

NOTICE:

The copyright law of the United States (Title 17, United States Code) governs the making of reproductions of copyrighted material. One specified condition is that the reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses a reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

RESTRICTIONS:

This student work may be read, quoted from, cited, and reproduced for purposes of research. It may not be published in full except by permission by the author.

Albright College Gingrich Library

Adult Understanding of the Verb “Trust”

Kiana Hepburn

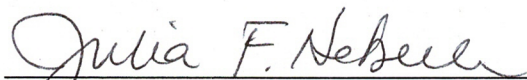
Candidate for the degree

Bachelor of Arts


Submitted in partial fulfilment of the requirements for

College Honors


Departmental Distinction in Psychology



Julia Heberle, Ph.D.



Gwendolyn Seidman, Ph.D.



Teresa Gilliams, Ph.D.


Albright College Gingrich Library

F. Wilbur Gingrich Library
Special Collections Department
Albright College

Release of Senior Thesis

I hereby deliver, give, and transfer property, rights, interest in and legal rights thereto which I had, have, or may have concerning the Senior Honors Thesis described below to the Special Collections Department of the F. Wilbur Gingrich Library at Albright College as an unrestricted gift. While copyright privileges will remain with me, the author, all privileges to reproduce, disseminate, or otherwise preserve the Senior Honors Thesis are given to the Special Collections Department of the Gingrich Library. I place no restrictions on this gift and hereby indicate this by signing below.

Title: Adult Understanding of the Verb "Trust"

Signature of Author:  Date: 5/2/17

Printed Name of Author: Kiana Hepburn

Street Address: 1902 McBride Ave.

City, State, Zip Code: Neptune, NJ, 07753

Albright College Gingrich Library

Adult Understanding of the Verb “Trust”

Kiana N. Hepburn

Albright College

Albright College Gingrich Library

Abstract

Adult use of the verb “trust” to children is rare, far less common than the use of emotion verbs such as “like” or cognition verbs such as “believe”. Does this verb carry a negative connotation? Does an adult’s early experience with the verb “trust” shape the meaning of the word for adults? In a within-subjects study, I assessed 60 adults’ comparisons of the verbs trust, believe, and like, with selected verbs of cognition, emotion, and action (5 each), as well as the individuals’ early experiences of hearing the verb “trust.” Participants rated all three verbs for similarity of meaning to all 15 verbs of cognition, emotion, and action. We asked participants about their early memories regarding trust, such as who said it, their age, the circumstances, and asked them to rate the valence of the circumstances as well as how it made them feel. Finally, they were asked to rate how they would feel if someone told them they did or did not like/trust/believe them, and how likely they were to say those same statements to someone else. In general, the results are equivocal and suggest that adult meaning of “trust,” as implied by ratings, is closer to “like” and verbs of emotion, but their explicit definitions frequently used the verb “believe,” and verbs of cognition. Adult reports of early experience of hearing “trust” are not consistently negative, but are perhaps, instead, emotionally “charged.”

Adult Understanding of the Verb “Trust”

The concept of trust is one that everyone experiences differently, whether those experiences be positive or negative, which could shape their understanding of the meaning of the word. The use of the word from adults to children is far less common than words of cognition like “believe” or verbs of emotion such as “like.” Is it possible that this word may carry a negative connotation? Is this verb associated with negative experiences? Individuals may trust another who is in concordance with their own interests or even their same values. Having this type of trusting relationship may prove to be beneficial, especially within close relationships. Exploring the experiences behind the verb “trust” as well as gaining insight into one’s definition of the verb may help us to understand why this verb is not used as much. We may be able to understand what trust does, but what does it mean?

Researchers in different disciplines have articulated various definitions of trust that are not consistent. For example, Cvetkovich and Nakayachi (2007) explore two characteristics, or “dimensions,” associated with trust; the notion that one is more likely to cooperate after making judgements of one’s morals and values that are similar to one’s own (“salient values similarity”), and also the notion that one is more likely to trust someone who is willing to act in their best interest (“encapsulated interests”). They mention that other studies have tried to define trust within two dimensions, whether they be any combination of “openness,” “fairness,” “honesty,” or “caring,” but seemed to have failed to define this verb. As well, these variations further show how much variability there can be when one tries to define trust. This study also mentions the fact that with trust comes the risk of vulnerability given that the opposite party may prove to be untrustworthy. Wang, Qiu, Kim, and Benbasat (2016) have also included vulnerability in the definition of trust. In their definition, they state that trust is the acceptance of vulnerability based

on one's beliefs about the trustee's ability as well as an emotional bond between the trustor and the trustee (Dunn, Ruedy, & Schweitzer, 2012; Mayer, Davis, & Schoorman, 1995). Cvetkovich and Nakayachi (2007) explore trust as a verb of cognition, whereas, a study conducted by Russel, Wentzel, and Donlan (2016) presents trust as a verb of emotion.

Russel, Wentzel, and Donlan (2016) examined trust as a verb of emotion in regards to teacher-student relationships. These researchers introduced the topic of interpersonal trust and how it has been defined in various ways, such as with attachment. Interpersonal trust within attachment between a mother and child is crucial in that the mother needs to respond to her child's needs to establish that trust (Cassidy, 2001). The attachment theory can also be applied to teacher-student relationships given that in order to establish trust between the two parties, the teacher must be a reliable source of emotional support for the students in order for the students to have positive outcomes. They also examined the benefits for teachers and the role of trust in an effective classroom environment from the perspective of the teachers. The researchers focused on students who exhibited at-risk behaviors such as poor attendance and suspensions, and thus may have a more difficult time establishing trust with their teachers. They expressed the limitations concerning the definition of trust in regards to how the participants will respond to items containing that verb. The researchers did not give them a definition of trust, thus leaving their responses as up to interpretation. Although this was the case, the researchers did note 2 common themes within their responses: faith or belief in another and honesty, as well as the notion of reciprocity. Given these limitations and lack of consistency in which one views this verb, how do people come to understand it regarding emotional, cognitive, or behavioral aspects?

Trusting behavior has been studied in a variety of settings, including social relationships and economics. For example, Macko, Malawski, and Tyszka (2014) discussed trust as an

inevitable part of economic interactions. One party is destined to have to depend on the other party in some way, whether that be to give the right price, as well to give the quality of goods that was promised. These types of situations bring vulnerability into play given that one party is seen to be vulnerable to potential betrayal of the opposite party, depending on where they stand in the relationship. Using the same example as above, if one party is delivering the promised goods, they can potentially be betrayed and not be paid what is owed to them. This type of situation is synonymous with the *trust game*, in which a participant decides whether to send money to their anonymous partner. Several experiments, including one by Berg, Dickhaut, and McCabe (1995), have shown that more often than not, participants will in fact trust their anonymous partner with at least some of their money, even if they knew the other person was also receiving money for their participation. This suggests that the participants *believe* that the other person can be trusted because they *believe* that the trust will be reciprocated. As long as this belief holds true, this word can also be an important part of development in that it can strengthen relationships, even as early as infancy, and according to Poulin and Haase (2015), it can even increase and sustain well-being across one's lifespan.

Developmental theorists have explicitly included the concept of trust in early social development. Erikson's first psychosocial stage deals with the crisis of trust versus mistrust. Erikson stated that an infant's achievement in this stage is the "willingness to let the mother out of sight without undue anxiety or rage, because she has become an inner certainty as well as an outer predictability" (Erikson, p. 247). He also stated that this stage may begin in infancy, but it continues throughout one's life cycle. As well, Ainsworth and Bowlby's (1991) notion of secure attachment includes a child's trust in his or her caregivers to provide care for them holistically. These theories embed trust implicitly in the child's psychosocial development, but do not

examine the child's explicit understanding of trust. For example, in the book *Trust & Reciprocity* edited by Ostrom and Walker, Harbaugh, Krause, Liday Jr., and Vesterlund (2003) study the trusting behaviors of children and how they develop, using trust games of reciprocity. They found that older children seem to be more trusting than younger children, as well as the fact that children are less trusting of children in their age group, than children in older age groups. Overall, these researchers found that the trusting behavior of children is not much different from adult trusting behaviors in that similar methods to examine this topic can be used with both groups along with some modifications to make the task clearer to children.

With adults, trust has been studied by looking at one's behaviors and the effects of those behaviors, which still does not provide a direct look at the definition of trust. This can be frequently seen when researchers explore adult willingness to give or share resources with unknown others in these decision-making games. A study by Berg, Dickhaut, and McCabe (1995) examined trust and reciprocity in regards to investment and rational decision-making. From the evolutionary standpoint, trust may emerge in order to maximize genetic fitness even though self-interest may suggest cheating. Also, this standpoint would make the argument that someone with the predisposition to reciprocate will do so if they believe that the other party will reciprocate. They believe that the rational decision of a stranger is to violate trust, especially if they are not certain that reciprocation will occur, but individuals will trust others if it is to their own gain (Berg, et al., 1995; Fetschenhauer & Dunning, 2009, 2012; Fetschenhauer & van der Vegt, 2001). As one can see, very little has been done on explicit understanding of what trust means for both children and adults.

The purpose of this study was to explore adults' meaning of the verb "trust" as well as examine whether they rate the similarity of meaning of "trust" as closer to verbs of cognition,

emotion, or action. Furthermore, we wanted to explore whether the participants' early experiences with this verb were positive or negative. All participants rated the similarity of trust, believe, and like with verbs of cognition, emotion, and action as well as share their early experiences with the verb "trust." Unlike other studies, this study will examine how the average person experienced and defines trust, instead.

In terms of individuals' judgments of grammaticality, Chomsky (Radford, 1981) defined one's *intuitions* about whether a sentence is well-formed in concordance with the speaker's *competence*, or the knowledge about one's language. This research gave importance to one's intuitions about the correct grammaticality of one's native language. The method of similarity ratings of pairs of words is supported by Earles (2016) in which she asked participants to rate the similarity of the meaning of pairs of sentences that either contained the same verbs or the same nouns. Also, Erk, McCarthy, and Gaylord (2013) asked the participants to rate the similarity between pairs of usages of the same word in context. Furthermore, Recchia and Jones (2009) stated the importance of human data of word similarity ratings in order to train a high-dimensional semantic space model on a body of text. These examples help support the reason for using verb similarity ratings.

If one's definition of trust more closely resembles a verb of cognition (like think and believe), then we could expect one's ratings of similarity to be closer to verbs of cognition than for verbs of emotion or action. As well, if an individual's definition of trust was more closely related to a verb of emotion (like love and care), then we could expect that person's similarity ratings to be closer to emotion verbs than cognitive or action verbs. Furthermore, if a person's definition of trust has more to do with action or behavior, then we could predict that his/her similarity ratings will be closer to the action verbs than the verbs of cognition or emotion. While

trust is conceived as a positive concept in both Erikson and Ainsworth's theories, the absence of trust in adult speech towards children may suggest that this verb may not be as positive. We predict that adult reports of their earliest memories in which the verb "trust" was used, will reflect the negative nature of this verb. We also predict that adult ratings of their likelihood to say statements such as "I like/don't like you," "I trust/don't trust you" and "I believe/don't believe you," will reflect their earliest experiences with trust in regards to the strength of the positive or negative circumstances. Finally, we predict that adults will report differential feelings for hearing another person say statements like "I like/don't like you," "I trust/don't trust you," and "I believe/don't believe you" than what they reported in regards to saying it themselves. With this study, we hope to uncover adults' meaning of the verb "trust" as well as gain insight as to how this understanding came to be.

Methods

Participants

Sixty individuals (47 female, 13 male) participated in this study. They were recruited by either email on the Albright College campus or Facebook, and they were all over the age of 18 (18-71, with a mean age of 38.6). Albright College psychology students received extra credit as compensation for their participation. This study was IRB approved.

Materials and Procedure

The participants completed this survey on SurveyMonkey. There were three groups of similarity ratings that the participants completed. They rated the verbs "trust," "believe," and "like" each to verbs of cognition, emotion, and action, which can be found in Appendix A. Participants were randomly assigned as to whether they received the trust comparisons, the believe comparisons, or the like comparisons first. The comparisons with trust, believe, and like

included the same set of randomly chosen verbs across all participants, and each participant received all three sets of verb comparisons. They were listed in alphabetical order and included verbs of cognition, emotion, and action. These verbs included: ask, call, care, feel, give, guess, hope, imagine know, love, remember, show, tell, think, and want. I asked the participants to rate the similarity of the verb sets using 7-point Likert type scales (not at all similar-extremely similar) to determine how much they associate trust, believe, and like with these verbs of cognition, emotion, and action.

All the participants were then asked to provide their own definition of the verb “trust.” The participants’ definitions can be found in Appendix B. They were then asked about their earliest experiences with the verb “trust” by answering open-ended and scale type items. Examples of which can be found in Appendix C. They were first asked, “Please think back to the first time you can remember hearing the word ‘trust.’ How old were you (in approximate years)?” The participants were then asked who said it to them, if they felt the circumstances were positive, neutral, or negative, what the sentence was, what exactly the circumstances were, and how they felt. Afterwards, the participants were asked about another early memory regarding the word “trust.” They were then asked the same questions as their first experience (age, who said it, circumstances, what the sentence was, how they felt).

Before obtaining demographic information, we asked all participants to rate how they would feel if someone said the following statements to them: “I like you,” “I believe you,” “I trust you,” “I don’t like you,” “I don’t believe you,” and “I don’t trust you” using a 5-point Likert scale (very negative-very positive). Using the same questions and a 5-point Likert rating scale (very unlikely-very likely), the participants were then asked how likely they are to say the above mentioned statements to someone else. Following the aforementioned questions, they answered

demographic questions which may or may not have affected the results. Finally, they were debriefed on the true nature of the study, and Albright College psychology students were given the opportunity to fill out an extra credit form.

Results

Analysis of Similarity Ratings

We averaged the ratings across the five verbs of each type (cognition, emotion, and action). The means and standard deviations of the participants' average ratings can be found in Table 1. A 3 (verb: believe, trust, like) x 3 (verb type: cognitive, emotion, action) within-subjects ANOVA was conducted. There was a main effect of verb $F(2, 134) = 12.27, p < .05$, as well as a main effect of verb type $F(2, 134) = 96.40, p < .05$. There was also a significant interaction between verb and verb type $F(4, 268) = 50.62, p < .05$.

To decompose the 2-way interaction, a series of 1-way ANOVAs were conducted for each of the 3 verb types. For verbs of cognition, there was a significant effect of verb, $F(2, 134) = 59.35, p = .000$. Post hoc tests Bonferroni corrected (.05/9) showed significant difference such that believe was rated as more similar to verbs of cognition than both trust and like. For verbs of emotion, there was a significant effect of verb, $F(2, 134) = 6.99, p = .000$. Post hoc tests Bonferroni corrected (.05/9) showed significant difference such that like was rated as more similar to verbs of emotion than both trust and believe. For verbs of action, there was a significant effect of verb, $F(2, 134) = 11.18, p = .000$. Post hoc tests Bonferroni corrected (.05/9 = .005) showed significant difference such that trust was rated as more similar to verbs of action than both believe and like.

The participants' average ratings of the similarity of verbs "trust," "believe," and "like" to verb type were very different depending on verb type, such that similarity ratings for "believe" to verbs of cognition accounted for the interaction, which is shown in Figure 1.

Analysis of Ratings for Hearing and Saying Verbs

We averaged the ratings of how positively or negatively the participants would feel if they heard certain verbs in both positive and negative ways. The means and standard deviations of the participants' ratings for how they would feel hearing "I like/don't like you," "I believe/don't believe you," and "I trust/don't trust you" can be found in Table 2. A 2 (valence: positive, negative) x 3 (verb: believe, trust, like) within-subjects ANOVA was conducted, and there was a significant interaction between valence (positive and negative versions of each sentence) and verb, $F(2, 118) = 19.33, p < .05$. The rating of how much they do/do not like to hear these verbs being said to them depended on both valence and verb in that the participants were least likely to want to hear "I don't trust you" the most. There was a main effect of valence $F(1, 59) = 595.35, p < .05$, but there was no main effect of verb $F(2, 118) = 2.7, p = .07$. The verb did not seem to be important for what the participants may hear from someone else, but they very much preferred hearing the positive statements over the negative statements.

In regards to saying those same statements to someone else, we examined how likely the participants would say those statements, and the means and standard deviations of the participants' responses can be found in Table 2. A 2 (valence: positive, negative) x 3 (verb: believe, trust, like) was conducted, and the interaction between valence and verb was not significant $F(2, 120) = 2.4, p = .09$. However, there was a main effect of valence $F(1, 60) = 57.96, p < .05$. Overall, participants rated their likeliness to say the positive statements as higher than the negative statements using these 3 verbs. There was also a main effect of the verb they

would use $F(2, 120) = 30.65, p < .05$. The participants rated their likeliness of using the verb “believe” in both instances as higher than both “trust” and “like.”

Qualitative Data

We asked the participants to give us their personal definition of the verb “trust,” in an open text response format, and we observed a few themes within their definitions. For example, the word most frequently used in their definitions was some form of “believe,” whether it was used in the phrase “To believe in” or otherwise. Approximately 25 out of 67 participants who answered this question used that verb within their definition. Another popular phrase that was used was “to have faith in,” or some variation of using the word “faith,” with approximately 16 participants using this word in their definition of “trust.” Some participants also used the word “reliability” in defining “trust.” Twelve participants used some variation of that word in their definition, followed by approximately 7 participants using the word “confident” or “confidence” in their definition. The remaining participants’ definitions had to do with assurance, feeling safe, comfortable, and not having a doubt about someone or something. These themes give us an idea about how adults understand the verb “trust,” and we also took a look at their early experiences with the verb.

The study included other qualitative data in regards to the participants’ earliest memories of hearing the verb “trust.” We first asked the participants if they could remember their approximate age of hearing “trust” for the first time, and the ages ranged from 2-14 years old, with the average age being 6.4. More than half who could recall their approximate age were age 5 or below (27/50). Much fewer participants recalled their earliest time to be around the onset of adolescence (8/50). We also inquired about who said it to them at these young ages, with an overwhelming number of them hearing it first from a parent (41/53). Four participants reported

hearing it from another relative, six heard it from another adult such as a teacher or religious figure, and only two participants reported hearing “trust” for the first time from a peer. The participants were also asked to recall the sentence that they first heard the verb “trust,” and a significant number of the responses were interpreted as more positive than negative in regards to trust vs. do not trust. More than twice as many participants rated this initial circumstance of their first encounter to be positive (29/57) rather than negative (13/57), while 15 of them rated this circumstance to be neither positive nor negative. These results did not match our interpretation of their actual description of the first time they heard the verb “trust” in that a higher number descriptions seemed to be more negative than positive.

We asked the participants if they could recall another early memory of hearing the verb “trust,” and fewer of them had a response to this set of questions. The ages for this set of responses ranged from 4-17 years old with an average age of 9.6. Far fewer participants recalled hearing the verb at age five or below (3/33) and almost half recalled hearing this verb in their adolescent years (15/33). As expected, out of the 25 participants who could recall the person that said the verb “trust” to them, 16 of them reported that they heard it from a parent. Only one participant recalled hearing it from another relative, three reported hearing it from another adult, and five reported hearing it from a peer. Again, a significant number of participants reported that the sentence they experienced using this word was more positive than negative in regards to trust vs. do not trust. More than half of the participants rated the circumstance to be positive (28/43) rather than negative (9/43), while 6 reported the circumstance to be neither positive than negative. These findings did not match our interpretation of their actual descriptions of another early memory of hearing the verb “trust” in that the number of positive and negative responses were nearly equal.

Discussion

The study assessed whether individuals rated the verb “trust” as more similar to verbs of cognition, emotion, or action. We also explored the positive or negative effect of hearing or saying the statements “I like/don’t like you,” “I believe/don’t believe you,” and “I trust/don’t trust you.” Finally, we also gathered the participants’ personal definitions of the verb “trust” as well as their earliest memories of hearing the verb. We believed that this study will provide additional information to the research regarding trust, as well as provide the missing information of how adults define trust as well as how their early experiences with the verb could influence their definition. Furthermore, we hypothesized that the use of trust from adult to child was rare, and as a result, adults must both have, and create, a negative connotation for the verb. The results of our study did not support this hypothesis.

Verb Meaning Similarity Ratings

The participants’ similarity ratings of the verb “believe” are responsible for the interaction between the three verbs and the three verb types. They rated “believe” as more similar to verbs of cognition, compared to their ratings of “trust” and “like” in relation to the verbs of cognition. “Believe,” “trust,” and “like,” however, behaved more similarly in regards to their similarity to verbs of emotion and action. According to the participants’ similarity ratings, the “trust” ratings behaved very similarly to the “like” ratings in that they are more closely related to verbs of emotion, rather than cognition or action. Furthermore, the main effect of verb type was significant, in that all three of the verbs were rated as less similar to verbs of action overall and were rated as more similar to verbs of emotion.

Preference Ratings for Hearing and Saying Verbs

When participants were asked how much they would like to hear “I like/don’t like you,” “I believe/don’t believe you,” and “I trust/don’t trust you,” not surprisingly, they indicated a higher degree of preferring to hear the positive sentences overall. How much they liked it depended on the specific verb, such that hearing “I don’t trust you” was rated as least liked and as a result, accounted for the interaction.

The participants were then asked about their likelihood of saying the same 6 statements that were listed above. There was no significant interaction in regards to the positive and negative statements and the verbs. Their likelihood ratings for saying all three verbs behaved very similarly across the positive and negative statements. As previously observed, the participants rated their likelihood of saying the positive statements as higher than saying the negative statements. A main effect also exists amongst the verbs. In both instances, the participants rated their likelihood of saying “I believe/don’t believe you” higher than the remaining verbs. This outcome was surprising given their previous ratings which were in favor of hearing the verb “trust” more, but when they were asked about saying these specific verbs, they reported that they were more likely to use the verb “believe.” What is the reason for the discrepancy? One may suggest that the verb “trust” is a loaded word to use, but it is seen as a preferable verb to hear from someone else.

Qualitative Data

When asked to provide one’s personal definition of the verb “trust,” a significant number of participants used the verb “believe” in their definition. Looking at this data alone would suggest that the participants would rate “trust” and “believe” more similarly in their verb similarity ratings, but this was not the case. Instead, their ratings of “trust” against verbs of

cognition, emotion, and action appeared to be more closely related to their ratings of “like” against those same verb types, which puzzled us.

We expected that parents were not using the verb “trust” when talking to their young children, but when asked about their first experiences with the verb, more than half of the participants reported hearing this verb at age five or younger, with most of the total participants hearing it from a parent. Therefore, our initial notion that parents refrain from using this word with their children has not been supported by their responses. Furthermore, given that so many of the participants remembered this initial event suggests that this is an emotionally “charged” verb, which supports their verb similarity ratings. As well, our hypothesis that this verb is not used given that it may have a negative connotation was not supported. When asked to recall the first sentence, significantly more of the responses were interpreted as positive. We interpreted their responses based on whether the sentence reflected “I trust” versus “I do not trust.” The participants were also asked to rate this initial circumstance, and more than half of them rated it to be more positive, which did not match our interpretation of their actual details of the circumstance. Our interpretations indicated that more of their circumstances were negative, given the situation that they presented. It is unclear as to why there was a discrepancy except for the fact that maybe the participants also took the outcome into account when rating this initial circumstance. Also, since this is a retrospective study, and these participants are adults, they are thinking from an adult perspective that it is a good thing to be warned or told about the need for trust. They are no longer thinking about these situations from a child’s perspective, which could result in the discrepancy.

As expected, fewer of the participants were able to provide a response to another early memory of hearing the verb “trust.” As well, the average age increased, which supports our

assumption that parents are not using this word with their young children, or at least not as much as other verbs. Again, most of the participants heard it from their parents. When we interpreted their sentences based on “I trust” versus “I do not trust,” we found that their responses were more positive in nature. There was still discrepancy between their ratings of this other early circumstance versus our interpretations of their descriptions of the circumstance in that a significant number of them rated the circumstance to be positive, but our interpretations indicated that the circumstance were almost equally positive and negative given the situation. Again, the possibility that the participants took outcome into account may explain this discrepancy.

General Conclusions

This study provides additional information as to how adults define the verb “trust” while also providing us with insights into how these definitions may have developed. Their verb similarity ratings show that they treat “trust” closer to “like” and verbs of emotion, despite the fact that a significant number of their personal definitions had a verb of cognition such as “believe” or “faith.” Also, the fact that most of our participants remembered their first encounter with the verb trust may indicate that this verb is, in fact, emotionally “charged,” thus leaving an imprint on their young minds, extending well into adulthood. Their decreased responses to another early memory of this verb, however, could support our notion that this verb is not used very often with parents towards their children. Our reasoning as to why this verb is not used, however, was not supported, given that the participants rated their experiences as more positive, than negative like we expected. Given these results, it remains unclear as to why this particular verb is not used as often as other verbs. We hope that further research on this topic will find the answer to that question.

References

- Ainsworth, M. D. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist*, 46, 331-34.
- Berg, J., Dickhaut, J., & McCabe, K. (1995). Trust, reciprocity, and social history. *Games and Economic Behavior*, 10, 122-142.
- Cassidy, J. (2001). Truth, lies, and intimacy: An attachment perspective. *Attachment & Human Development*, 3(2), 121-155.
- Cvetkovich, G. and Nakayachi, K. (2007). Trust in a High-concern Risk Controversy: A Comparison of Three Concepts. *Journal of Risk Research*, 10(2), 223-237. doi: 10.1080/13669870601122519
- Dunn, J., Ruedy, N. E., & Schweitzer, M. E. (2012). It hurts both ways: How social comparisons harm affective and cognitive trust. *Organizational Behavior and Human Decision Processes*, 117(1), 2-14.
- Earles, J. L., and Kersten, A. W. (2016). Why are verbs so hard to remember? Effects of semantic context on memory for verbs and nouns. *Cognitive Science*
- Erk, K., McCarthy, D., & Gaylord, N. (2013). Measuring word meaning in context. *Computational Linguistics*, 39(3), 511-554.
- Fetchenhauer, D., & Dunning, D. (2009). Do people trust too much or too little? *Journal of Economic Psychology*, 30, 263–276. <http://dx.doi.org/10.1016/j.joep.2008.04.006>
- Fetchenhauer, D., & Dunning, D. (2012). Betrayal aversion versus principled trustfulness: How to explain risk avoidance and risky choices in trust games. *Journal of Economic Behavior & Organization*, 81, 534 –541. <http://dx.doi.org/10.1016/j.jebo.2011.07.017>

- Fetchenhauer, D., & van der Vegt, G. (2001). Honesty, trust and economic growth. A cross-cultural comparison of Western industrialized countries. *Zeitschrift für Sozialpsychologie*, 32, 189–200. <http://dx.doi.org/10.1024//0044-3514.32.3.189>
- Harbaugh, W. T., Krause, K., Liday Jr., S. G., and Vesterlund, L. (2003). Trust in Children. In E. Ostrom and J. Walker (Eds.) *Trust & Reciprocity* (pp. 302-322). New York, NY: The Russel Sage Foundation.
- Macko, A., Malawski, M., & Tyszka, T. (2014). Belief in others' trustworthiness and trusting behavior. *Polish Psychological Bulletin*, 45(1), 43-51. doi:10.2478/ppb-2014-0007
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734.
- Poulin, M. J., and Haase, C. M. (2015). Growing to Trust: Evidence That Trust Increases and Sustains Well-Being Across the Life Span. *Social Psychological and Personality Science*, 6(6), 614-621. doi: 10.1177/194855065574301
- Radford, A. (1981). *Transformational Syntax: A student's guide to Chomsky's Extended Standard Theory*. New York, NY: Cambridge University Press.
- Recchia, G., and Jones, M. N. (2009). More data trumps smarter algorithms: Comparing pointwise mutual information with latent semantic analysis. *Behavior Research Methods*, 41(3), 647-656.
- Russel, S. L., Wentzel, K. R., & Donlan, A. E. (2016) Teachers' beliefs about the development of teacher-adolescent trust. *Learning Environments Research*, 19, 241-266. doi: 10.1007/s10984-016-9207-8

Wang, W., Qiu, L., Kim, D., & Benbasat, I. (2016). Effects of rational and social appeals of online recommendation agents on cognition- and affect-based trust. *Decision Support Systems*, 86, 48-60.

Table 1

Means and Standard Deviations of Similarity Ratings for Verbs as a Function of Verb Type

<u>Verb Type</u>	<u>Verb</u>		
	<u>Trust</u>	<u>Believe</u>	<u>Like</u>
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Cognition	2.24 (.99)	3.46 (1.21)	1.91 (1.13)
Emotion	3.16 (1.55)	3.11 (1.31)	3.49 (1.40)
Like	2.18 (1.29)	1.78 (1.05)	1.83 (1.25)

Table 2

Means and Standard Deviations of the “How would you feel hearing...” and “How likely are you to say...” Ratings

Sentences	Hear	Say
	<i>M (SD)</i>	<i>M (SD)</i>
I like you	4.32 (.75)	3.48 (1.19)
I don't like you	1.78 (.74)	1.89 (1.17)
I believe you	4.57 (.67)	4.15 (.81)
I don't believe you	1.70 (.74)	2.85 (1.29)
I trust you	4.70 (.56)	3.69 (1.16)
I don't trust you	1.35 (.63)	2.61 (1.28)

Note. The sentences refer to how the participants felt if they heard “I like/don't like you,” “I believe/don't believe you,” and “I trust/don't trust you,” as well as how likely they are to say the same six sentences.

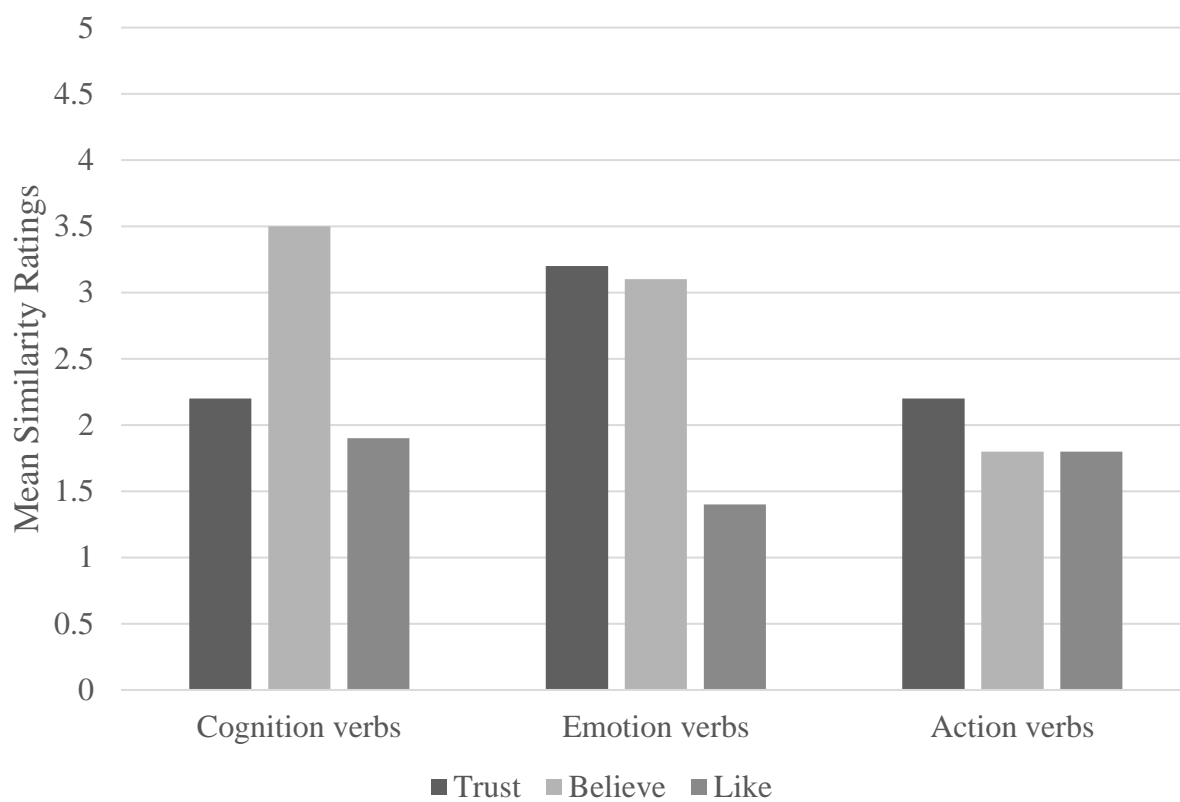


Figure 1. Verb similarity ratings as a function of verb and verb type

Albright College Gingrich Library

Appendix A

Verbs of cognition, emotion, and action

Verbs of Cognition
Guess
Imagine
Know
Remember
Think
Verbs of Emotion
Care
Feel
Hope
Love
Want
Verbs of Action
Ask
Call
Give
Show
Tell

Appendix B

Trust definitions

Having faith in someone or something.
Having faith in someone or something
Belief in capability to keep secret
To rely fully on someone or something
To not be let down
Understanding and one plus year involvement
To not doubt and believe and be completely comfortable
Someone I can tell secrets to and they will keep it and finding someone I connect with so deeply that I am afraid to lose them
Believe
Feeling at ease with someone
To have faith in
To know that something will happen; to have faith in a person or thing.
Confidence in reliability and truth
is being able to rely on someone when you cant rely on yourself
to have an all encompassing sense of safety and rightness
Having confidence in someone or something with no real proof
Putting my confidence in someone or something
To have faith in someone, and not have a feeling of misjudgment
Someone/ Something that is reliable and honest
To act without thinking, unafraid of the consequences
To put faith into someone or something
Putting faith in people
to believe somebody
To trust is to give a part of yourself or your whole self to someone and expect them to take care of and respect that
To trust is to believe that expectations will be met.
To believe in someone or something and their ability to follow through on their purpose and to not cause harm.
To have no doubt about something
have faith in something
To believe someone even when you don't know
Believe in something or someone
To believe that something is reliable, can be counted on.
To believe that someone or something is true or reliable
To trust involves being able to share intimate information about oneself while expecting the person whom is "trusted" to not share that information and all to be supportive
To have faith in Believe one is being truthful
To have confidence in the reliability of a person, an institution, or a thing, such as a bridge.

to put faith in another that something will be done
To believe something (or someone) will not cause harm.
To have faith in someone or something. To believe that they won't let you down in some way.
to be completely assured of...
to feel that someone is reliable, truthful, and dependable
To place one's faith/beliefs/thoughts in the hands of another.
To trust means to have verified the information or to have substantial reason to believe in its truth.
to be sure of, or be certain of
To rely on someone or something, and believe that they/it will not let you down
To believe something or someone.
To be able to authentic a person's feelings through their actions. To be able to have confidence that a person will hold your thoughts and beliefs with themselves.
To have faith in
To implicitly be comfortable with the person/item in question, as in I "trust" you with my _____; I feel comfortable that you will respect my wishes.
To believe in a person. Truth.
Believe in the reliability of something. Depend on, count on someone or something.
It has more than one meaning. It may mean to have confidence in someone or something, and it may be used more loosely to mean you believe something is true.
To hold the expectation of a particular outcome, most often a favorable outcome.
to know that the information or person is truthful. You can count on the information or on the person.
To comprehend something/someone and determine them to be true
to believe as honest or factual
a firm belief that someone or something is reliable, loyal, and going to follow through with their promise
To accept that something is what it is. To take it/someone at face value. To feel safe.
To believe that someone regards your word as truth
confidence in something or someone
having faith is someone or something.
believe in the reliability of something or person or information
to have confidence in something or someone; to accept and count on their reliability, integrity, honesty...
To believe in something or someone, its ability or reliability
To feel completely secure
having faith
Do what you say you will do.
to have faith and believe in something

Appendix C

First sentence	First circumstances details	Pos./Neg. Sentence Code
I'm going to trust you to do the right thing.	Going to a friend's house.	Pos.
Just trust me.	I was scared to jump into the pool even though my mom said she would catch me.	Pos.
I can't trust you if you lie.	I had lied about ripping my jeans and tried to lie and say I didn't know even though I needed them that weekend.	Neg.
trust me.	When I promised to hung out and talked about whether you was late for meeting time.	Neg.
"If I can't trust you than no one can"	He was angry with me because I did not tell him something that my mother had told me.	Neg.
"just trust me on this"	he picked me up and threw me into the ocean	Pos.
You can trust me	learning how to ride a bicycle	Pos.
"People trust you."	I was trusted to do something- I forget what- that was weird for a kid my age to be allowed to do.	Pos.
"How am I supposed to trust you?"	I lied a lot as a kid, and got caught a lot as a kid.	Neg.
He asked me to trust that he wouldn't let me go under water and would be there.	when I was learning how to swim	Pos.
I trust that you will not lie to us anymore.	I lied to my parents.	Pos.
I trust that you will make the right decision	I was going to a place by myself	Pos.
It taste like chicken trust me	I needed to eat liver	Pos.
My mom or dad asking how they can trust me	I lied a lot when I was around that age	Neg.
Trust me, I know what I am doing.	I was asking her about the outcomes of a situation	Pos.

First sentence	First circumstances details	Pos./Neg. Sentence Code
She wanted me to learn to trust her	When I was afraid to ride a ride at an amusement park	Pos.
I'm trusting you to bring this back to school tomorrow.	Bringing papers from school back signed by my parents	Pos.
"Trust me it's good for you."	They put vitamins in my cereal because i would never take them.	Pos.
i trust you enough to watch your brother	watching my brother	Pos.
You need to trust me.	Advice about a boy	Pos.
Faith means to believe and have trust.	My name means to believe and to trust. (Faith)	Pos.
Trust me, I know what those people are up to.	Friends that she didn't want me to hang with.	Pos.
Trust in God	Religious institution	Pos.
Trust me	Going to a new location	Pos.
I trust you to sit still and wait for me.	visiting someone in the hospital	Pos.
I won't trust you if you don't tell the truth	I think something that had to do with a broken toy	Neg.
something akin to: "we trust that you will make good decisions."	young teenager growing up in college town -- a required conversation for all of our parents (haha)	Pos.
I don't remember exactly, but it was something like "Trust in the Lord with all your heart."	Most likely during a church service.	Pos.
You need to trust me.	I didn't want to go up an escalator because I was afraid of it.	Pos.
Trust me	Anxiety	Pos.
Something like, "I cannot trust you to cross the street"	Response to an incident when I tried to cross a street during a red light while walking to school.	

First sentence	First circumstances details	Pos./Neg. Sentence Code
"I trust you to be nice to the new girl"	A new girl was joining our Sunday School class, and my parents wanted to make sure I would be friendly.	Pos.
It was an explanation	We were in Sunday School and the teacher was explaining the song "Trust and Obey"	Pos.
Don't worry, you can trust me. I won't hurt you or tell anyone.	A Saturday evening hanging out.	Pos.
I trust you enough to leave you alone while I'm out.	Mother was going to work before dad got home from work.	Pos.
trust me, i'll catch you	jumping into a pool	Pos.
Commonly "I trust you will..." giving instructions, but also showing confidence in compliance...	variable around the house and neighborhood	Pos.
i am trusting you to sit here and watch your sister	Mother had to go out and find my father outside	Pos.
something like "you just have to trust me"	in response to a question to which she didn't have a good answer	Pos.