

# ATTACHMENT AND PERSPECTIVE-TAKING IN STORYTELLING

Attachment and Perspective-Taking in the Context of Storytelling

Jacob Buttry

Texas Christian University

### **Abstract**

In the following study, I propose to build upon previous research indicating that individuals with insecure attachment styles often have worsened mentalization capabilities to examine the relationship between attachment (with caregiver and peers) and perspective-taking within a storytelling context at three different stages of the developmental process. I intend to recruit 150 participants—50 four-year-old children, 50 thirteen-year-old adolescents, and 50 twenty-two-year-old young adults—who will complete measures assessing attachment style and storytelling-specific perspective-taking abilities. I hypothesize that individuals classified with insecure attachment styles will demonstrate lower scores on the storytelling-specific perspective-taking measures than those with secure attachment. Although storytelling as a construct has relatively few empirically validated measurements at present, finding support for this hypothesis could influence the way we use storytelling and perspective-taking in attachment interventions to improve outcomes for those with insecure attachment styles.

### **Attachment & Perspective-Taking in the Context of Storytelling**

Many people in modern society laude the topic of empathy as a solution to a number of societal injustices and interpersonal conflicts. Research concerning the topic of empathy has only recently been reaching a point to begin substantiating these assumptions, anecdotes, and preconceptions. Indeed, while current literature is rich on the topic of empathy, there is still much more to be learned about the workings of empathy, the factors that affect it, and the factors that are affected by it. Along similar lines, developmental psychologists have been seeking to learn more about the role of attachment style in affecting life outcomes since Bowlby first introduced his theory half a century ago. There, literature robustly describes a number of life outcomes and other factors significantly impacted by attachment style, but there is still more to learn. For the current study, I aim to seek to fill a gap in the research concerning the relationship between perspective-taking abilities and attachment style.

### **Perspective-Taking and Related Concepts**

Because of the increasing popularity of the word, people often throw around the term empathy with little specificity or standardization for its meaning and definition. Furthermore, there are many secondary concepts within the topic of empathy that can refer to similar but distinct ideas. Colloquially, people tend to use terms such as empathy, compassion, and perspective-taking interchangeably, and while they do refer to similar ideas, each term carries separate connotations and refers to distinct concepts. Thus, because of the numerous related concepts and a lack of a culturally consistent use of the terms “empathy” and “perspective-taking,” it is important to define these concepts to avoid further confusion.

Perspective-taking is a subordinate concept within the broader idea of empathy. Empathy has three primary subcomponents: affective empathy, cognitive empathy, and empathic concern (Decety, Meidenbauer, & Cowell, 2018; Reiss & Neporent, 2018). Affective empathy refers to

the emotional aspect of empathy—the ability of someone to feel another’s feelings and to mirror another’s emotions. Cognitive empathy refers to a more mental faculty involving the ability to think about, consider, and understand the situation of another person from their viewpoint; this ability is often also known as perspective-taking, and many people use the terms interchangeably. Lastly, empathic concern refers to a more “motivational” aspect that involves a felt investment in and desire to affect the situation of another person. Empathic concern often leads to actions, which can take the form of prosocial behavior (defined as actions aimed at seeking to help another person).

In addition to the three major concepts into which empathy divides, there are a few other topics relevant to perspective-taking that we must consider. The first of these that falls under the empathy umbrella is empathic accuracy, which typically refers to the ability of a person to recognize and correctly identify the emotions of another person (Sened et al., 2017; Izhaki-Costi & Schul, 2011). Additionally, an idea frequently researched by developmental psychologists known as theory of mind relates closely to empathic accuracy and cognitive empathy. Theory of mind similarly refers to the ability of a person to recognize that someone else has different thought processes and emotional experiences than oneself, and while it can refer to how correctly a person can identify these processes, it often refers more broadly to awareness of the possible existence of difference in these ways of thinking (Shahaeian, Peterson, Slaughter, & Wellman, 2011; Izhaki-Costi & Schul, 2011). This concept in particular relates closely to the almost-synonymous concept of cognitive empathy and perspective-taking, as seen in the fact that some researchers define cognitive empathy as “affective theory of mind” (Baczkowski & Cierpialkowska, 2015). Bensalah, Caillies, and Anduze (2016) also discovered a strong correlational relationship between theory of mind and cognitive empathy scores in young children aged four to six.

One of the last but most important of the terms to define is the broader concept of mentalization, which researchers use frequently in psychological literature to discuss a number of topics related to perspective-taking and empathy. Mentalization refers to the ability to infer the emotions, thoughts, beliefs, and intentions of another person, typically based on their actions (Baczkowski & Cierpialkowska, 2015). The breadth of this definition allows it to include most of the secondary ideas discussed above, and the concept also encapsulates the application of these attribution skills to both internal processes and external behaviors, toward both other individuals and oneself, and in both intentional and subconscious ways. For this reason, mentalization is the most appropriate term to summarize the family of concepts that includes perspective-taking and empathy. With this in mind, the present study proposes to focus not on a broader concept such as mentalization, but on the more specific subtopic of perspective-taking (referring primarily to the cognitive element of empathy).

### **Development of Perspective-Taking**

Each of the subcomponents of empathy has a distinct developmental timeline and often correlates with different elements of a person's life (Decety, Meidenbauer, & Cowell, 2018). In contrast to the relatively early and unchanging development of affective empathy, cognitive empathy and perspective-taking seem to develop more gradually, and some say that they continue to increase for the entirety of a person's life (Decety, Meidenbauer, & Cowell, 2018). A similar trajectory is often recorded in the development of theory of mind in young children—gradually, children tend to gain increasing abilities to understand that others think differently than they do (Comay, 2009). Many believe that the most essential elements of theory of mind appear around age four, and several other crucial elements of it develop in the years subsequent.

When it comes to perspective-taking in particular, psychologists historically refer to Jean Piaget as one of the original researchers who commented on the development of perspective-

taking skills in children. Piaget argued that children acquire perspective-taking abilities at the age of seven, and he asserted that children are entirely egocentric prior to this time (Piaget & Inhelder, 1948). Despite this early empirical discovery, many researchers have since found evidence that perspective-taking begins to take shape at an earlier age. Hughes and Donaldson (1979), for example, demonstrated that children can imagine others' points of view at age four. Additionally, Bensalah, Caillies, and Anduze (2016) discovered that perspective-taking has a significant timeline of development between the ages of five and six. Thus, the crucial takeaway from the literature concerning the development of perspective-taking is that perspective-taking develops gradually but has passed significant milestones by age four.

### **Perspective-Taking, Storytelling, and Role-Playing**

Storytelling is a concept related to perspective-taking that has significant relevance to the present study. Numerous studies have found a connection between perspective-taking abilities and storytelling. For example, Tan-Niam (1994) conducted an experimental study and discovered that children exposed to thematic fantasy play (TFP) had higher scores on perspective-taking measures as a result. Furthermore, in a study on storytelling at the dinner table, Ochs, Taylor, Rudolph, and Smith (1992) found that storytelling can be a great means of cultivating abilities such as perspective-taking in children. Many researchers in education are conducting their own research on how to channel storytelling in a way that enhances perspective-taking as a desired educational outcome—for example, Carlomagno, Di Tore, and Sibilio (2014) published an article on their exploration of cultivating perspective-taking through the use of storytelling and a similar concept known as role-playing, which involves asking participants to take the position of a particular individual in a pretend scenario. Clearly, storytelling has a strong connection to perspective-taking, and it may even have the potential to actively cultivate perspective-taking in some groups and circumstances.

As mentioned above, another concept related to perspective-taking and storytelling is known as role-playing. For the purposes of this study, we will define storytelling as a broader term that includes the sharing of narrative information through any medium, and it includes both the listener and the narrator. Role-playing, on the other hand, more specifically refers to instances when a person takes on the position of another person more actively and actually performs or acts as if they were the other individual, as in a skit, work of drama, or similar exercise. It may involve literally taking the perspective of another in a simulation task or engaging in a performance as a specified character or role. In one sense, role-playing can act as a form of storytelling because it involves showing the life and story of another individual to both oneself and another group of people. In another sense, role-playing could essentially boil down to a more demonstrative manifestation of perspective-taking, and evidence shows that there is also overlap between the two in research and in their uses. For example, Furumi & Koyasu (2012) found that individuals asked to engage in role-playing had faster and more accurate perspective-taking skills than the control group after completing the task. Furthermore, a number of perspective-taking intervention procedures utilize role-playing to make them successful, such as a study conducted with delinquent women that demonstrated how role-playing could be used to instill perspective-taking and lead to better social outcomes (Chalmers & Townsend, 1990).

For the above reasons, the present study seeks to evaluate perspective-taking through the lens of storytelling and role-playing. Both of these concepts allow the concept of perspective-taking to relate most directly to many of the perspective-taking interventions cited in psychological literature, and thus viewing perspective-taking through this lens allows us to operationalize the variable of perspective-taking in a way that may be most applicable to possible intervention studies in the both areas of attachment or perspective-taking. Furthermore, this lens allows us to also assess to a limited degree how attachment might impact storytelling or role-

playing abilities, as well as the potential for people with varying attachment styles to engage in literature, drama, and other forms of storytelling.

### **Factors Related to Perspective-Taking**

An important reason for dissecting the construct of empathy into more specific psychological concepts is that each secondary concept relates with different sets of variables and outcomes. In particular, there seem to be several factors that perspective-taking predicts in both children and adults. Carlo, Knight, McGinley, Goodvin, and Roesch (2010) conducted a meta-analysis that demonstrated that perspective-taking may influence prosocial behaviors in a positive way, and they found that perspective-taking may even be a developmental antecedent to prosocial behavior. Additionally, Emen and Aslan (2019) found that the development of language skills and the development of perspective-taking abilities correlated in a positive, significant manner among young children, and at a minimum, this finding indicates that mastery of these two concepts develops in tandem. Moreover, another group of researchers found that perspective-taking equipped employees to enhance the quality of certain aspects of their customer service performance (Huo, Chen, Lam & Woods, 2019).

Many of the outcomes predicted by perspective-taking fall into the relational realm. For example, Yao, Chao, and Leung (2019) discovered that perspective-taking has an association with improved conflict resolution, and another group of researchers found support for this claim physiologically, noting that perspective-taking led to mirrored activation of the autonomic nervous system in romantic couples during conflict resolution (Nelson, Laurent, Bernstein, & Laurent, 2017). Schröder and Schütz (2011) also found that perspective-taking indirectly impacts the quality of romantic relationships by mediating the impact of emotional intelligence on relational quality. This body of literature not only indicates the importance of perspective-taking in affecting and predicting a number of important factors in life, but it also demonstrates a



connection between perspective-taking and relationships.

### **Attachment and Perspective-Taking**

In light of the high number of outcomes related to perspective-taking, the importance of better understanding the predictors of perspective-taking abilities constitutes a worthwhile and important topic of research. Attachment, particularly in light of its association with a number of other factors, presents itself as a possible predictor of perspective-taking abilities that researchers have not thoroughly examined.

### **Attachment Overview**

Originally theorized by James Bowlby, attachment theory examines how humans form lifelong ties with a select number of other irreplaceable individuals in order to promote survival of both the individual and the species as a whole (Ainsworth, 1978). Although it extends to a number of other relationships, such as with a person's romantic partner or intimate friends/peers, attachment most notably forms within the parent-child relationship. Parents do not form attachment bonds with their children, but children establish an attachment relationship with their primary caregivers within the first year of life, and the nature of this relationship develops both into and out of a working model that children form based on the way their parents respond to their distress. These children hold onto these working models and apply them to other relationships in their lives. Those with a secure attachment operate on the idea that people are ultimately good, helpful, and responsive to their needs. Those with avoidant (insecure) attachment do not operate with the same secure base and instead expect parents and others to reject them and their needs, and those with a resistant (insecure) attachment style operate with a working model based on uncertainty—they do not know whether to expect that their needs might be met or ignored. Lastly, those with a disorganized attachment style do not have a consistent working model because their model is mostly based on fear of caregiver and others. Furthermore,

while researchers discuss attachment most frequently in the context of parent-child relationships, humans also form attachment bonds with other significant individuals, such as close peers and romantic partners. Attachment looks very similar in these relationships, but it is often measured on a spectrum involving two variables—attachment anxiety (most similar to the resistant style among children) and attachment avoidance (Bartholomew & Horowitz, 1991).

### **Theoretical Links Between Attachment and Perspective-Taking**

There are a few theoretical bases stemming from the concept of attachment for why attachment style may be related to perspective-taking, particularly in a storytelling context. Izhaki-Costi and Schul (2011) conducted a study finding that participants with higher attachment avoidance scores demonstrated decreased empathic accuracy. These researchers also provided a significant amount of theoretical backing for why this might occur, indicating that those with avoidant attachment styles often seek to increase psychological distance between themselves and others, and thus their disinterest and decreased interaction prevents the same degree of empathic accuracy as would be afforded to people who more directly seek regular engagement with others relationally. Surprisingly, however, Izhaki-Costi and Schul (2011) also describe how the literature indicates that anxious attachment scores have little impact on empathic accuracy—in fact, some sources indicate that those with higher anxiety scores may also have higher empathic accuracy scores. This trend offers a similar explanation for the relationship between avoidant attachment and empathic accuracy—because those with an anxious attachment generally still seek interpersonal contact and demonstrate an interest in engaging with other people, this attachment style seems unlikely to affect empathic accuracy in a different way than a secure attachment style. It seems reasonable to assume that the theoretical framework explained above for empathic accuracy would also apply to the realm of perspective-taking, given the fact that it is also an empathy-related concept dependent on interpersonal interaction with others.

Another theoretical explanation for a potential link between attachment and perspective-taking stems from research beginning in a rather unexpected place. In their work researching borderline personality disorder, Fonagy and Luyten (2009) asserted their theory that borderline personality disorder stems from an overly sensitive attachment system that becomes activated too frequently, as well as an excessive deactivation of mentalization capabilities. In their research, they offer several explanations for why these two outcomes might actually be related, initially citing that problems with attachment, particularly during early developmental stages, can negatively impact mentalization capabilities in general. Furthermore, Fonagy and Luyten (2009) describe how certain levels of oxytocin can impact a person's social intelligence and ability to accurately read the states and emotions of others, and they explain that these oxytocin levels have also been reportedly linked with sensitive parenting; thus, because quality of parenting and parent sensitivity might affect both mentalization capabilities and attachment style, the link between mentalization and attachment might have another theoretical backing.

Another explanation that they offer deals with a more direct link between attachment and mentalization. Fonagy and Luyten (2009) describe that high amounts of emotional response and stress often triggered by activation of the attachment system could restrict the ability of individuals to engage in mentalization. They offer a significant amount of neurological and hormonal evidence for this theory, and they indicate that a person's history with attachment can influence the frequency and the manner in which activation of the attachment system impacts mentalization capabilities. A partial explanation for this stems from the idea that people with insecure attachment styles struggle to regulate their own emotions when encountering the negative emotions of others, as seen in a study with mothers responding to their infant's sadness (Strathearn, Li, Fonagy, & Montague, 2008). This improper regulation may disrupt the individuals' ability to engage in mentalization and process the feelings of others. Fonagy and

Luyten (2009) also offer a body of evidence suggesting that those with insecure attachment may process negative emotions and attachment activation in a way that promotes more instinctual mentalization based in an individual emotional reaction, in contrast to a more deliberate engagement in mentalization that involves a greater degree of distance and better fosters perspective-taking and positive action motivated by the mentalization.

Fonagy and Luyten (2009) further explain the disparity between the effect of the attachment system on mentalization abilities in both securely and insecurely attached individuals by indicating that, in individuals with secure attachment, activation of the attachment system results simply in decreased inhibition in interpersonal relationships. In contrast, in insecure individuals, mentalization is often impacted due to the emotional response of the attachment system. To make matters worse, these individuals may also have lower thresholds for the activation of their attachment systems, and some insecurely attached individuals may have chronic activation of the attachment system due to traumatic or severe experiences in childhood or other relational contexts. Thus, secure individuals not only tend to handle activation of the attachment system more successfully, but they also tend to have a higher tolerance to emotional distress before the attachment system is activated, and this may allow them to have stronger mentalization abilities more frequently. In light of the higher prevalence of anxious attachment among individuals with borderline personality disorder, Fonagy and Luyten (2009) offer that anxious attachment styles in particular lend themselves to the lower threshold for attachment and higher disruption of mentalization.

In light of the disruptions to the broader concept of mentalization and the fact that each of the theoretical links would also hold true for the more specific concept of perspective-taking, it seems reasonable to predict that insecure attachment could lead to decreased perspective-taking abilities. Thus, the theoretical insights offered by Fonagy and Luyten (2009) not only reinforce

the other theoretical reasonings offered by Izhaki-Costi and Schul (2011) and others, but they also indicate backing for the link between anxious attachment styles and worsened perspective-taking abilities beyond the links specifically related to avoidant attachment styles. Furthermore, the negative relationship between perspective-taking and anxiety created by activation of the attachment system could also be supported by a study indicating that social anxiety was associated with lower performance on tasks assessing complex social cognition abilities such as empathic accuracy and theory of mind (Alvi, Kouros, Lee, Fulford, & Tabak, 2019). The relationship between higher attachment avoidance and lower perspective-taking abilities also receives further substantiation from a study that described the positive relational effects of a perspective-taking intervention on those with avoidant attachment styles (Bernstein, Laurent, Nelson, & Laurent, 2015).

### **Previous Research Similar to the Current Study**

Although studying the specific link between perspective-taking and attachment style from a developmental context (at different ages/stages of life) presents a novel research question, there are several studies closely related to the current study that can inform and support the hypothesis that attachment style might influence perspective-taking abilities. One of the earliest groups of researchers seeking to explore attachment and empathy discovered a number of nuanced findings among their adult participants (Péloquin, Lafontaine, & Brassard, 2011). Their research showed that, in all participants, attachment insecurity related to increased psychological aggression toward their partner, but the researchers also found that, in women, those with attachment insecurity demonstrated lower empathy toward their romantic partner as a whole. However, the results with men differed depending on the subscale—men showed increased empathic concern but decreased perspective-taking with attachment insecurity. Furthermore, the attachment style of the male partner also related to the empathy and aggression of the female partner. Teymoori

and Shahazad (2012) later added to this body of literature and found that empathic concern had a significant, positive correlation with attachment styles, indicating that higher attachment security scores related to higher scores on empathic concern measures. Similarly, Boag and Carnelley (2015) found that a secure attachment prime led to higher empathy and lower prejudice scores against immigrants and Muslims, and they found that an avoidant attachment prime lowered empathy and raised prejudice against Muslims. Because of the tie discussed previously between perspective-taking and both empathy and prejudice, it seems reasonable to infer that the perspective-taking abilities of participants may also have been impacted by the attachment prime in this situation as well.

A link between parenting behaviors and perspective-taking can also be defended in present literature. Laranjo, Bernier, Meins, and Carlson (2014) uncovered that the frequency with which researchers observed mothers using speech indicative of mind-mindedness related to the ability of preschoolers to engage in visual perspective-taking, otherwise known as the ability to understand that others physically see differently from oneself. The researchers also found a relationship between this visual perspective-taking measure and attachment insecurity for the boys included in the study, and given other literature on the link between parenting and attachment, it seems reasonable to hypothesize that this relationship may occur among females as well if the study were replicated (Shai & Meins, 2018).

A study more closely related to the current study was conducted by researchers Baczkowski and Cierpialkowska (2015). They found that avoidant attachment scores within specific relationships (mother, father, partner, friend) correlated strongly and positively with perspective-taking within that relational context. They found similar findings between anxious attachment in specific relationships and perspective-taking scores in those relationships, but they did not find a relationship between global mentalization scores and attachment measures. One

major difference between this study and the current study is that Baczkowski and Cierpialkowska (2015) found the relationship between attachment and perspective-taking of the person with whom the participant had the attachment relationship, but the current study seeks to gain a broader measure of perspective-taking ability within the context of storytelling and role-playing. In fact, Baczkowski and Cierpialkowska (2015) used the Reading the Mind in the Eyes test to evaluate general perspective-taking, and in the context of this study, the RTME constitutes more of a measure of empathic accuracy rather than perspective-taking.

Lastly, Stefan and Avram (2019) published a study indicating a significant relationship between attachment and perspective-taking among children between the ages of three and five. These researchers amalgamated data demonstrating that children classified with an avoidant attachment style had weaker perspective-taking abilities than those classified as secure. They did not, however, find a significant disparity between the perspective-taking abilities of children with secure and ambivalent attachments. This study certainly qualifies as the one most closely related to the current study, but the present study still differs in its approach to include storytelling and its intention to assess perspective-taking and attachment at multiple stages of development.

### **Current Study**

In the present study, I plan to build on existing literature about the role of various facets of mentalization, empathy, and perspective-taking and their relationships with attachment by assessing the relationship between the attachment styles of participants and their ability to take the perspective of characters from drama and literature. In particular, this study seeks to answer the following question: What is the relationship between attachment (with caregiver and peers) and the ability of adults to engage in perspective-taking in a storytelling context (such as in drama or performance) at three different stages of the developmental process (childhood, adolescence, and adulthood)? My hypothesis is that participants with secure attachment styles

will present with higher perspective-taking scores at all three stages of development (childhood, adolescence, adulthood). This hypothesis stems in large part from the body of psychological studies outline above, as well as the theoretical explanations of Izhaki-Costi and Schul (2011) and Fonagy & Luyten (2009). In the present study, I plan to take these theoretical reasonings a step further and argue that the imperfect secure base from which those with insecure attachment styles operate could disrupt the exploratory systems of those with insecure attachments. I hypothesize that perspective-taking abilities rely heavily on a functioning exploratory system due to the vulnerability and exploration required for engaging in this form of empathic behavior. I also hypothesize that measuring perspective-taking within the context of storytelling and role-playing requires an even greater access to the exploratory system due to the requirements to remove oneself so extensively from one's personal emotional experiences and place oneself into the mind of another person.

In addition to the primary hypothesis, I also predict a few secondary hypotheses. First, because of the larger support in literature for the link between avoidant attachment styles and perspective-taking, I predict that the effect size of the difference in perspective-taking scores will be higher among those with avoidant attachment than those with anxious attachment when compared with securely attached individuals (Izhaki-Costi & Schul, 2011; Boag & Carnelley, 2015; Baczkowski & Cierpialkowska, 2015; Stefan & Avram, 2019). Nevertheless, I still expect to see a significant effect size among all insecure attachment styles. Second, because Fonagy & Luyten (2009) indicated that mentalization abilities are most affected by attachment during early childhood, I hypothesize that the relationship between attachment and perspective-taking will be strongest in early childhood and weakest in adulthood (while still remaining significant in adulthood). Third, due to the larger body of literature related to parent attachment style and mentalization capabilities, I hypothesize that parent attachment will correlate most significantly



with perspective-taking abilities among both children and adolescents (Laranjo, Bernier, Meins, & Carlson, 2014; Fonagy & Luyten, 2009). However, due to the greater impact of peers on the day-to-day life of adults, I expect the relationship between peer attachment and perspective-taking to be as strong or stronger than the relationship between parent attachment and perspective-taking among the adult participants. Ultimately, I expect to see the most significant perspective-taking deficit among children with avoidant attachment styles with their parents.

## **Methods**

### **Participants**

The participants in the study will be composed of three groups, each with 50 participants. The first group will be of four-year-olds, the second group will be composed of young adolescents aged thirteen, and the third group will be composed of young adults aged twenty-two. One parent of each participant will also be asked to participate for those in the first two groups. Of the 150 participants (and within each group of participants), approximately 50% will be male, and the ethnicity demographics will approximately mirror the race and ethnicity breakdown of the state, which is roughly as follows: 78.8% white (41.5% non-Hispanic white), 12.8% black, 1% American Indian/Alaskan Native, 5.2% Asian, 2% two or more races, and 39.6% Hispanic/Latino (“U.S. Census Bureau QuickFacts: Texas,” 2018).

I plan to recruit participants in a city in Texas through a variety of means. For the younger group (four-year-olds), I plan to utilize local advertisement in pediatrician’s offices, preschools, day care centers, and places where classes or programs are offered for young children (at local gyms, yoga studios, performing arts centers, etc.). Promotion will also be conducted online through social media platforms (Instagram and Facebook), the university website, and a variety of research forums and recruitment sites, such as Research Match. For the second group (adolescents), I plan to use similar recruiting techniques that are targeted toward

families with older children, so I aim to advertise in places such as middle schools, pediatrician offices, community athletic centers, and places where programs are offered for young adolescents (such as performing arts centers, tutoring centers, churches, etc.). Online advertisement will look similar. In both of these groups, parent participation will also be required, and thus many of these recruitment methods target parents as well (and often primarily). With the third group (young adults), recruitment will stem from advertisement on college campuses, technical schools, and community areas frequented by young adults (coffee shops, gyms, grocery stores, restaurants, etc.). A similar online advertisement strategy will also be utilized. The heaviest recruitment will stem from college campuses and the SONA system at TCU, and extra credit will be offered in some courses for participation.

### **Procedure**

This study will use a cross-sectional design to assess how perspective-taking relates to attachment style. The children will be brought by their parents to the laboratory. The parents will sign an informed consent for the participation of both child and parent, and the child will be asked to give a verbal assent about their participation in the study as well. Immediately after completing the informed consent, the parents will be given a short questionnaire that assesses their predictions on what emotions their child might typically feel in a given situation. The parent and child will then be taken to an observation room containing age-appropriate toys for the child and both magazines and a desktop computer for the parent to use. The parent and child will be asked to interact normally as they would at home for a span of thirty minutes while three trained observers watch from another room and complete the Attachment Q-Set based on the observed interactions. After the end of the observational period, the child will be taken by a research assistant to a separate room to engage in another activity. The researcher will use puppets to present fourteen “vignettes” to the child, who will then be asked to indicate which facial

expression the puppet would have in the presented situation. Finally, the parent will separately be asked to complete a short questionnaire to assess the basic levels of empathy and perspective-taking in the child. The parents will also complete the same survey on themselves. After a quick debriefing, both the child and the parent will be dismissed to leave the lab. All parent-child pairs in the first group will receive \$75 combined in compensation for their participation in this study.

The second group consisting of adolescents aged twelve to fourteen will also come to the lab with a parent. Both the parent and adolescent will complete an informed consent, and then both will be asked to separately complete a set of questionnaires. The parents and the adolescent will both complete a series of questionnaires. We will then ask the adolescents to silently read a short ten-minute play titled *That Midnight Rodeo*. Research assistants will then pair adolescents with one another, assign each a character, and ask them to read the play aloud together in order to incorporate a role-playing task. Research assistants will then separate participants once again and hand them two copies of the State Empathy Scale—one that is geared toward each character in the short play. Adolescent participants will receive \$50 as compensation and their parents will also receive \$50 in compensation.

The third group consisting of young adults will come to the lab and complete their own informed consent. They will be asked to complete a series of questionnaires and will be taken through the same procedure as the adolescents in the second group. After a short debriefing, participants will be dismissed. Young adult participants in group three will receive \$60 in compensation, or if they are enrolled at the university, they may opt for compensation in the form of extra credit.

## Measures

**Parent Attachment in Children.** To assess the attachment relationship between child and parent in the young children, I propose to use the Attachment Q-Set (Water & Deane, 1987).

The measure consists of ninety descriptive statements, and a set number of trained observers will watch the parent and child interact and sort each of the statements into nine separate piles based on how accurately they describe the behavior of the child. The attachment style of the child is then revealed in what kind of statements describe the child best. Children classified as secure would demonstrate behaviors such as the following: sharing with mother, going to their mother when bored, keeping track of where their mother is while playing, allowing their mother to show affection to other relatives, or enjoying sitting in their mother's lap. This assessment has been found both valid and reliable empirically, and it is often regarded as a gold standard measurement for attachment when the Strange Situation is no longer a viable option due to the age of the children.

**General Perspective-Taking in Children.** I will use the Empathy Questionnaire for Children and Adolescents (Overgaauw, Rieffe, Broekhof, Crone, & Güroglu, 2017) to obtain a general empathy score for each of the participants. There are fourteen questions on this assessment, each of which are answered on a Likert scale ranging from one to three, with one corresponding to “not true,” two corresponding to “somewhat true,” and three corresponding to “true.” This test consists of three primary subscales, including affective empathy (six of the fourteen questions), cognitive empathy (three of the fourteen questions), and “intention to comfort” (five of the fourteen questions), which roughly equates with empathic concern. The measure of interest related to the primary variable in the present study is the cognitive empathy subscale, but research assistants will examine each of the other scores as possible moderating factors.

**Storytelling-Specific Perspective-Taking in Children.** I intend to use the Affective Perspective-taking Measure (Denham, 1986) as the primary measure of perspective-taking in the context of storytelling for the young children. Children watch a puppet performance presented by

research assistants and select a facial expression based on their assessment of how the puppet feels in the presented situation. There are fourteen puppet “vignettes” in total, and eight of them are designed to generally target how a majority of people would feel in a situation, and the other six are supposed to portray the puppet reacting in a way that is opposite how the parents predicted that their child in a prior survey (administered at the beginning of the procedure). Each answer selected gets either one or two points, and the total score represents the overall perspective-taking ability of the child in this context. Multiple studies indicate that this measure is reliable and valid.

**Peer Attachment in Adolescents and Young Adults.** The peer segment of the Inventory of Parent and Peer Attachment—Revised (IPPA-R) (Gullone & Robinson, 2005) will be used to measure peer attachment in young adults and adolescents. The peer attachment section of the IPPA-R contains twenty-five self-report measures that are used to evaluate the attachment relationship between a person and their peers. Each measure is a statement, and participants indicate on a three-point Likert scale how true the statement is for them (with options including “always true,” “sometimes true,” and “never true”). The measure then breaks down into three subscales that measure trust, communication, and alienation with the peer. Those scoring higher on trust and communication subscales and lower on alienation subscales would suggest secure attachment with peers. This measure has been found to be both valid and reliable.

**Parent Attachment in Adolescents and Young Adults.** To assess parental attachment in young adults and adolescents, I will use the Father/Mother Attachment Questionnaire (FMAQ) (Matos, Almeida, & Costa, 1997). This measure includes thirty-four self-report questions that participants will answer on a 4-point Likert scale. The measure can be divided into four different subsections as well, including Exploration and Individuality, Quality of Emotional

Bond, Separation Anxiety and Dependence, and Role Reversal. This measure has been found both valid and reliable, and it has found to be positively related to the IPPA-R.

**General Perspective-Taking in Adolescents and Young Adults.** I will use the Interpersonal Reactivity Index (IRI; Davis, 1980) to assess a general perspective-taking ability in groups two and three. This measure includes twenty-eight statements with which participants self-report their agreement. The twenty-eight statements can be divided into four subscales that assess perspective-taking, fantasy, empathic concern, and personal distress. The first two of the subscales will be most important because perspective-taking is the primary variable of interest and because the scale defines fantasy as the “tendency to transpose oneself imaginatively into the feelings and actions of fictitious characters in books, movies, and plays,” and this very closely relates to the question at hand in the current study, even more so than perspective-taking on its own. Many empirical studies have used this measure successfully, and it is considered valid and reliable.

**Storytelling-Specific Perspective-Taking in Adolescents and Young Adults.** After participants read the short play and engage in the role-playing activity, they will complete two versions of the State Empathy Scale (Shen, 2010) to assess their perspective-taking abilities in a storytelling-specific context. The original scale consists of twelve statements that participants indicate their agreement with on a scale from zero to four, with zero indicating that they do “not at all” agree and four indicating that they “completely” agree. This scale also has three subscales, including affective empathy, cognitive empathy, and associative empathy, each of which have four questions within the total of twelve. In addition to indicating their agreement with the statements, participants will also be asked to expand on their choices. For example, for the statement that states “I can see the character’s point of view,” participants will also be asked to discuss that point of view. These qualitative answers will then be evaluated for perspective-

taking quality by three trained judges. The results on the cognitive empathy subscale is the primary variable of interest because it corresponds most closely to perspective-taking.

### **Discussion**

In the present study, I proposed to examine the relationship between attachment security and the ability to engage in perspective-taking within the context of storytelling. In creating our hypothesis, I decided to build on existing literature to predict that insecure attachment style will be associated with lower values on perspective-taking measures at all three stages of development examined by the study—during early childhood (at four years of age), adolescence (thirteen years of age), and young adulthood (twenty-two years of age). More specifically, I expected that participants classified into insecure attachment styles would present lower scores on both generalized self-report perspective-taking measures and perspective-taking measures assessed within the specific context of storytelling (perspective-taking when viewing a puppet show for small children and perspective-taking for characters in a short piece of drama for adolescents and young adults). When breaking the scores down into more specific attachment styles, I expect to find the significantly lower perspective-taking scores more prevalently among those with avoidant attachment (compared with secure attachment) and less prevalently among those with other insecure attachment styles (such as resistant or anxious). I chose to look at perspective-taking within the context of storytelling and role-playing because of the research indicating that researchers have used both storytelling and role-playing to successfully cultivate and train perspective-taking in participants.

### **Implications**

Finding support for my hypotheses would lead to a number of implications. In many ways, supporting my hypotheses would help to substantiate and add more specificity to previous research on the way that insecure attachment relates to lowered empathy in individuals, as

summarized by Izhaki-Costi and Schul (2011). It also would expand upon and reinforce the findings of the literature discussed earlier that has found associations between attachment styles and various secondary topics within empathy (Stefan & Avram, 2019; Baczkowski & Cierpialkowska, 2015; Laranjo, Bernier, Meins, & Carlson, 2014; Teymoori & Shakhazad, 2012; Boag & Carnelley, 2015). This study would also be first to provide insight into how the relationship between perspective-taking and attachment changes as children age and form attachment bonds with various figures. Additionally, this study may provide insight into why certain individuals may struggle more with tasks requiring perspective-taking, such as the analysis of literature, engaging in performing arts such as theatre, or participating in intentional dialogue and active listening.

Knowing how attachment influences the ability of participants to engage in perspective-taking within storytelling contexts could also help to better inform those working in attachment interventions or attachment research in general. Most importantly, this research might indicate how attachment influences the effectiveness of storytelling at fostering benefits such as reduced prejudice and decreased behavioral problems. There are a multitude of studies examining the benefits of storytelling and the outcomes related to the ability to listen to and engage with stories that others tell. Piipponen and Karlsson (2019) demonstrated how storytelling can be used to decrease the stronghold of stereotypes and encourage dialogue between diverse cultures. Similarly, Husnu, Mertan, and Cicek (2018) demonstrated that storytelling acted as a component of an intervention that successfully helped to foster more positive attitudes and trust between two different cultural groups in Cyprus. Other researchers uncovered that experience with storytelling as a young child correlated with higher amounts of resilience later in life (Nguyen, Stanley, Rank, Stanley, & Wang, 2016). There has even been some research indicating the way that storytelling can benefit the attachment relationship itself in childhood—Shokoufefdard, Mazaheri



and Tahmassian (2015) found that “attachment-based storytelling” helped to lower the prevalence of bedtime problems among children while simultaneously strengthening the relationship between the child and his/her mother. If our hypotheses prove to be correct, this may indicate that individuals with insecure attachment styles may miss out on many of the benefits listed above, and it may allow researchers to better create interventions to target these outcomes, either within or independent of other attachment interventions. Understanding how attachment relates to perspective-taking might indicate how well participants may respond to this kind of intervention, as well as how much these interventions may be beneficial as part of larger attachment-related interventions for those with insecure attachments.

Researchers have found that outcomes often associated with insecure attachment styles could be combatted by perspective-taking training based in storytelling and role-playing. For example, a recent meta-analysis uncovered that insecure attachment could predict delinquent behaviors (Hoeve et al, 2012), and Chandler (1973) utilized an intervention program based in role-playing that sought to increase the perspective-taking abilities among adolescent boys with behavioral issues. Not only did the role-taking based training improve perspective-taking outcomes, but it also led to sustained improvements in behavioral outcomes for the children in the sample as well (Chandler, 1973).

A second example deals with another intersection between attachment and perspective-taking outcomes. Research has found a link indicating that insecure attachment style may predict poorer communication abilities in children (Klann-Dleius & Hofmeister, 1997), and other research also indicates that insufficient perspective-taking abilities can also be associated with worsened communication skills (Simeonsson, Monson, & Blacher-Dixon, 1979). Researchers then discovered that sociodramatic play (which, to an extent, involves both role-playing and storytelling) could be used with other perspective-trainings to help children improve their

perspective-taking abilities; researchers anticipated that this might, in turn, positively impact their communication abilities (Simeonsson, Moson, & Blacher-Dixon, 1979).

Both of these examples reinforce the idea that, if attachment has a relationship with perspective-taking in storytelling contexts, a way to improve outcomes for children with low attachment styles may be through interventions that involve training in perspective-taking. Support from the proposed study would help to reinforce this connection more directly, and this could lead to tangible outcomes in the way that researchers and activists seek to improve outcomes for those with insecure attachment styles.

### **Limitations**

One of the largest limitations of this study deals with the integration of the storytelling concept. First, there is a lack of previous research on the way that various factors affect storytelling (rather than the reverse), and this provides obstacles in theorizing and assessing the way that attachment and storytelling may relate directly. Furthermore, to fully evaluate the way that storytelling relates to perspective-taking in the context of attachment, it will be important to be more specific in the way that storytelling is operationalized, measured, and implemented into study designs.

Another limit is the lack of an empirically validated measure for perspective-taking in the context of storytelling. Further research using measures that have been validated and tested to a further extent could provide stronger and more replicable results. Additionally, the Attachment Q-Set is originally designed to be performed with two home visits lasting between ninety minutes and two hours, so the study could be limited by the use of this measure in a laboratory context with shorter observation time (Waters & Deane, 1987). Smaller limitations involved in this study deal with the limited geographic location in which it was studied, as well as the

inherent limits in conducting cross-sectional studies, such the decreased validity that might come from the inability to track the same participants over time.

There is also potential for more research in this area that could help to clarify nuances discrepancies. Further research should be conducted to examine more specifically the way that storytelling and role-playing as individual factors interact with both perspective-taking and attachment. Research could also look more specifically at tasks that require perspective-taking to assess how attachment style relates to performance on those tasks. Lastly, there should be empirical assessment of the way that perspective-taking, storytelling, and role-playing interventions can help to mitigate the negative effects of insecure attachment and improve outcomes for all children and adults.

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