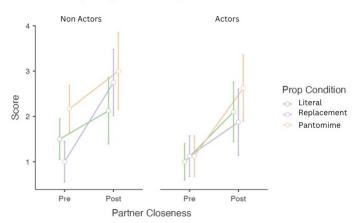
Acting Level and Prop Condition for Trust



Finally, there was a significant 3-way interaction in the effect of acting level and prop condition on changes in feelings of partner closeness; see Figure 9), but not for either trust or empathic concern. While working together on the play increased partner closeness across all prop conditions for actors and non actors alike, the increase was greatest in the replacement prop condition for non-actors, but in the pantomime condition for actors.

Figure 9.





# **Activity Immersion**

To explore participants' immersion in the acting activity, we analyzed measures of engagement in the activity, assessment of character closeness, character realness, and partner empathy during the activity.

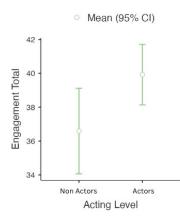
## **Prop Condition**

A Welch's one-way ANOVA test was conducted to compare the effect of prop condition on engagement in the activity, assessment of character closeness, character realness, and partner empathy during the activity. There was no significant effect of prop condition on measures of engagement ), character closeness ), character realness ) or partner activity empathy )

## Acting Level

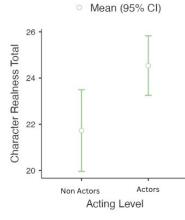
An independent sample t-test was conducted to assess the difference between actors and non-actors on assessment of character closeness, character realness, between Actor and Non-Actors. There was an effect of acting level on measures of engagement (t(46)=-2.28, p=0.027; see Figure 10.) and how real participants found the characters to be (t(46)=-2.712, p=0.009 (see Figure 11). Actors(M=39.92) were more engaged in the activity than Non Actors (M= 36.59). Actors also found the characters in the play to be more realistic (M=24.54) than Non actors (M= 21.73). There was no statistically significant effect of actor level for measures of character closeness(t(46)=0.537, p=0.594) or partner activity empathy(t(46)=-1.197, p=0.237). *Figure 10*.

Engagement by Acting Level





Character Realness by Acting Level



# Discussion

This study explored the effects of the types of props used by actors during the preparation and performance of a short scene on interpersonal feelings towards their scene partner. Although this study did not find robust evidence of a difference in responses between groups based on props condition, participants demonstrated an increase in feelings of closeness to their partner, trust in their partner and empathic concern for their partner after completing the acting intervention. This provides evidence that the collaborative process of preparing a scene can potentially help create more positive feelings towards a scene partner. Though we cannot tell if this is a general effect of collaboration or an effect specific to , future research could explore how measures of interpersonal closeness are impacted by non-theatrical collaborative activities.

Although the effect of props on change in interpersonal feelings was not significant for any of the three measures, examination of the main effect of prop condition suggests these measures may be affected differently by the different prop conditions. In particular, those in the pantomime condition scored highest on partner closeness while those with replacement props scored higher on empathic concern. There may be different aspects of interpersonal relationships that different prop conditions may facilitate. Pantomime has a wide range of interpretation that may cause performances to differ more between groups than those with the physical objects to focus on. The coordination required to act out something so abstract could facilitate the closeness people feel to their partners. Replacement props are the least conventional way to depict props in theater and this collaboration on an unconventional method of theater could be responsible for facilitating more empathic concern for one's partner and their ability to succeed on a difficult task.

One interesting finding in this study was the difference between Actors and Non Actors. Actors had more empathic concern and less feelings of closeness towards their partners than non actors. Higher empathic concern from actors aligns with Nettle's finding that actors score higher on affective empathy than non actors (2006). Actors were also unaware of their partner's acting experience prior to the activity and may have had a concern for a partner that could potentially be unfamiliar with the task they were about to perform together. Non actors may lack confidence in their ability to perform well on an acting task and may want to feel closer to the person they are going to experience something new with. Actor's previous experience in theater may make them desensitized to the process of preparing a scene and therefore less sensitive to the effects of acting on feelings of closeness.

The interaction effects between prop condition and acting level imply that experience may be a factor in how prop work impacts interpersonal relationships. Non actors reported more trust in their partner when in the literal prop conditions while actors reported more trust in the replacement condition. Actors may have familiarity with conventional theater practices of prop work and pantomime but lack experience with replacement props. This lack of familiarity may create more trust in one's partner from navigating an unfamiliar task together. Non actors are unfamiliar with all conditions which may make them less sensitive to differences in convention.

Non actors in the replacement prop condition had the largest increase in closeness to partners and actors in the pantomime condition had the highest increase in closeness to partners. Pantomime may differ between actors and non actors due to the broad nature of interpretation and how accurate the portrayal of pantomime may be. Experienced actors may take more care to make sure that the imagined props in a pantomimed scene are continually enacted on while a non actor may not have the same level of technique and may not utilize the same cognitive effort such as remembering to continue holding a prop while it is not being interacted with. These differences in attention to detail and technique may create more instances of collaboration that facilitate partner closeness. Actors had higher engagement in the acting task and found characters to be more realistic. Due to less immersion into the world of the play, non actors may find the replacement prop condition to be the most difficult to act out. There is a cognitive effort required to disassociate the original meaning of an object in order to apply the new meaning of what the object is meant to represent in the world of the play. This may require more collaborative efforts that increase partner closeness.

While there are interesting results about the differences in prop conditions and acting levels on measures of trust, partner closeness and empathetic concern, the results are mixed and it is difficult to make definitive conclusions about how different prop conditions impact partner relationships and how the mechanisms of different props conditions differ between acting levels. Future studies could explore prop conditions with larger groups of actors and non actors and see if there are differences between groups when run separately.

Future studies could also explore the ways that feelings of realism in theater are created. Understanding the way immersion in a scene is developed can help to better understand one of the possible mechanisms behind how different prop conditions impact actors' experiences. Imagination is believed to be connected to social cognition as we use knowledge about the existing world to imagine and understand potential actions and experiences of others (Kushnir 2022). Understanding how imagination is developed and preserved in adulthood could be helpful in understanding other aspects of social cognition.

The primary limitation of concern is the brevity of the intervention. Most acting interventions and experiences are longitudinal, so a potential future study could explore relationship development over the course of a longer production. Having a live audience as opposed to recording could also increase the stakes of a performance that may impact the dynamics of collaboration as participants prepare their scripts. Creating a more traditional and authentic theater experience could potentially allow a better understanding of the factors in the process that create connections.

19

In conclusion, this research provides grounds for understanding the effects of theater participation in relationships between strangers and insight into the different ways that actors understand and interpret relationships. Understanding the psychological benefits of theater has been used as evidence to promote theater education and put more funding towards the arts in middle childhood education (Holochwost, 2022). Understanding mechanisms through which we are able to build closeness and trust between people can also help with the development of team building exercises and creating cooperation between groups. Theater could be a potential space for people to form connections and become better social agents in the world as they understand the people in it better.

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