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Young Children's Understanding of the Mental State Verb "Trust"

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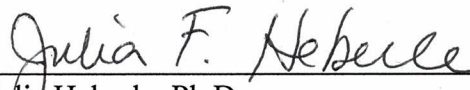
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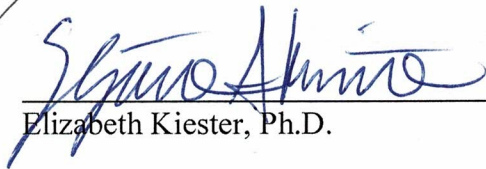
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Young Children's Understanding of the Mental State Verb "Trust"

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Abstract

Trust has rarely been researched in relation to children's conceptualization of the word. Children's understanding of "trust" was explored and compared to their understanding of "trust" using open-ended questions and two stories around themes of trust. It was hypothesized that younger children would define "trust" in the context of friendships, immediate rewards, and physical capabilities and older children will attribute trust to friends who keep secrets and promises. The open-ended set of questions were used to ask children to respond to who they trust/like and who trusts/likes them and why. None of the hypothesized themes were found but children demonstrated that they understand "trust" and "like" differently. Results revealed that children referred to relational and behavior responses most often for both "trust" and "like". However, for "like" children referred to traits more often than in "trust" responses. Children referred to their parents the majority of the time for "trust" and other children and parents most often for "like".

Young Children's Understanding of the Mental State Verb "Trust"

An understanding of "trust" is important to develop because it influences children's personality and social development through the development of a healthy self, their peer social status, prosocial behaviors and the ability to develop supportive, cooperative, and intimate relationships with others (Bernath & Feshbach, 1995). However, research on "trust" is limited with much of it focusing on trust theoretically or in a behavioral sense not in terms of conceptual understanding. Simpson (2007) speculates that limited research has been conducted on "trust" because it is a multidimensional construct making it hard to operationalize and measure.

Theoretical Approaches

Erikson (1950) and Rotter (1967) were some of the first to theorize about children's sense of trust and their development. Erikson (1950) theorized about interpersonal trust and believed that trust is the first stage established in the eight stages of his development theory, indicating its importance for life. The development of trust first begins with the consistency of a caregiver. This established reliance on a caregiver is then used to explore the world. A child's trust expands from the caregiver to the self in the basis of their identity. Additionally, children developed trust from self-regulation, personal control, and other's actions coming from sensory development (Erikson, 1950).

Rotter (1967) defined interpersonal trust as the reliance on another person's statement, promise or word formed from repeated exposure to reliance, which is a cognitive point of view. Rotter (1971) believed that trust must be established in childhood with a caregiver to have a sense of support and protection in their environment, then trust extends to peers that children interact with, and lastly the child must develop trust in them. For Rotter, trust is necessary for social functioning and a proper functioning society.

Simpson (2007) divided the theoretical definitions of “trust” into two categories: dispositional and dyadic. Dispositional trust involved a person-centered view in which it forms on other people’s reliability, cooperation and help in daily life situations. Dyadic trust involves an interpersonal view in which trust is a psychological state of the “truster” toward a “trustee” that is interdependent on each other for a valued outcome to occur. These situations involve feelings of vulnerability and an expectation that a partner will react in the other’s best interest in these situations. The expectation that a partner will act a certain way every time and it will be in the best interest of the partner boasts confidence which is a key component of interpersonal trust.

Simpson (2007) developed four principles of interpersonal trust based off of past literature. First, people will evaluate “trust” through a partner’s willingness to self-sacrifice their own benefit for what is in their partner’s or the relationship’s best interest. Second, people will test their partners on the first principle by creating circumstances on top of the typical situations that occur in life. Third, individual differences in attachment, self-esteem, and self-differentiation will affect the amount of trust developed. The fourth principle relies on the combined previous three principles of both partners in the relationship.

Behavioral Measures of Trust

Trust feelings are influenced by immediate trustworthiness cues presented and past interactions with how much a person can be trusted (Bernath & Feshbach, 1995). “Trust” can also include memories of constancy and reliability in others’ patterns of behavior and promise reliability. Defining “trust” is complex and multidimensional including cognitive, emotional and behavioral aspects and while necessary for people to have, researchers have not been able to create a single, all encompassing definition of “trust” (Szezesniak, Coaco, & Rondon, 2012).

Harbaugh, Krause, Liday, and Vesterlund (2005) believed trust developed through social interactions of rewarding behaviors implying trust. Harbaugh et al. researched trust behaviors in children by using an economic game. Participants were paired, one the “truster” and the other a “trustee” without being told, and their goal was to earn the most money. Every time a decision was made the participant was rewarded with tokens. If the “truster” decided to pass tokens to the “trustee” then the amount of tokens were tripled. When the “trustee” decided to pass token to the “truster” the token values increased by one token, but participants were not told about the value increase with each decision. Each partner was asked to make five transfer decisions in the game to four different grade levels and an adult. Results for the “trusters” revealed that younger children did not show higher trust than older children; the older children actually passed the least tokens. Additionally, “trusters” rewarded more tokens to the adults. For “trustees” trustworthiness, measured in the number of tokens returned, increased with age.

Kahn and Turiel (1988) examined “trust” through social expectations by reading children stories about deceptions between close friends or casual friends. To measure their conceptualization of “trust”, children were asked questions evaluating the deception with justification, if the friendship would be maintained, if the friendship could be restored, and if they had any negative feelings toward the friend. Results revealed that children rated all deceptions as negatively and was justified by moral reasoning. Additionally results revealed that deception would have negative feels toward their friends from the deception and would be less likely to maintain a friendship with a close or casual friend after a deception.

Understanding Changes with Age

Researchers previously found that “trust” was only used once in 350 hours of parent’s speech to young children (Heberle, 2009), five times in over 150 children’s books (Daigle,

Dillard, Jones, Snyder, & Heberle, 2011), and four times in 22 hours of children's television programming (Mikelonis & Heberle, 2010). However, research has shown that as children get older their understanding of trust changes, even without hearing the word from any of these sources. Additionally it has been found that younger children define trusting relationships, such as friendships, in relation to concrete rewards, punishment, and behaviors in interpersonal exchanges and in relation to their own interest and as children get older, a trusting relationship is defined in relation to intentions, friends' independence and interdependence, and mutuality (Bernath & Feshbach, 1995; Rotenberg, 1980; Bigelow, 1977). Bigelow (1997) examined the essays of children age 6 to 14 years old regarding friendship expectations. Results revealed that expectations about trust issues such as sharing, loyalty, commitment and helping in friends was used to define friendships. Additionally, children looked at the rewards and costs in their friends' behaviors such as sharing, commonalities, and reciprocity of "liking".

Selman and Selman (1979) also looked at "trust" in relationship to friendships. They conducted semi-structured interviews with children about hypothetical friendship dilemmas to understand development changes in cognition of children's "trust" in friendships. Results found that, overall, children focused on their own self-interest. From ages 3-7, children are in the "Momentary Playmateship" age in which "trust" is looked at in relation to physical capability. Children ages 4-9 years old are in the "One-Way Assistanceship" stage and recognized the importance of feelings and intentions in friendships but mainly focus on rewarding experiences within a friendship such as being able to do what they desire to determine trust.

Rotenberg (1980) found similar results by studying trust-decision making strategies in kindergarten, second, and fourth graders. Rotenberg presented stories in which either the behavior varied or a promise varied. In the behavior-varied stories, someone promised to help a

peer and either followed through or did not. In the promise varied stories someone promised to do all, none, or some helping for a peer. Children rated if they trusted the character: not at all, a little bit, kind of, a lot, or very much. Results revealed that kindergarteners relied on if an individual did nice things or a rewarding behavior rather than if they said they would of something nice. The second and fourth graders based “trust” on the credibility and consistency of promises based on the actions of the individual, supporting that trust shifts from behaviors to the reliability of a promise with age.

Rotenberg (1986) researched trust value friendships by examining children's reports of secret keeping and sharing and promise making and keeping for peers in their class and judge them on trust and friendship. Secret was defined as telling another person a thing that they want no one else to know. Secret keeping was defined as not telling other, and secret breaking was defined as telling others. A promise was defined as telling another person they will do something later. Promise keeping was defined as doing what they said and promise breaking was defined as not doing what they said. Results revealed that promises kept and secrets kept were correlated with friendship and trust ratings. Additionally, it was found that lack of secret sharing and frequent secret breaking was associated with lower ratings of trust and friendship. Rotenberg (1991) also found that ten year olds gave a higher trust value to friendships when a friend kept a promise rather than broke the promise, told the truth, and keep a secret than those who broke secret.

Mental State Verb Comparisons

Researchers have also looked at other mental state verbs such as “forget,” “want,” and “need.” The methodologies of these studies are significant for comparing “trust” and “like” in the current study. Hill, Collis, and Lewis (1997) looked at how children, age 4 to 8 years old,

understand the word “forget.” To examine their understanding, children were presented two stories in which one character had prior knowledge and one who had not. Then children were asked questions to differentiate between the characters on forgetfulness (i.e. “Who had forgotten...?”) by pointing to the appropriate doll that represented a character. Moore, Gilbert, and Sapp (1995) examined children’s understanding of the difference between “want” and “need.” Their research presented children with stories in which two characters were involved in an activity but the result of this activity differed for each character; for one character it resulted in a problem while the other did not. Then children were to differentiate if a character wanted or needed the object in the story. The current study compares children’s understanding of “trust” and “like” due to previous research that has found that younger children similarly defined “trust”, believe, and “like” but more “trust” with believe, and older children differentiated between these verbs but grouped “trust” and “like” together significantly more (Busz & Heberle, 2009).

Current Study

Overall, previous researchers looked at the concept of “trust” in children through other means than using the word “trust,” and each have formed their own definition of “trust” and idea of how it develops in children. However, no researchers have looked at how children define the word “trust” individually. This study aims to get an understanding of children’s definition of “trust” and if it relates to the themes found in previous research: secret keeping, sharing, and friendship. Additionally, this study examines how children’s definitions and understanding of “trust” and “like” differ. It is hypothesized that children’s definitions of “trust” will change with age. Kindergarten and first graders will define “trust” in the context of friendships, immediate

rewards, and physical capabilities (Selman & Selman, 1979; Rotenberg, 1980). Older children will attribute "trust" to friends who keep secrets and promises (Rotenberg, 1991).

Method

Participants

There were a total of 18 participants (12 male and 6 female). Their age ranged from 66 months to 100 months ($M = 73.61$). The participants came from the Albright Early Learning Center kindergarten class and the First Unitarian Universalist Church of Berks County's childcare. A letter was sent home to parents, either through email or in person, before the experimenter arrived at the site to interview the children. At the First Unitarian Universalist Church of Berks County's childcare parents were also approached before and after church services about their children participating. Informed consent was separately received from the parents and the child before the children participated in the study. The children gave verbal consent to participate and were free to decline if they wanted or stop the interview at any time.

Materials and Procedure

Children were brought into a quiet room to conduct the interview where there were few distractions. At Albright's Early Learning Center, the children were brought into a reading room connected to the kindergarten classroom. At the First Unitarian Universalist Church of Berks County's childcare, children were brought into a sectioned off area of a room and an observer was present during the interview. First children were introduced to the experimenter and verbal informed consent was attended and then the interview started.

A set of open-ended questions about “trust” and “like” was used to learn what each child understood about both concepts. The questions asked participants to think about someone they trust/like and someone who trusts/likes them. This was used to allow children an example to help children develop their answer for why. Then asked why they trust/like them and why they think that person trust/likes them. Each child was given enough time to answer each question and was not influenced at all during this time. When a child did not respond after an amount of time they were asked the question again but not given leading examples of answers. Additionally, if a name was given without any indication of the relationship between them by the end of the section of questions, participants were asked to clarify who that person was in relation to them. Participants were asked the open-ended questions first so the stories would not influence their answers.

Next, the participants were read two stories about school friends' secret keeping and sharing toys and four questions were asked each story (see Appendix 1). For every participant the secret keeping story was read first and then the story about sharing toys was read. The stories were constructed based off the themes found in the literature by the researchers. Researchers tried to make clear that all the children in the stories were friends even though one child did not get to play with the toy or hear the secret. The stories talked about how all the children play together at recess and at someone's house after school. The questions asked whom the child in the story “trusted” and “liked”. Participants who received the “trust” questions first in the opened ended section also received the “trust” questions first in the story section and vice versa for the participants who received “like” first. The questions gave the participants options to pick either child from the story. Participants were shown two clip art images of children, which corresponded to the gender of the participant, and were told these images represented the

children in the story to help the children remember who the characters in the story were (see Figure 1). Participants were able to point to the child that corresponded to their answer when asked the questions. If the child needed the story repeated at any time, they were told they could ask the researcher to repeat the story. Additionally, if the child did not answer after a period of time the researcher asked the child if they wanted the story repeated. All answers were recorded with a recorder and answers to the story questions were recorded on a sheet of paper as well.

Results

Preliminary Analysis

Responses to the open-ended questions were transcribed and a number identified each participant's response. After the responses were transcribed, they were coded on both whom they "trusted" and "liked" and why they "and "liked" that person. The "who" the child trusted or "liked" was coded into five different categories: parent, sibling, another family member, an unrelated adult, or another child. Another family member included a general reference to family, a grandparent or a cousin. An unrelated adult included a teacher or the President.

None of the themes hypothesized for the definition of "trust" or the "why" were found in the children's responses so a new coding system was used. The "why" was coded into three categories: relational, internal or random. Relational included reasons that referred to the relationship between the child and the person they identified as someone they "trust" or "like". Internal included reasons that described characteristics of the person the child identified as someone they "trusted" or "liked". Any response coded as random were responses that did not fall into the other two categories or when the child did not respond. These random responses included, "I don't know," "because I do," "spread the love" and a quote from the movie *Pan*. The random responses only took pertained to five responses.

The “why” responses were coded a second time using different categories than the first coding system. The second coding put the “why” responses into behavior and trait categories. Behaviors are any actions that the child referred to and traits were any inner, psychological trait referred to. For instance, playing and reading stories to the child was considered a behavior and being described as nice or a friend was considered a trait. Additionally random responses were coded the same as the first coding system, consisting of no answer, “because I do,” and “I don’t know.”

Responses to the story questions were coded into four matrixes based off the pattern of responses. The matrixes were composed of two columns indicating that the participant believed the character “trusted” or “liked” both characters and two columns that indicate the participant believed only one character was “trusted” or “liked” (see *Table 1*). It was expected that participants would believe the child “trusted” the child who heard the secret or received the toy but not the other child. It was also expected that the participant would believe the child would “like” both children no matter who received the toy or heard the secret. Specifically, in the secret keeping story the character Jessie was expected to be “trusted” while Alex would not be and in the toy sharing story Cameron was expected to be “trusted” but not Alex.

Main Analysis

“Who” Open-Ended Responses

Results from the open-ended questions revealed that more children referenced their parents as the person they “trust” and the person who “trusted” them (See *Figure 2*). Specifically for who the child “trusted” nine children referred to one or both of their parents, two children referred to a sibling, one child referred to another family member, two children referred to an unrelated adult, three children referred to another child, and one child referred to both a

parent and another child. Results for responses to the who “trusted” the child revealed eight children referred to one or both of their parents, two children referred to a sibling, two children referred to another family member, and six children referred to another child while none referred to an unrelated adult.

Results from the open-ended questions revealed that the majority of children referenced their parents for who they “like” and the majority of children referenced another child for who “liked” them (See *Figure 3*). Results from about who the child “liked” revealed that seven children referred to their parents, two children referred to a sibling, one child referred to another family member, one child referred to an unrelated adult, five children referred to another child, one child referred to both a parent and sibling and one child referred to a sibling and another child. Results from who “liked” the child revealed that four children referred to one or both of their parents, one child referred to their sibling, two referred to another family member, and eleven referred to another child.

“Why Open-Ended Responses”

Responses for why the child “trusts” or “likes” the person and why someone “trusts” or “likes” the child revealed that the majority of people referred to a relational characteristic (see *Figure 4*). Specifically when asked why the child “trusted” someone, fifteen children referred to relational characteristics, two children referred to internal characteristics, and one child referred to both types of characteristics. Results revealed that when asked why someone “trusts” the child, fourteen children referred to relational characteristics, three children referred to internal characteristics, and one response was coded as a random response. For responses to why children “like” someone, twelve children referred to relational characteristics, two children referred to internal characteristics, two children referred to both types of characteristics, and two

responses were coded to be random. For responses to why someone “likes” the child, results revealed ten children referred to relational characteristics, four children referred to internal characteristics, two children referred to both types of characteristics, and two responses were coded as random responses.

The second coding of why responses revealed that the majority of children referred to behaviors for both “trust” and “like”. However, traits were used more times in the “like” responses. Specifically, results revealed that eleven children referred to behaviors, five children referred to traits, and one referred to both behaviors and traits for why they “trust” someone. For why someone “trusts” them, ten children referred to behaviors, five children referred to traits, one child referred to both behaviors and traits, and one child’s response was coded as random. Results for why the child “like” someone revealed that eleven children referred to behaviors, four children referred to traits, two children referred to traits and behaviors, and one child’s response was coded as random. For why someone “likes” them, results revealed that five children referred to behaviors, nine children referred to traits, two children referred to both traits and behaviors, and two children’s responses were coded as random. Combining the results from both “trust” responses revealed that twenty-one responses referred to behaviors, ten responses referred to traits, two responses referred to both behaviors and traits, and one response was coded as random (see *Figure 5*) For the combined “like” responses, results revealed that sixteen responses referred to behaviors, thirteen responses referred to traits, four responses referred to both traits and behaviors, and three responses were coded as random.

Story Results

Results from the stories did not reveal a distinct pattern of responses for “trust” questions. For the secret keeping story condition, the “trust” questions revealed that eleven children

responded that the character “trusted” both children in the story (Jessie and Alex), with seven answering Jessie first and four answering Alex first. Five children responded that only Jessie was “trusted”, the expected response, and one child responded that only Alex was “trusted”. One child responded that they believed that character “trusted” Alex and maybe “trusted” Jessie. For the toy sharing condition, the “trust” questions revealed that eight children believed the character “trusted” both children in the story (Cameron and Riley), with seven answering Riley first and one answering Cameron first. Six children responded that only Cameron was “trusted”, the expected answer, and two children responded that only Riley was “trusted”. One child responded that they believed the character “trusted” Riley and maybe “trusted” Cameron and another child responded the opposite pattern.

Results from the stories did reveal a more distinct pattern of responses for the “like” questions compared to “trust”. For the secret keeping story condition, the “like” questions revealed that fourteen children responded that both characters were “liked”, with twelve children answering Jessie first and two answering Alex first; this was the expected response for “like”. For the toy sharing condition, the “like” questions revealed that eleven children responded that the character “liked” both children in the story, the expected response, with nine children answering Cameron first and two children answering Riley first.

Discussion

Overall, children treated the verb “trust” as a positive concept. The positive nature of children’s explanations of “trust” demonstrates that children do have an understanding of “trust”. The why responses to “trust” revealed none of the hypothesized themes previously seen in literature: secret keeping, sharing, and friendships. Rotenberg (1986) found that trust-value relationships were based on secret and promise keeping when rating friends on “trust” and

friendship. Bigelow (1977) examined children's definition of friendship in relation to "trust" issues and found that sharing, commitment, loyalty and helping was used. In the current study children named friends as someone they "trust" two times and as someone who "trusts" them six times, a small amount compared to the number of times children named their parents.

The majority of times children referred to relational characteristics as an explanation of "trust". These responses relied on explanations in which the person did something for them or with them. For instance, playing and doing nice things for them or with them were frequent responses. These results are similar to Selman and Selman's (1979) findings about "trust" in friendships. Selman and Selman found that children between 3 and 7 years of age define "trust" in physical capacities not psychological traits. Additionally, Selman and Selman found that children between 4 and 9 years of age recognized intentions and feelings in "trust" for friendship but were centered on reward for them in the relationship. In the current experiment, children defined "trust" by explaining how the person helped or did something good for them. For instance, one girl explained that her mother lets her watch television when she wants, unlike her father.

The current study's results were also similar to Rotenberg (1980) study in which children rated "trust" based off of stories in which promises were made and behaviors promised were followed through or were not. Rotenberg's results revealed that kindergarteners looked if behaviors occurred that consisted of doing something nice or rewarding for the child, not the verbal promise to do something for them. The current study found children referring to rewarding behaviors as well such as doing something nice for them or doing something they wanted.

Additionally, results supported some of the theorized conceptualization of “trust”. Erikson (1950) and Rotter (1967) believed that interpersonal “trust” was developed first through the caregiver and then was applied to the world. The current study found that majority of children referred to their parents when asked whom they “trusted”. Seventeen children referred to their parents in “trust” responses compared to nine other children and four siblings who were referred to. Additionally when comparing these results to who was referred to for “like”, children referred to parents eleven times in “like” compared to the seventeen times for “trust”. Overall, results seem to reveal that parents are the model for “trust” behaviors and characteristics and “trust” is reciprocal between parent and child from the child’s point of view but this pattern is not seen for other children.

When comparing children’s understanding of “trust” and “like”, results revealed that children are not treating “trust” and “like” the same. Reasoning for why children are treating “trust” and “like” differently is speculation because the current research is exploratory so there is not definitive understanding why they are treating them differently. Speculation for the observed difference includes the limited language capacity of five and six year old children.

Children’s difference in their definition of “trust” and “like” could be due to their behavior and trait understanding. Theory of mind is the understanding that behaviors are related to related and attribute to the person’s mental state (Wellman, 1990). Children begin to develop theory of mind around the age of 4 years of age. While children begin to develop theory of mind as early as four years of age, researchers have found that before the age of 8 years children describe others through actions, possessions, and appearances (Barenboim, 1981). Additionally, before the age of 8 years children are typically not seen using traits to describe others. These trends can be seen in the current studies results for reasoning for both “trust” and “like”.

However, “like” had more traits reasoning used compared to “trust”. In the current study, children used traits a larger portion of time in reasoning why they “like” someone and why someone “like” them in comparison to “trust” descriptions. This suggests that children have a better understanding of “like” than “trust”. Lui, Gelman, and Wellman (2007) examined children’s abilities to make behavior to trait inferences compared to their ability to make trait to behavior inferences. Results from their study revealed that children at age 4, 5, 7, and 9 years of age have the ability to infer traits from behaviors that were consistent over time. Additionally, Liu et al. found that children as young as 4 and 5 years of age are able to understand that traits are stable over time and are predictive of future behaviors. From Liu et al.’s research, children in the current study have the ability to make an inference about a trait based on the behaviors demonstrated. However, children limitedly use traits in their reasoning for why they “trust” someone and why someone “trust” them. The lack of traits used in relation to “trust” demonstrates that children do not have a complex understanding of “trust” at 5 and 6 years of age in comparison to “like”.

It has also been speculated that “trust” behaviors are not present at the age of 5 and 6 years, which would explain the lack of expected themes found in the current study’s results. This could also be the reason children did not differentiate between “trust” and “like” in the secret keeping or sharing story portion of this experiment. “trust” behaviors expected in the current experiment were secret keeping, promise keeping, and sharing (Rotenberg, 1991). Barenboim (1977) theorized that children compare behaviors across a period of time to form their psychological constructs of personality. Barenboim (1981) found that when testing 6, 8, and 10 years old children, first behavioral comparisons from over a period of time were used and then these lead to psychological constructs which increased around the age of 7 years old.

Additionally, in children 8 years of age behavioral comparisons predicted psychological construct usage one year later.

Also important in understanding psychological constructs are behavior frequency and intentions. Boseovski, Chiu, and Marcovitch (2013) found that when children were presented with several positive and intentional behaviors, 3 to 6 year old children were able to make behavioral predictions that were consistent with trait descriptions. In the current study this is important for an understanding of "trust" and conceptualizing it different than "like". If "trust" behaviors are not present at a younger age of 5 and 6 years old, then children may not have the ability to understand "trust" the same as older children even if their ability to understand traits from behaviors is present as previous research has demonstrated.

Vanderbilt, Liu and Heyman (2011) found that when children were presented a character with helpful and malicious intentions, children five years of age demonstrated more "trust" for the helpful character by preferring their advice to the malicious character. Vanderbilt et al.'s research demonstrates that children use past behaviors to infer intentions and develop their understanding of "trust". Liu, Vanderbilt, and Heyman (2013) expanded upon this and examined children's judgment of "trust" based off of intentions in past testimony and the outcomes from the past testimony. Liu et al. found that children 5 years of age "trust" the person who tried to help them more than the deceptive person. Additionally, the children 5 and 6 years of age trusted the person whose previous testimony resulted in a positive outcome more than the person's who previous testimony resulted in a negative outcome. Liu et al.'s research suggests that children 5 and 6 years of age will evaluate past outcomes when deciding if they can "trust" someone. Liu et al. suggest that these results support that children 5 and 6 years of age rely on mental states and past outcomes when determining if they "trust" someone. Vanderbilt et al. and

Liu et al.'s research supports that children use behavioral evidence, as demonstrated by previous research, to judge "trust". If "trust" behaviors were not present for children in the current study then children were not able to judge "trust" the same as older children, even though they have the ability to do.

Limitations

The current study is completely exploratory and does not have any statistical analysis to support the results. A limitation of this study is the limited sample size of only 18 children. Additionally, the children's ages were limited to a majority of children being 5 and 6 years of age with only a few 7 and 8 year olds. An extended age range and larger sample was not able to be established due to a lack of availability of older children. Inter-rater reliability is another limitation in this research. One researcher only transcribed responses without any comparison for accuracy. However, responses from children were considerably short leaving little room for error or differential interpretations.

The stories in this research also pose a limitation. The secret keeping story was a shorter story and may have been perceived as easier to understand for children. The sharing story was longer and involved more information and could have been confusing to children to keep the children and the actions straight. A portion of the children asked to have the sharing story repeated a second time before answering.

Future Directions

Future research could look at the difference between older and younger children's conceptualization of "trust" by using a larger sample size. The larger sample size with a greater expansion of ages could help reveal the hypothesized themes seen in previous research. Additionally it would be interesting to expand the age range to include adults. Overall, future

search on “trust” needs to focus on understanding how children develop an understanding of “trust” given the shortage of the word in the child’s available input and environment.

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Appendix 1

Questions:

Trust

- 1) Think of someone you trust. Why do you trust them?
- 2) Think of someone who trusts you. Why do they trust you?

Like

- 1) Think of someone you like. Why do you like them?
- 2) Think of someone who likes you. Why do they like you?

Stories:

Secret Keeping:

Erin, Jessie, and Alex go to school together. At school, they play together during recess. After school, they play together at Erin's house. While they are playing Erin tells Jessie a secret but does not tell the secret to Alex.

Questions:

- 1) Who does Erin trust: Jessie or Alex?
- 2) Does Erin also trust (child who was not chosen in question 1)? Yes No
- 3) Who does Erin like: Jessie or Alex?
- 4) Does Erin also like (child who was not chosen in question 3)? Yes No

Sharing a special item:

Avery, Cameron and Riley go to school together. At school, they play together during recess. After school, they play together at Avery's house. At Avery's house, they play with his/her toys. While they are playing Avery shared his/her favorite toy, which can easily be broken, with Cameron. Avery does not let Riley play with his/her favorite toy.

Questions:

- 1) Who does Avery trust: Cameron or Riley?
- 2) Does Avery also trust (child who was not chosen in question 1)? Yes No
- 3) Who does Avery like: Cameron or Riley?
- 4) Does Avery also like (child who was not chosen in question 3)? Yes No

Figure 1

Female Condition



Male Condition



Table 1. Matrixes of answers for story questions.

Secret Keeping Story

		Trust Questions			
		Yes	No		
Jessie		6	5	Jessie	
Alex		4	1	Alex	

* One Alex/Maybe response

		Like Questions	
		Yes	No
	Jessie	12	2
	Alex	2	1

* One Jess/Maybe response

Toy Sharing Story

		Trust Questions	
		Yes	No
Cameron		1	6
Riley		7	2

* One Riley/Maybe response
* One Cameron/Maybe response

		Like Questions	
		Yes	No
	Cameron	1	6
	Riley	7	2

* One Riley/Maybe response
* One Cameron/Maybe response

** The bolded number in the matrixes is the expected answer pattern for each story.

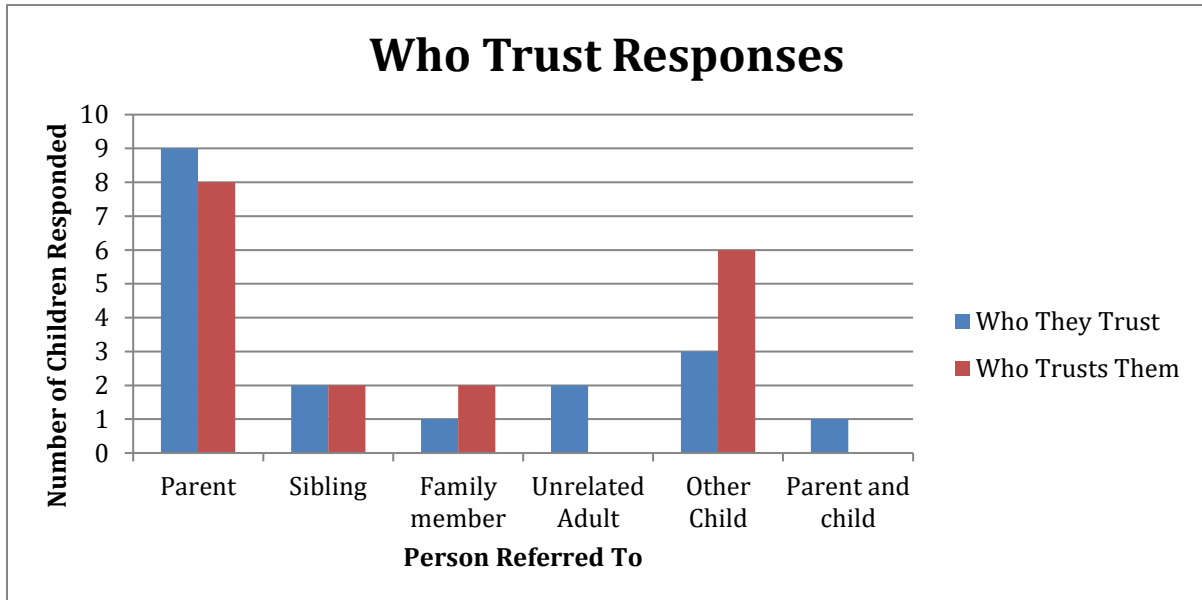


Figure 2. The number of children who referred to each category of person for who they trust and who trusts them.

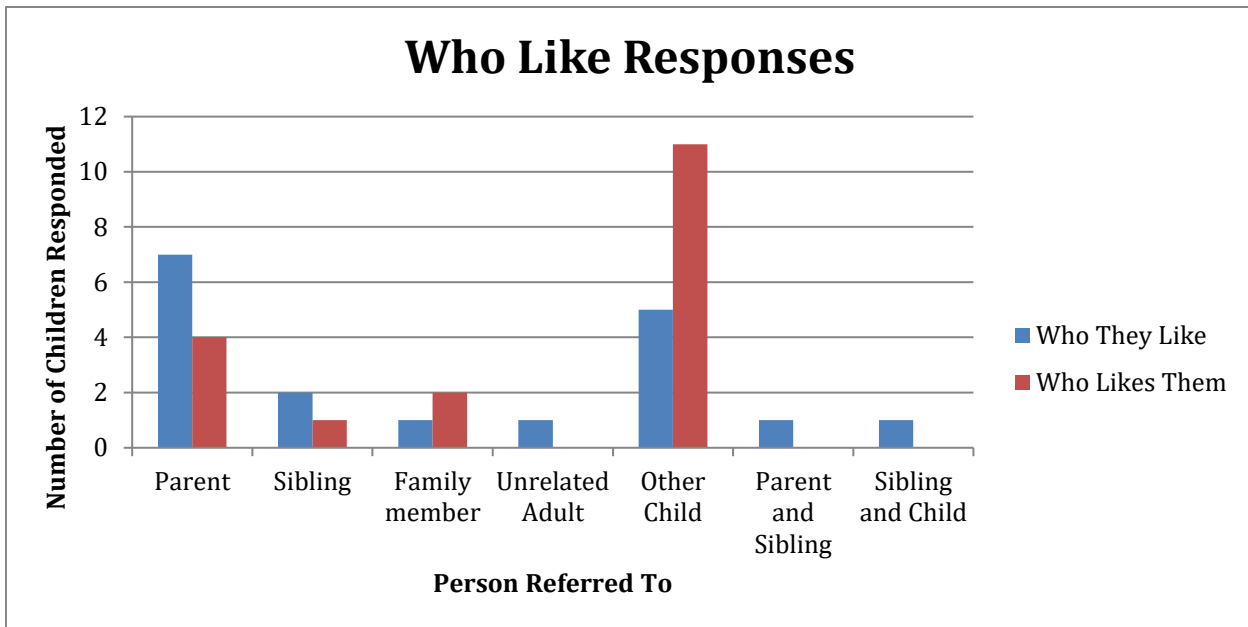


Figure 3. The number of children who referred to each category of person for who they like and who likes them.

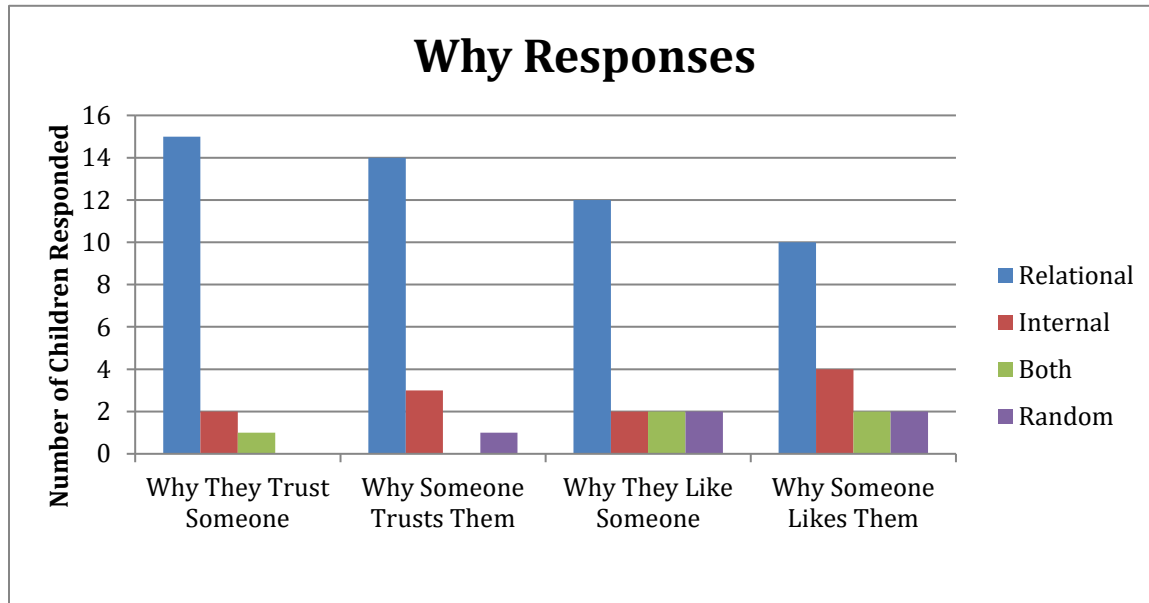


Figure 4. The number of children that responses where coded relational, internal, both, or random to why they trust/like someone and why someone trusts/likes them.

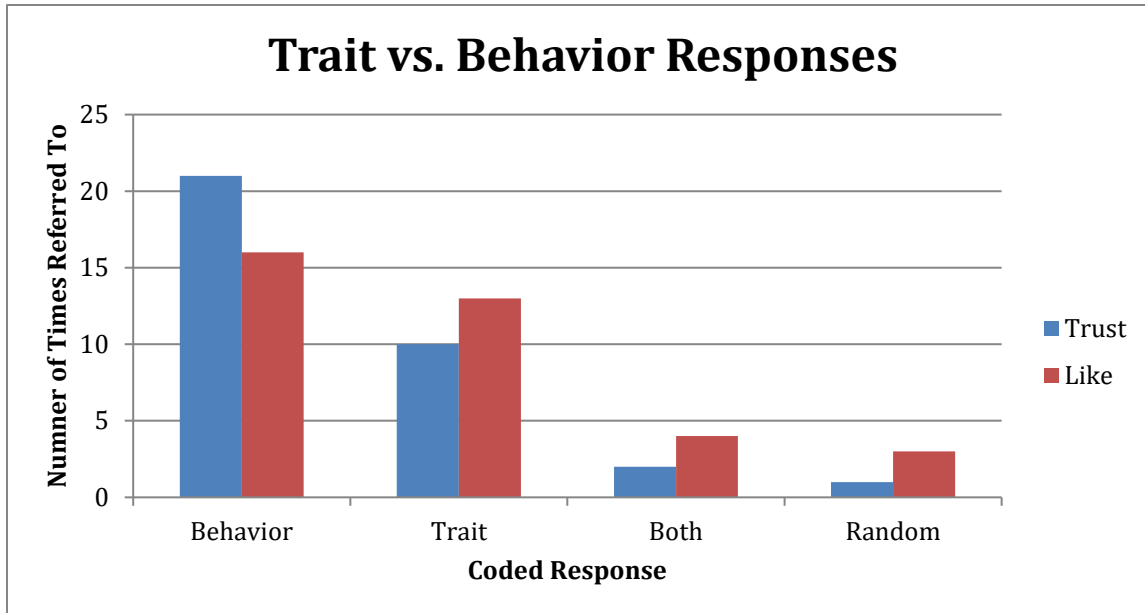


Figure 5. The number of responses that are categories as behaviors, traits, both, or random for trust and like.

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