

5-2019

Application of Directed Intentional Forgetting on Spontaneous Trait Inference

Patrick Horn
Lehigh University

Follow this and additional works at: <https://preserve.lehigh.edu/undergrad-scholarship-eckardt>



Part of the [Cognitive Psychology Commons](#)

Recommended Citation

Horn, Patrick, "Application of Directed Intentional Forgetting on Spontaneous Trait Inference" (2019).
Eckardt Scholars Projects. 54.
<https://preserve.lehigh.edu/undergrad-scholarship-eckardt/54>

This Thesis is brought to you for free and open access by the Undergraduate scholarship at Lehigh Preserve. It has been accepted for inclusion in Eckardt Scholars Projects by an authorized administrator of Lehigh Preserve. For more information, please contact preserve@lehigh.edu.

Patrick Horn

Research Advisor: Dr. Almut Hupbach

Lab: Dr. Hupbach Memory Lab Lehigh University

Application of Directed Intentional Forgetting on Spontaneous Trait Inference

Intro/Background:

First impressions have long been known to be of high importance if one wishes to have a person they are meeting for the first time to like them. People wish to leave good first impressions on nearly every person they meet and in varying environments whether it be on a job interview, their significant other's parents and/or friends, or someone they just meet at the store to name a few examples. It is a common phenomenon in which people even decide whether they like or dislike someone solely from their first encounter with that person. However, it is not an occurrence that we can have control over as it occurs spontaneously and unconsciously. Yet, this can be maladaptive since it may leave one with a false interpretation of another person's character and even less likely to change their initial interpretation to future stimuli that opposes their opinion. It has even been proven that we make unconscious assumptions of a person solely from their face that may be based off previous stimuli that lead to stereotypical thinking. Details such as ethnicity, emotional and facial expression, and

familiarity play a role in the first impressions we draw from another individual (Zebrowitz 2017). However, how do we come to these biases and what makes us instantly formulate these interpretations of another individual's behavior?

These natural inferences we make likely play a significant role in our social life and our relationships with those around us. If two people come in contact for the first time at work and the first person doesn't hold the door for the other and only says negative things about another co-worker, then the second person may be less likely to engage the negative person in the future. This increased avoidance of the first person may be based off the assumption that he/she doesn't have manners and will likely talk behind their back because they had done so regarding a different co-worker. Alternatively, the second person might decide that the person may just be having a bad day and decide to engage with them again in the future to compare their behaviors to before and see if they are consistently negative or if he/she was caught at a bad time. Irmak Okten discusses the implications of trait inferencing and explores the ability of people's first impression of another's trait to adapt and change depending on future opposing stimuli. Okten found that once a trait inference is first made from a person's behavior, that initial interpretation is very difficult to be changed and will likely be unaltered even with contradicting future behaviors (Okten 2015). Okten's findings also suggest that the traits a person induces from another person's behavior allows will be used to make predictions of the person's future behaviors (Okten 2015). These constant mental evaluations that we unconsciously perform when meeting people are an occurrence that has been acknowledged for decades. In Kelley's Covariation Model and the Role of Information Received in the Type of Inference Made (Kelley 1967), Kelley discusses the fact that the person who is interpreting

another person's behavior (perceiver) makes a series of analyses in attempt to interpret the exact cause or reason for the person to perform the observed behavior.

The multiple variables that lead into to the infinite potential causes for a specific behavior are evaluated in our minds along 3 main scales: the consistency, distinctiveness, and the consensus of the observed behavior (Kelley 1967). Kelley also addressed another psychological phenomenon known as the discounting effect in which the possibility of one cause leading to an observed behavior is discounted once the presence of additional causes is established as possible (Kelley 1972) (Okten 2015). In summary, the options a person thinks of to explain another individual's behavior will differ from other interpretations because of this high level of variability in our mental evaluations. Each person's ideas of consistency, distinctiveness, and consensus will differ due to the variations in experiences we have encountered through our life previously. Variation will also occur in the number of potential options for explanations of an observed behavior within each perceiver and thus, the degree of discounting will be affected as well. A conclusive finding that has been a well-documented observation among humans, is that for one event observed by many, there are almost no two identical interpretations or memories for the event. This can be attributed to the differing beliefs that cause us to pay attention to different details of the same event as well as interpret those details in differing manners and can even be evidently shown through MRI brain scans (Yeshurun et al. 2017). These differences are a significant factor in forming our first impressions of another individual and may lead us to creating an accurate mental representation of another's character or a misinterpretation leading to an inaccurate representation.

All this information begs the important question that has only mildly been investigated thus far; Can these first impressions can be altered or truly changed? Okten had already shown it to be very difficult to change one's first trait inference of another, but Kelley's covariation model suggests that the complexity of our evaluations of other people's behaviors allows for adjustment and updating of previous assumptions. In society, one would hope that they could make up for a bad first impression they may have left by ensuring they engage in contradicting behaviors that imply a different illustration of their character. Furthermore, in the scenarios in which there was an initial misinterpretation by the perceiver of the behavior or the behavior was uncharacteristic of the individual due to something as common as a bad day, how can the perceiver's first assumptions be open to change? These questions must be investigated further and the underlying mechanisms that control these thought processes should be outlined and understood in a more intricate manner. Alas, if initial interpretations vary so greatly among people and thus constant conditions are so difficult, how is it possible to be able to study first impressions and to test if changes to one's first impression can be induced from different manipulations of information? Fortunately, there is a psychological paradigm that has been consistently supported in research that ensures similar interpretation among participants of the same information. This paradigm is the naturally occurring phenomenon known as Spontaneous Trait Inference or STI.

The basis of Spontaneous Trait Inferences is that a trait is automatically and unconsciously induced from the presentation of a trait-implying behavior. The trait serves as a summary of the behavior that was presented and allows easy memory of that person's character to further encourage or discourage future engagement with that individual

depending on if the trait is positive or negative (Rim et al. 2009). The leftover memory of that person's trait may be indicative of a part of a mechanism underlying the importance of "first impressions" especially since Okten had shown the difficulty of changing the initial trait inference made of an individual after contradicting trait-implying behaviors were shown. An example of instantly an inferred trait from a trait-implying behavior is presenting the behavior of "always arriving 10 minutes early to every event" and the unconscious spontaneous trait inference made by a significant majority of people would be that the person is "punctual."

Certain aspects of this paradigm have been investigated such as the difference between inductive and deductive processing of presented information. The inductive aspect can be explained as being presented a trait-implying behavior first and then inferring a trait from the behavior. The deductive aspect can be understood as the retrieval of a specific trait-implying behavior after the presentation of the trait. The inductive property of trait inferences was shown to be more readily able to be retrieved from memory with a higher-level of false recognitions than the deductive property. Even though there were less false recognitions in the deductive tests, there was lower memory and recall of the trait-behavior pairs implying that the behavior-to-trait order activates a more natural, (spontaneous and unconscious), pathway of trait inferencing and that specific behavior retrieval may depend on a separate memory trace than trait retrieval (Maas et al. 2001). These findings make sense since in our day to day life, we are not necessarily presented with the individual traits of people to allow us to make inferences on their behaviors, but rather we are presented with the behaviors of others that enable us to infer characteristics of those people. The inductive reasoning of inferring traits from behaviors closer relates to the formation of first impressions and may be a psychological feature

underlying first impressions, and thus, will be the method used in this experiment. Additionally, further supporting the finding in Maas's paper that there is a high level of false recognitions of the presence of a trait in a presented behavior, an additional paper had evidence of the same finding. It was explained that the quick and natural trait inferences made from a trait-implying behavior can cause false memories of the trait being present in the given behavior or set of information (Uleman et al. 1996). This supports the notion that trait inferencing is spontaneous and unconscious and therefore, may lead the participant to falsely remember the presence of the trait word even though they had solely made a mental summary of the person being described as having that trait from the trait-implying behavior. For this reason, there will be an equal mixture of behaviors with the implied trait being present in the sentence and behaviors without the implied trait present in the sentence within this experiment.

A different paradigm that is commonly used in psychology research is Directed Forgetting or DF. In this archetype, the participant is presented with information and then given an instruction on whether to remember or forget the previous information they were just given. The observed phenomenon that embodies directed forgetting is that information in forget condition, (information the participant is told to forget), is consistently found to have a decreased level of memory recall than information in the remember condition. The participant can actively forget information by mentally "throwing it away," prevent any mental rehearsal of the information and spend more mental effort focusing on remembering information they are told to remember (Anderson et al. 2014). There are two main models in which Directed Forgetting is applied to: the item method and the list method. In the item method, the forget or remember instruction is given after each item presented during the encoding phase and then

memory recall of items are tested later. During the encoding phase of the list method, a list of information is presented and the forget or remember command is given halfway through the list to tell the participant whether to forget or remember the first half of the list. Memory of information from the list is tested later (MacLeod 1999). In this experiment, the item method model will be used.

The combination of the STI and DF paradigms has not been attempted yet, and in this research study, Directed Forgetting will be applied to Spontaneous Trait Inference to investigate another aspect of trait inferencing and if directed forgetting applies to the natural inductive processing of STIs. This will be done to see if one can actively forget a trait they had inferred from a trait-implying behavior. The findings will either support or contradict Irmak's finding that updating and changing a first inferred trait (first impression) is difficult. This will provide another aspect of the importance of first impressions and test if it is possible to forget one's first impression of another. Uleman's findings of false recognitions of the presence of the trait in the trait-implying behavior will also be included by including the implied trait in some behaviors while omitting the implied trait from other behavioral descriptions. Additionally, to further investigate the difference between inductive and deductive processing of STIs, (behavior-to-trait and trait-to-behavior respectively), an experiment testing whether Directed Forgetting can be applied to recall of the specific trait-implying behavior itself will be performed. The results of this experiment will either support or negate the findings of Maas that trait inference recall is natural and spontaneous while behavior recall is more difficult and therefore, may rely on separate memory traces.

Hypotheses:

1st Experiment: Directed Forgetting will not work for an inferred trait since it is automatic and unconscious (thus cannot be consciously forgotten).

2nd Experiment: Directed Forgetting will work for memory of a behavior since this is semantic information and can be consciously remembered or forgotten.

Methods:

Experiment 1: Directed Forgetting and Spontaneous Trait Inference

In the first experiment, there were 24 different faces used that were taken from the Chicago Face Database. All the faces that were used had neutral expressions as well as having similar ratings on scales such as attractiveness, facial expression, etc. Additionally, they were all faces of Caucasian ethnicity. This was to ensure that there was as little variability in initial biases as possible since biases can be formed just from how someone looks as referenced in Zebrowitz's paper (Zebrowitz 2017). Each of these faces were paired with a unique trait-implicating behavior. All the traits and correlating trait-implicating behaviors that were used were orthogonal, (unrelated and separate in meaning) to avoid any cross-interpretations. Within the 24 face/behavior pairs, there were 4 different conditions: Forget and trait word presented,

Forget and trait word implied, Remember and trait word presented, and Remember and trait word implied. The inclusion of the trait word presented and implied conditions were to compare the effects of directed forgetting on trait inferencing if the word was included in the behavioral description or implied through the behavioral description. In addition to the effect of directed forgetting on trait inferring, this would allow the number of false memories to be measured and see if there are a high level of false memories in the implied conditions as would be expected such as in Uleman's findings (Uleman et al. 1996). Each of these 4 conditions had 6 components, (6 unique face/behavioral description pairs), as well as having 3 female faces and 3 male faces. Having an equal amount of both female and male faces acts as an additional way to prevent the effect of any initial biases from affecting the data and to balance the variability of the faces presented. Potential analysis of any differences in results of directed forgetting of trait inferences to compare between female and male faces could be possible.

The trait-implying behaviors and corresponding trait words that were used were taken from Irmak's 2015 *Implicit Goal Inference and Implicit Trait Inference: Two Ways of Understanding the Social World* and Uleman's 1996 *On-Line Evidence for Spontaneous Trait Inferences at Encoding* (Irmak 2015) (Uleman 1996). The sentences that were in the trait word presented condition were slightly adapted to allow easy flow of the trait word without changing the meaning of the sentence. During the Encoding phase of the first experiment, each of the 24 faces were presented individually with one corresponding behavioral description that falls under one of the four conditions. Each face/behavioral description pair is presented for 10 seconds following a 1 second picture of a centered plus "+" sign to prepare the participant and tell them where to focus. After the 10 seconds, an instruction on whether to "FORGET" or

“REMEMBER” the previous face/behavior pair is shown for 2 seconds. The order of the faces displayed was randomized among all participants and there were 2 versions in which all the faces who were in the “FORGET” condition was switched to the “REMEMBER” condition as an additional way to further reduce variability. There were 25 participants for each of the versions, accumulating a total of 50 participants. The surveys for this experiment (including the Testing phase) were created using Qualtrics.com and then distributed to people using the online domain Prolific.ac.

After the Encoding phase, there was a brief break period in which the participant was asked 4 mental questions followed by instructions about the Testing phase. During the Testing phase, each of the 24 faces were individually presented along with two questions. The first question asked whether the trait word was included in the behavioral description and would be answered with either a Yes or No. This was to test if the person correctly remembered the presence of, (or lack of), the trait word in the behavioral description. This would enable the assessment of the number of false memories for the presence of the implied trait word. For the second question, the participant was asked to write down as much of the behavioral description as they could remember. This would serve to cross-examine the amount of a participants’ memory of the overall statement with their response for the first question. Also, the second question allows the researcher to ensure that the participant was paying attention during the encoding phase itself since it will be through the internet and the environment may not be isolated.

Experiment 2: Directed Forgetting and Recall of Trait-Implying Behavior

The second experiment essentially had all the same details as the first experiment. The only differences were that there were only two conditions: The Forget and the Remember conditions. There was no inclusion of the trait words in any of the behavioral descriptions and thus there was no conditions comparing “trait-presented” and “trait-Implied.” There were 24 faces, (same faces), and the same trait-implying behaviors were used except that none of them had the trait word included. There were 12 Forget face/behavior pairs and 12 Remember face/behavior pairs as well as an even split of 6 male and 6 female faces within each of the two conditions. The Encoding phase had the same set-up in which each face was paired with one of the trait-implying behaviors. A plus “+” sign was displayed for one second to give the participant a focus point which was followed by a 10 second display of one of the 24 face/behavior pairs. The instruction on whether to “Forget” or “Remember” the face/behavior pair previously displayed is then shown for 2 seconds. The Testing phase was the same as the in Experiment 1 in which each face was presented with two corresponding questions. The first question asked whether the trait word was included in the behavioral description and would be answered with either a Yes or No. This was asked to be compared with results from Experiment 1 to see if they are replicable. For the second question, the participant was asked to write down as much of the behavioral description as they could remember. This is to measure whether the effects of the forget and remember conditions, (Directed Forgetting paradigm), are applicable to behavior recall or memory of specific behaviors a person engaged in.

Results:

Experiment 1: Directed Forgetting and Spontaneous Trait Inference

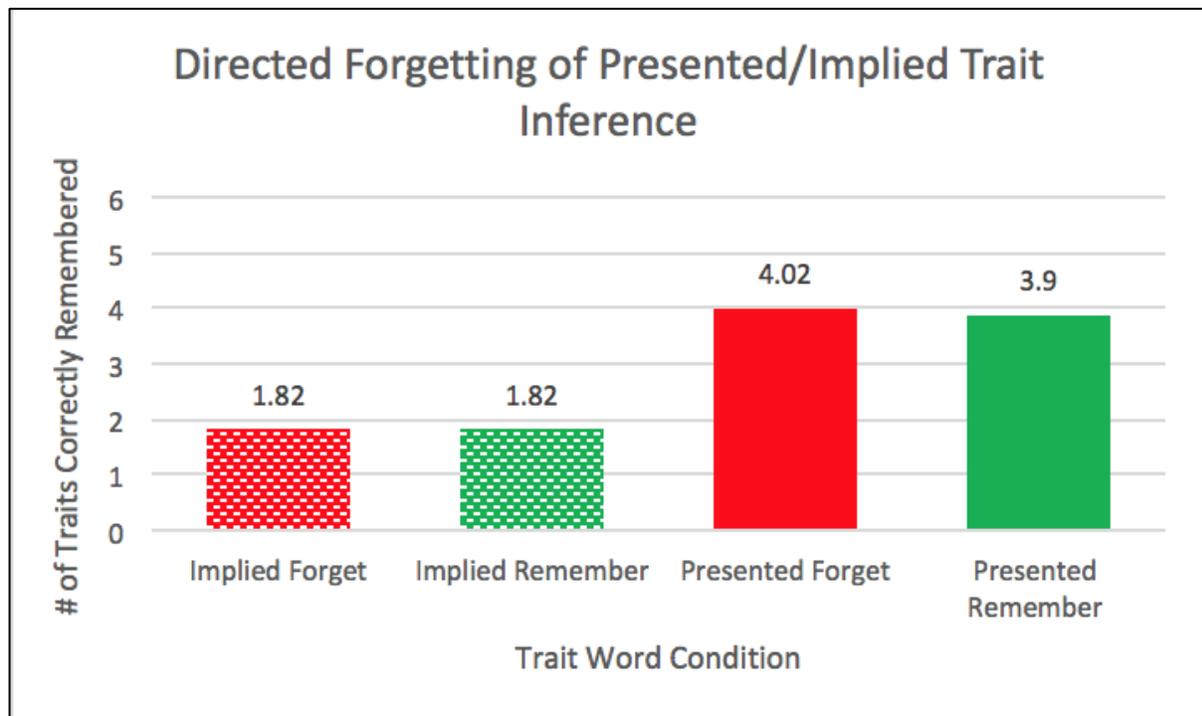


Figure 1: Graphical illustration of the effect of Directed Forgetting on Spontaneous Trait Inferencing with the presentation or implication of the trait word.

The X-axis is scaled depending on the specific experimental condition the face behavior pair was presented, (FORGET/REMEMBER), and the trait word was presented in, (PRESENTED/IMPLIED). The Y-axis measures the number of trait words that were correctly remembered to be either present or not present in the behavioral description. The measurements in the bar graph are an average of all the scores given to the participants for their responses in the respective experimental conditions.

For the first experiment, a graph illustrating the effect of Directed Forgetting on STI was created. The scoring was done by giving a participant 1 point for each trait word they answered correctly as being either presented or not included in the behavioral description. The points given within each of the experimental conditions were then added together for each

participant. All the summed scores participants received in each condition were then averaged. These averages are what are graphed in Figure 1.

The first observation that can be drawn from the data in Figure 1, is that both Remember and Forget conditions in which the trait word was presented with the behavioral description have higher scores than in the Forget and Remember conditions for where the trait word was implied through the sentence, (not included in the behavioral description). This was expected and is a promising result since it implies that there was likely to be a tendency for participants to select the "YES" option for when asked the first question about the presence of the trait word in the behavioral description. Since the "Presented" condition answer would always be yes for the presence of the trait, it is more likely participants will get this answer right since the trait-word is enhancing the impression made from the behavior. Moreover, the fact that there are lower scores in the implied condition shows that participants were more likely to answer the first question wrong, meaning that they were more likely to answer "YES" for the trait-word being present in the behavioral description. If this is the case, there was a high presence of false memories of the presence of the trait word in the behavioral description implying that a successful Spontaneous Trait Inference or "first impression" was made. This finding supports Uleman's findings in which there are a high level of false memories for Spontaneous Trait Inferences when asked if the trait word was presented in the trait-implicating behavior.

The second and even more interesting finding that can be pulled out from the data from Experiment 1 displayed in Figure 1 is the fact that there is no (significant) difference between the forget and remember conditions within the implied and presented conditions respectively.

This finding suggests that the normal Directed Forgetting paradigm does not have an effect on the Spontaneous Trait Inferencing paradigm. Participants do not have differing levels of memory of the presence of the trait in the behavioral description depending on the instruction of forget or remember in which they were given. Thus, memory of first impressions (STI) remains the same whether one is told to forget the face/behavior pair or not.

Experiment 2: Directed Forgetting and Recall of Trait-Implying Behavior

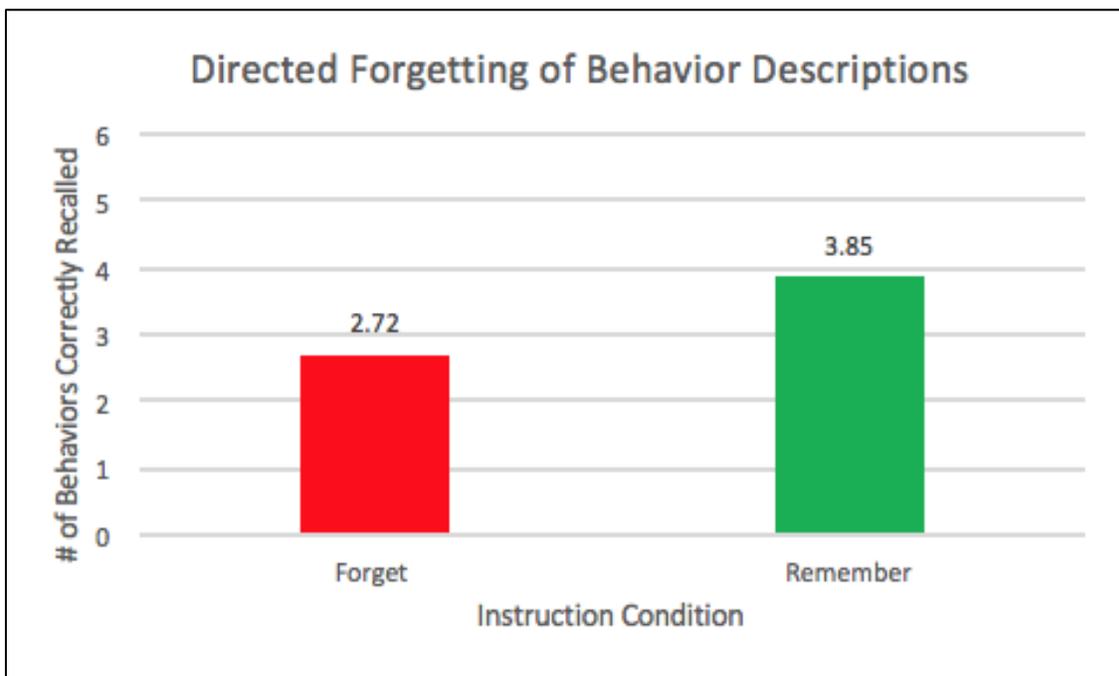


Figure 2: Graphical Illustration of the effect of Directed Forgetting on Memory and Recall of Trait-Implying behavioral descriptions.

The X-axis compares the two experimental conditions, (FORGET/REMEMBER), in which the behaviors and faces were presented in. The Y-axis measures the number of behavioral descriptions that were correctly remembered and written in the response for question 2. The measurements in the bar graph are an average of all the scores given to the participants for their responses in the respective experimental conditions.

For the second experiment, a graph illustrating the effect of Directed Forgetting of the behavioral descriptions themselves was created. The scoring was done by giving the participant

1 point for correctly remembering and reciting the whole (or full overall meaning) behavioral description that was presented with the face. However, the scoring was on a sliding scale since the amount of information remembered by the participants varied and the amount of information in each behavioral description slightly varied. Some answers may have received between a 0, .25, .5, .75, or 1 for their written responses for the second question. The points given within each of the experimental conditions (Forget or Remember) were then added together for each participant. All the summed scores participants received in each condition were then averaged. These averages are what are graphed in Figure 2.

The most important and promising finding from data from Experiment 2 displayed in Figure 2, is the difference between the forget and remember conditions. There was a significant difference in correct responses for the trait-implying behavioral descriptions between the forget and remember conditions in Experiment 2. The forget condition had a significantly lower level of recall than the remember condition, which is an expected result from the DF paradigm. This suggests that the Directed Forgetting paradigm can, in fact, be applied to memory of the specific behaviors that people engage in. This contradicts the results from Experiment 1 since participants can forget the specific trait-implying behavior even if they may have still unconsciously remembered the “trait” that occurred through their Spontaneous Trait Inference induced from the behavior.

Discussion:

Overall, the experiment was successful and the data proved to have promising results. Some of the findings had been expected and replicated the findings of other past psychology studies in Spontaneous Trait Inference. The first study had shown that there were less correct memories of whether the trait word had been present or not for the trait word-implied condition when compared to the trait word-presented condition. This suggests the participants had a higher tendency to select the “YES” option and that the trait word was present in the sentence. This finding implies a significant number of participants having formed false memories of the presence of the trait word from the trait-implying behaviors. This is an expected occurrence that had been discovered and discussed in Uleman’s 1996 paper which supports the notion that there is a trend for participants to form false memories of the presence of a trait word when a trait-implying behavior is given.

Furthermore, an additional finding that further supported and explained past results in research was that one cannot consciously forget a Spontaneous Trait inference through the Directed Forgetting paradigm. This supports the findings of Irmak’s 2015 paper since it was found that once a trait inference (STI) is first made from a person’s behavior, that initial interpretation is very difficult to be changed and will likely be unaltered even with contradicting future behaviors. This finding shows that it not only difficult to alter these first impressions, but it is nearly impossible to forget them, (at least using the DF archetype). This is one of the two significant conclusions that can be drawn from this paper, (specifically Experiment 1): Directed Forgetting does not have an effect on Spontaneous Trait Inferencing.

The second main take-away and conclusion that can be made from this paper, (specifically Experiment 2), is that Directed Forgetting does have an effect on memory of the specific behaviors that may have led to a STI, (trait-implying behaviors). This shows that there are opposing effects Directing Forgetting has on STI and behavior memory, in which DF does work on memory of specific behaviors but not on trait inferences (or first impressions). These findings can have real-world implications and can be applied to many social scenarios especially that of first impressions of people. The data may suggest that once you have a first impression of someone, (or have made an unconscious trait inference about that person after the first encounter), the memory of their trait will stay whether you can remember the behavior(s) that caused the spontaneous trait inference to be made, and thus the first impression will stick. The first impression and the initial trait inference that was made about another person cannot be consciously forgotten. This knowledge gives further insight into the mechanisms controlling first impressions and highlights the reasons for why first impressions have been given such strong meaning and viewed as high importance.

Moreover, the distinct separation between the influence of Directed Forgetting on Spontaneous Trait inferences and memory of the trait-implying behaviors may imply that the consolidation of the memory of these two factors may rely on separate mechanisms or memory traces. Memory encoding and consolidation of specific behaviors may be more semantic and conscious while the consolidation of spontaneous trait inferences is unconscious and instantaneous which may rely on a different form of memory. The application of this finding is likely to be most relevant in social relationships. Since we may not have the ability to remember every behavior a person engages in, instead our brain finds a way to summarize a person's

behavior(s) into a general trait which will impact our future decisions on whether to engage with that person again or to avoid them. This phenomenon can be beneficial in the cases that the behavior and corresponding trait inference that is made are correct and leads us to engaging with “positive-trait” people and avoiding “negative-trait” people. However, it can also be harmful since if a specific behavior a person performed is forgotten, you cannot re-evaluate your initial interpretation of the behavior or trait inference to see if there may have been a misinterpretation. A person may choose to avoid a “positive-trait” person or vice versa in which you chose to engage with a “negative-trait” person. For example, if you meet someone and you have a bad first impression of them, but they are actually a good person and was just having a bad day, you will be less likely to like them in the future if they perform a positive behavior since you have a negative trait associated to them. This is especially true if you cannot remember the behavior that lead to the initial negative impression to re-evaluate for any misinterpretation. This also works the other way in which you may make a positive trait inference from someone’s behavior and have a good first impression on them, but if the person is actually a “bad” person and was just being “sly” for example, then you may be more likely to give them the benefit of the doubt if they perform a negative behavior in the future. This is also amplified if you cannot remember the initial trait-implying behavior the person performed that lead to the initial positive impression to re-evaluate for any misinterpretation.

The mechanisms that underlie first impressions and the way in which Directed Forgetting can affect them is still not fully understood and requires further investigation. This combined paradigm of Directed Forgetting on Spontaneous Trait Inference has yet to be examined over a course of an extended period. Therefore, future experiments testing Directed

Forgetting in recalling trait and behavior information after an extended period to test if trait inferences remain in memory longer than the behaviors. Additionally, there is another aspect of trait inferencing known as Spontaneous Trait Transference which is essentially a trait inference that a person about someone through second-hand information like when they are told a description about a person by someone else (Wells et al. 2011). Testing the effect of Directed Forgetting on trait transference or by providing a contradicting behavior that was “observed” rather than “told” from someone else after a trait transference is made, may prove informative on the mechanism underlying trait transference and potential distinction between trait transference and trait inference. This could test if a first impression that is made from someone telling you about a person is similar in significance and has similar effects on a long-term opinion of another person. Lastly, another test that can be included to expand the understanding of trait inferencing, the order of recall of behavior and trait can be switched to see if by recalling a person’s trait first, the memory of their behavior will be primed and the participant will have better scores for behavioral recall, or vice versa. This kind of study could imply the order of memory recall and see if remembering a trait first or a behavior first will prime the memory of the other.

Table 1: Table of Trait Words and Trait Implying Behaviors

Trait Word	Trait-Implying Behavior
Curious	She was curious, so she asked where the stars come from.
Cautious	He always drove a little slower than the speed limit.
Lazy	She took the elevator to only go up one flight.
Modest	Being the modest person she was, she thought she didn't deserve their award and praise.
Insecure	He hoped they wouldn't think his new glasses looked funny.
Honest	He returned the lost wallet with all the money in it.
Selfish	She wouldn't loan her extra blanket to the other campers.
Neat	She dusted and vacuumed her room every day.
Nosy	She watched her neighbor's house to see who came and went.
Smart	He took his first calculus course when he was 12 years old.
Determined	He tried out for the varsity basketball team for four years in a row, determined to make the team.
Forgetful	He is normally forgetful, and it took him 15 minutes to find his car in the parking lot.
Generous	She usually leaves at least a 25% tip for the waitress.
Shy	She couldn't get herself to greet her new neighbor, she was just too shy.

Calm	He remained calm and phoned for help while the others just screamed.
Irresponsible	While she was babysitting, she lost track of the two-year-old.
Considerate	He didn't smoke at home to be considerate of his roommate, who was trying to quit.
Impulsive	She suddenly decided to go to the shore for the weekend, the fourth impulsive decision she made that week.
Fit	Every week, he jogged 3 miles on the treadmill in the office gym at least 4 times.
Sociable	He liked parties more than seeing a movie because he was a sociable person.
Punctual	He arrives to work 10 minutes early every morning.
Helpful	She enjoys being helpful and often offers directions to the lost tourists.
Welcoming	She's always welcoming, and invited the newcomers over her house.
Safe	He always asks everyone to make sure to check their seat belts before starting off on trips, he feels that he can never be too safe.

References:

Anderson, M. C., & Hanslmayr, S. (2014, April 18). Neural mechanisms of motivated forgetting. Retrieved from <https://www.sciencedirect.com/science/article/pii/S1364661314000746>

Kelley, H. H. (1967). Attribution theory in social psychology. *Nebraska Symposium on Motivation*, 15, 192-238.

Kelley, H. H. (1972). Attribution in social interaction. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), *Attribution: Perceiving the causes of behavior* (pp. 1–26). Morristown, NJ: General Learning Press.

Maass, A., Colombo, A., Colombo, A., & Sherman, S. J. (2001). Inferring traits from behaviors versus behaviors from traits: The induction-deduction asymmetry. *Journal of Personality and Social Psychology*, 81(3), 391-404. doi:10.1037//0022-3514.81.3.391

MacLeod, C. M. (1970, January 01). Directed Forgetting. Retrieved from https://link.springer.com/referenceworkentry/10.1007/978-1-4419-1428-6_1084

MacLeod, C. M. (1999, March). The item and list methods of directed forgetting: Test differences and the role of demand characteristics. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/12199306>

Okten, I. O. (2015). Implicit Goal Inference and Implicit Trait Inference: Two Ways of Understanding the Social World. *Lehigh Preserve*.

Rim, S., Uleman, J. S., & Trope, Y. (2009, September). Spontaneous trait inference and construal level theory: Psychological distance increases nonconscious trait thinking. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3150821/>

Uleman, J. S., Hon, A., Roman, R. J., & Maskowitz, G. B. (1996). On-Line Evidence for Spontaneous Trait Inferences at Encoding. *SAGE Social Science Collection New York University*, 22(4).

Yeshurun, Y., Swanson, S., Simony, E., Chen, J., Lazaridi, C., Honey, C. J., & Hasson, U. (2017, March). Same Story, Different Story. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/28099068>

Zebrowitz, L. A. (2017, June). First Impressions From Faces. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5473630/>

(n.d.). Retrieved from <https://chicagofaces.org/default/>

(n.d.). Retrieved from <http://ideonomy.mit.edu/essays/traits.html>